## UPDATED STATUS OF PRIOR ENVIRONMENTAL CLEARANCE (EC) GRANTED SINCE YEAR 2011

Sr.	Details of the Project	Proposed Developmental	Date of	Date of
Sr. No.	Proponent (PP) seeking prior Environmental Clearance (EC)	Activity / project proposal	issue of prior EC (New / Renewal, as applicable)	First uploading on the DSTE website
		YEAR 2018		
1	M/s ALCON Constructions (Goa) Pvt. Ltd., Sukerkar Mansion, 1 <sup>st</sup> Floor, M. G. Road, Panaji, Goa – 403 001	Prior environmental clearance for proposed residential development activity in survey no. 112/1, 112/2(P), in Taleigao village, Tiswadi taluka, North Goa.	14 <sup>th</sup> February 2018	26 <sup>th</sup> Februaruy 2018
2	The Director,Managing Director,GoaWasteManagement Corporations, HindustanWasteTreatment Pvt. Ltd Calangute, Goa – 403 511.	Proposed enhancement in existing capacity from 100 TPD to 250 TPD +20% of the Solid Waste Management Facility at its plant operational at Saligao, Bardez Taluka, North Goa - Issuance of the Prior Environmental Clearance (EC) – Reg.	22 <sup>nd</sup> January 2018	06 <sup>th</sup> February 2018
3	TheManagingDirector,GoaWasteManagementCorporations,HindustanWasteTreatment Pvt. LtdCalangute,Bardez,Goa – 403 511.	Establishment of Solid Waste Management Facility (SWMF) at Cacora, Quepem Taluka, South Goa - Issuance of the revised Environmental Clearance (EC)	22 <sup>nd</sup> January 2018	06 <sup>th</sup> February 2018
		YEAR 2017-NIL		
		YEAR 2016		
1	Managing Director, Goa State Infrastructure Development Corporation (GSIDC), 7 <sup>th</sup> Floor, EDC House,	CRZ clearance for construction of bridge across river Mandovi at panaji including approaches on NH-17 (now NH-66) between Pundalik nagar junction (Porvorim) to Merces	18 <sup>th</sup> November 2016	28 <sup>th</sup> November 2016

	Dr. Atmaram Borkar Road, Panaji, Goa – 403001	junction (Panaji) – application as per clause 4.2 (ii) of the CRZ Notification, 2011.		
2	M/s Gera Development Private Limited, 200, Gera Plaza, Boat club road, Pune – 411001	Prior environmental clearance for proposed construction of a building construction project 'Enchanted woods' at survey no. 33/1, Candola village, Ponda Taluka, Goa.	31 <sup>st</sup> October 2016	28 <sup>th</sup> November 2016
3	M/s Trinitas Realtors India LLP, Floor 8, Muttha Chamber, Senapati Bapat Marg, Pune -411016	Corrigendum in the prior environmental clearance (EC) issued vide this office letter No. 3-181-2010/STE- DIR/21 dated 4 <sup>th</sup> August 2016	5 <sup>th</sup> August 2016	19 <sup>th</sup> August 2016
4	M/s Trinitas Realtors India LLP, Floor 8, Muttha Chamber, Senapati Bapat Marg, Pune -411016	Proposed Residential cum Commercial complex in Survey No. 198/1 of Sancoale village, Mormugao taluka, Goa by M/s Trinitas Realtors India LLP	4 <sup>th</sup> August 2016	19 <sup>th</sup> August 2016
5	M/sParsavnathDevelopers,PoAthroughM/sGeraDevelopmentsPvt.Limited,200,Boatclub road,Pune.	Proposed construction project of commercial building - 'Imperium V' in the property bearing plot no. 43/ 44 at EDC Patto Plaza Panaji, Tiswadi Taluka, North Goa.	15 <sup>th</sup> Aril 2016	19 <sup>th</sup> August 2016
6	M/s Ocean View Properties LLP, Navi Peth, Pune – 411 030	Proposed construction of residential group-housing- cumcommercial project at survey no. 26/2 (Part) of village Baingiunim, Tiswadi Taluka, North Goa.	31 <sup>st</sup> March 2016	5 <sup>th</sup> April 2016
7	M/s Shrem Aansav Realty LLP, Margao, Goa – 403 601	Proposed Residential cum Commercial project on P. T. Sheet no. 57, Chalta No. 1, Margao, Salcete Taluka, South Goa District	23 <sup>rd</sup> March 2016	5 <sup>th</sup> April 2016
8	The Collector and District Magistrate (South). Margao-Goa.	Streamlining the process of environmental clearance (EC) for mining of minor minerals – Official Gazette Notifications (02 nos.) published by the Ministry of Environment, Forests and Climate Change (MoEF & CC).	21 <sup>st</sup> March 2016	5 <sup>th</sup> April 2016

9	The Collector and	Streamlining the process of	21 <sup>st</sup> March	5 <sup>th</sup> April
	District Magistrate	environmental clearance (EC)	2016	2016
	(North). Panaji, Goa –	for mining of minor minerals –		
		Official Gazette Notifications		
		(02 nos.) published by the		
		Ministry of Environment,		
		Forests and Climate Change		
		(MoEF & CC).		
10	Directorate of Mines	Issuance of prior	6 <sup>th</sup> January	11 <sup>th</sup>
	and Geology (DMG),	Environmental Clearance (EC)	2016	January
	Panaji, Goa – 403 001	towards renewal of minor		2016
		mineral quarry lease (03 nos.)		

Sr. No.	Details of the Project Proponent (PP) seeking prior Environmental Clearance (EC)	Proposed Developmental Activity / project proposal	Date of issue of prior EC (New / Renewal, as applicable)	Date of First uploading on the DSTE website
		<b>YEAR 2015</b>		
1	Directorate of Mines and Geology (DMG), Panaji, Goa – 403 001	Re-consideration of three minor mineral quarry proposal for issuance of environmental clearance (EC) – reg.	31 <sup>st</sup> December 2015	11 <sup>th</sup> January 2016
2	M/s Sociedade de Fomento Industrial Pvt. Ltd.Margao, Goa.	Amendment in the prior environmental clearance (EC) issued vide this office letter No. 3-181-2010/STE- DIR/188 dated 16 <sup>th</sup> December 2015.	23 <sup>rd</sup> December 2015	29 <sup>th</sup> December 2015
3	M/s Sociedade de Fomento Industrial Pvt. Ltd.Margao, Goa.	Proposed "Rail Freight Terminal" for handling of multi-cargo system in the property bearing Survey Nos. 33/1A, 1B, 34/1 to 9, 01/1( <i>part</i> ), 4/1A, of village Xic-Xalvona and Survey Nos. 34/1 ( <i>part</i> ), 35/1to and 35/5 to 7 of village Assolda, Quepem Taluka,South Goa.	16 <sup>th</sup> December 2015	18 <sup>th</sup> December 2015
4	The Collector & District Magistrate, North Goa District, Collectorate Building, Panaji-Goa.	Addendum to the Pre- feasibility report submitted by Collectorate, North Goa to the Goa-Environment Impact Assessment Committee-reg.	14 <sup>th</sup> December 2015	18 <sup>th</sup> December 2015

5		D 1		1
5	M/s Hindustan Petroleum	Proposed expansion of LPG-mounded Storage	9 <sup>th</sup>	18 <sup>th</sup>
	Corporation Limited	facility (3x200MT) in plot	December	December
	(HPCL).	no. 150, Kundaim Industrial	2015	2015
	Ponda, Goa.	Estate, Kundaim, Ponda,		
	1 01100, 000.	Goa.		
6	M/s Merck (India)	Proposed expansion in		
	Ltd., Ponda, Goa.	manufacturing capacity of	$26^{th}$	$18^{\text{th}}$
		the existing enhancement of	November	December
		bulk drug product in plot	2015	2015
		No. 11/1, Marvasodo,		
		Usgaon, Ponda, Goa.		
7	M/s Loonkar	Residential-Project 'Remus	41-	41-
	Developers Pvt. Ltd,	Away' proposed to be	26 <sup>th</sup>	18 <sup>th</sup>
	Mumbai - 400023	constructed in the property	November	December
		bearing survey no. 93/2 of	2015	2015
		Bambolim village in Tiswadi taluka of North Goa District.		
8	The Collector &	Extraction of sand in		
	District Magistrate,	rivers/estuaries at North	01st	07th
	North Goa District,	Goa District by manual	October	October
	Collectorate	methods by traditional	2015	2015
	Building, Panaji-Goa.	CommunitiesEnvironmental		
		Clearance reg		
9	The Collector &	Extraction of sand/Pebble	01st	07th
	District Magistrate,	in rivers/estuaries at South	October	October
	South Goa District,	Goa District by manual	2015	2015
	Mathany Saldanha	methods by traditional		
	Administration	CommunitiesEnvironmental		
	Complex, Margao-	Clearance reg.		
1.0	Goa.		cth :	e th
10	M/s Anand Chandra	Amendment in the prior	6 <sup>th</sup> August 2015	$24^{\text{th}}$
	Bose,	environmental clearance	2013	August 2015
	Baina, vasco-da-	(EC) issued for proposed		2013
	Gama, Goa.	construction of residential		
		complex in Survey no. $215/1$ of Correctle will go		
		215/1 of Sancoale village,		
		Mormugao taluka		
11	Directorate of Mines	Issuance of environmental	22 <sup>nd</sup> May	21 <sup>st</sup>
	and Geology (DMG),	clearance (EC) for minor	2015	August
	Panaji, Goa – 403 001	mineral quarry leases of M/s		2015
		Christopher Furtado – in		
		survey no. 13/2 (part) of		
10	Directorate of Min-	Cordem village, South Goa.	oth Nr.	10 <sup>th</sup> 1/1
12	Directorate of Mines	Renewal leases w.r.t minor	8 <sup>th</sup> May	18 <sup>th</sup> May

	and Casta are (DMC)	minanal maning in the State	2015	2015
	and Geology (DMG), Panaji.	mineral quarries in the State (50 lease holders)	2015	2015
13	Directorate of Mines and Geology (DMG), Panaji.	Renewal of minor mineral quarry lease of M/s Samrat Industries, Gudi, Paroda, Salcete	30 <sup>th</sup> March 2015	24 <sup>th</sup> April 2015
14	Department of Science & Technology (DST), Saligao, Bardez, Goa – 403 507	Setting up of Solid Waste Management Facility ( <i>SWMF</i> ) at Saligao/Calangute, North Goa.	3 <sup>rd</sup> March 2015	
15	M/s Raheja Universal (Pvt.) Ltd., Mumbai - 98	Construction of a residential project in CTS No. 64/1-A and 67/1 in village Carmona, Salcete Taluka, South Goa district.	26 <sup>th</sup> February 2015	4 <sup>th</sup> March 2015
16	M/s Marvel Resorts Pvt.Ltd., Pune	Construction of residential complex in P. T. sheet no. 121 and Chalta no. 2, 3, 4, 38, 39 & P. T. sheet no. 130 and Chalta no. 33 of St. Inez village, Tiswadi Taluka, North Goa district.	30 <sup>th</sup> January 2015	
17	M/s Counto Metals and Mining Co. Ltd., Panaji.	Construction of twin-jetty with common deck for loading / unloading purpose in survey nos. 18/2, 18/3, 18/4, 18/5, 19/2 and 20/1 of Tixem village, Pale - Kothambi, Bicholim Taluka, North Goa district	30 <sup>th</sup> January 2015	February 2015
18	M/s Kamat Real Estates Developers Panaji.	Construction of residential - cum - commercial complex - "Kamat's Marao Kenny Complex" on land bearing Chalta no. 7 of P.T. Sheet no. 144 of City survey, Panaji within the limits of Corporation of the City of Panaji ( <i>CCP</i> ) at Carazalem, Panaji, Tiswadi Taluka, North Goa district.	30 <sup>th</sup> January 2015	
19	M/s Devashri Real Estates Developers, Panaji.	Construction of residential buildings in survey no. 361/1 ( <i>Plot-A</i> ), Socorro village, Bardez taluka, North Goa district.	20 <sup>th</sup> January 2015	

20	M/s Akar Creations Pvt. Ltd., Margao.	Group Housing & Commercial Project "AKAR EXCELSIOR" in Survey No. 40/0 of Village: Vanelim, Taluka: Salcete, South Goa.	8 <sup>th</sup> January 2015	
21	M/s Milroc Good Earth Property & Developers L.L.P., Panaji	Expansion of residential – cum -commercial complex – "Milroc Kadamba" in Survey No. 21/2-D, Baingiunim village, Tiswadi taluka, North Goa District.	5 <sup>th</sup> January 2015	February 2015
22	M/s Balchandra A. Wagle, Panaji.	Construction of Commercial- cum-Residential project in Survey No. 276/1 of Morombi- O-Grande village, Tiswadi Taluka.	5 <sup>th</sup> January 2015	

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		<b>YEAR 2014</b>		
1	M/s Goa Institute of Management (GIM), Sanquelim, North Goa.	Expansion of the institutional facility ( <i>i.e. construction</i> of International Student Hostel, Visiting Faculty accommodation) and new construction of Faculty Housing in survey no. 58/1-C-2 & 58/1-C-3, Poriem, Sattari.	23 <sup>rd</sup> December 2014	December
2	Department of Science & Technology (DST), Saligao, Bardez, Goa – 403 507	Setting up of Solid Waste Management Facility ( <i>SWMF</i> ) at Cacora, South Goa.	5 <sup>th</sup> December 2014	2014
3	Department of Science & Technology (DST), Saligao, Bardez, Goa – 403 507	Setting up of Solid WasteManagementFacility(SWMF)atSaligao/Calangute,NorthGoa.Saligao/Calangute,	4 <sup>th</sup> November 2014	November 2014

4	M/r A $r$ $r$ $r$ $r$ $l$ $Cl$ $r$ $r$ $l$	Construction of mail (1)	$15^{\text{th}}$	1
4	M/s Anand Chandra	Construction of residential		
	Bose, Vasco-da-Gama.	complex in Survey No. 215/1	September	
		of Sancoale village,	2014	
		Mormugao Taluka.		
5	M/s Maharudra Real	Construction of a residential	15 <sup>th</sup>	
	Estate, Ponda.	complex ( <i>i.e. flats</i> + villas)	September	
		in Survey no. 209/1-A,	2014	
		Ponda, Goa.		
6	M/s Prudential	Construction of a residential-	$15^{\text{th}}$	November
	Developers Pvt. Ltd.,	cumcommercial complex	September	2014
	Margao.	in Chalta No. 34, P. T. Sheet	2014	
	e	No. 129, Margao, Gogal,		
		Salcete.		
7	Birla Institute of Science	Expansion complex (i.e.	$15^{\text{th}}$	
,	& Technology (BITS)	construction of Hostel	September	
	Pillani, Goa Campus,	<i>Building</i> ) in survey no. 189/1	2014	
	Sancoale.	(plot no. 2), 189/1 (plot P4),	2011	
	Sancoare.	190/1 (part), $191/1$ , $191/2$ ,		
		190/1 (part), $191/1$ , $191/2$ , $191/3$ , $192/1$ (plot no. 1),		
		191/3, 192/1 (plot no. 1), 193/1, 229/1, 230/1, 231/1,		
		232/1, 233/1, 234/1, 235/1,		
		235/3, 241/1, 243/1 (plot no.		
		1) of village Sancoale,		
		Marmugao, South Goa.	e the e	
8	M/s Ganesh Benzoplast	Expansion in storage	9 <sup>th</sup> May	May 2014
	Ltd., Mumbai.	capacity by constructing two	2014	
		storage tanks, for storage of		
		LPG in Chalta No. 1, P. T.		
		Sheet no. 49 of Vasco city		
		area.		
9	M/s Model Real Estate	Construction of residential	$26^{\text{th}}$	April
	Developer, Panaji.	complex "Model's Status" in	February	2014
	- · · ·	Survey No. 231/2 of	2014	
		Taleigao village in Tiswadi		
		taluka, North Goa district.		
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		<b>YEAR 2013</b>		
1	Directorate of Mines and Geology (DMG), Panaji.	Renewal / New leases w. r. t. minor mineral quarries in the State (09 lease holders)	12 <sup>th</sup> April 2013.	

2	M/s Leading Hotels, Panaji	Setting up of 18-hole PGA- standard golf course and Eco-resort in survey nos. 2 to 13(P) of Tiracol village in Pernem taluka of North Goa district.	12 <sup>th</sup> April 2013	
3	M/s Nitin Developers Pvt. Ltd., Miramar, Panaji.	Expansion of residential complex in survey nos. 402/2, 404/5 and 404/2-C of Soccorro village in Bardez taluka of North Goa district.	8 <sup>th</sup> April 2013.	16 <sup>th</sup> June
4	M/s Rockfirst Real Estate Ltd., Mumbai.	Expansion of a Residential complex 'Ashok Beleza' in survey no. 57/1 of Reis Magos village, Alto-Batim in Bardez taluka, North Goa district.	8 <sup>th</sup> April 2013.	2013
5	Goa Development Corporation (Goa-IDC), Panaji	Establishment of Common Hazardous Wastes Treatment, Storage and Disposal Facility (CHWTSDF) at Dharbandora.	21 <sup>st</sup> March 2013	April
6	Directorate of Mines and Geology (DMG), Panaji.	Renewal / New leases w.r.t. minor mineral quarries in the State (13 lease holders)	21 <sup>st</sup> March 2013.	2013

7	M/s Mahindra and	Construction of Eco-resort in	22 <sup>nd</sup> March
/			
	Mahindra Ltd., Chennai	Survey nos. 16 & 7 of	2013
		Moitem village in Bardez	
		taluka of North Goa district.	
8	M/s Palacio Property	Expansion of residential	22 <sup>nd</sup> March
	Developers Pvt. Ltd.,	buildings	2013
	Panaji.	in Survey Nos. 181/(P),	
		181/2,	
		181/3, 181/5(P), 182/7,	
		183/9, 180/1(P), 180/2(P),	
		and 184/3 of St. Andre, Goa	
		Velha village in Tiswadi	
		taluka of North Goa district.	
9	M/s Pascoal Trindade,	Construction of a residential	22 <sup>nd</sup> March
	Dona Paula.	project in Survey no. 93/2 of	2013
		Bambolim village in Tiswadi	
		taluka of North Goa district.	
10	M/s Pascoal Trindade,	Construction of a residential	22 <sup>nd</sup> March
	Dona Paula.	project in Survey no. 93/4 of	2013
		Bambolim village in Tiswadi	
		taluka of North Goa district.	

11	M/a Dai Housina	Construction of a residential	22 <sup>nd</sup> March	April
11	M/s Raj Housing Development Pvt. Ltd.,	project 'Raj Ryle' in P.T.	22 March 2013.	April 2013
	Ponda.	Sheet No. 14 of Chalta Nos.	2015.	2015
	Polida.	40, 41, 42, 43, 44, 45, 46, 47		
		& 48 and P. T. Sheet No. 32		
		of Chalta Nos. 4 & 36, in		
		Mapusa, Bardez taluka in		
		North Goa district.		
12	M/s Rajendra Prasad	Construction of a Group	22 <sup>nd</sup> March	
12	Singla, Margao.	Housing and Commercial	2013	
	Siligia, Margao.	project in Survey no. 20/3-A	2013	
		of Baiguinim village of		
		Tiswadi taluka in North Goa		
		district.		
13	M/s SRE Estates	Expansion of residential	22 <sup>nd</sup> March	
15	Developers, Margao.	complex "Supreme	2013	
	Developele, maigue.	Colmorod Central" in Chalta	2015	
		no. 13 & 15 of P. T. sheet no.		
		299 of Margao city in Salcete		
		taluka of South Goa district.		
14	M/s Trinitas Developers	Construction of a residential	22 <sup>nd</sup> March	
	Pvt. Ltd., Pune.	project in Survey no. 117/1-	2013	
	,	A of Sancoale village of		
		Mormugao taluka in South		
		Goa district.		
15	M/s Prive Reality Pvt.	Construction of residential	22 <sup>nd</sup> March	
	Ltd., Mumbai.	complex in survey no. 103/1,	2013	
		103/2 and 104/1 of		
		Bambolim village in Tiswadi		
		taluka of North Goa district.		April
16	M/s Raj Housing	Construction of a residential	22 <sup>nd</sup> March	2013
	Development Pvt. Ltd.,	project 'Raj Enclave' in P.T.	2013	
	Ponda.	Sheet No. 8 of Chalta No. 01		
		in Mapusa, Bardez Taluka,		
		North Goa district.		

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YEAR 2012				
1	M/s Bandekar Brothers Pvt. Ltd., Vasco-da-	Construction of Iron-ore loading Jetty in Survey no.	16 <sup>th</sup> October 2012	

	Gama.	17/4, in Kotambi village of Bicholim taluka in North		
2	M/s Berger Paints (India) Ltd.,	Goa district. Expansion in production capacities of water-based emulsion and distemper paints at a unit located in plot nos. 316 & 317, Kundaim Industrial Estate, Kundaim.	16 <sup>th</sup> October 2012.	December 2012
3	M/s Susheela Homes Properties Pvt. Ltd., Vasco-da-Gama	Expansion of a Group Housing project in Chalta No. 26 (Part) of P.T. Sheet No. 69 & Plot Nos. 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 of Chalta No. 2 of P. T. Sheet No. 68 in Vaddem village of Vasco-da-Gama.	30 <sup>th</sup> April 2012	
		~	a ath is set	July 2012
4	M/s Sattva Builders Pvt. Ltd., Bengaluru.	Construction of a residential building 'Sattva Water's Edge' Survey no. 199/2 of Sancoale village in Mormugao taluka, South Goa district.	30 <sup>th</sup> April 2012	
5	M/s Prithvi Consultants Pvt. Ltd., Miramar, Panaji.	Construction of a residential – cum -commercial complex in Survey no. 20/1 (part), Sub. Div. No. 1(P) of Bainguinim village in Tiswadi taluka of North Goa district.	30 <sup>th</sup> April 2012	
6	M/s Four Seasons Shelters, Panaji.	Construction of residential buildings (12 nos.) in Survey no. 20/1 (part), Sub. Div. No. 1(P) in Bainguinim village in Tiswadi taluka in North Goa district.	30 <sup>th</sup> April 2012	
7	M/s Commonwealth Developers Pvt. Ltd., Margao.	Construction of residential – cum -commercial complex in Chalta no. 3 (Sub. Div. 1 & 2) / P.T. sheet no. 118, Chalta no. 4(P), 5(P) / P.T. sheet no. 118, Chalta No. 1 (Sub. Div. 13(P) & 18(P)) / P.T. sheet no. 119 in village Gogol, Salcete taluka, South Goa district.	30 <sup>th</sup> April 2012	July 2012

8	M/s Nanu Estates Pvt. Ltd., Margao.	Construction of commercial – cum -residential complex in Chalta no. 27 of P.T. sheet no. 245 and Chalta no. 100 of P.T. sheet no. 225 of Aquem village near Margao city in Salcete taluka of South Goa district.	30 <sup>th</sup> April 2012	
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		<b>YEAR 2011</b>		
3	M/s Buildmore Infrastructure (India) Pvt. Ltd., Panaji.	Construction of Residential – cum -Commercial complex at Khorlim near Mapusa in Bardez taluka of North Goa district	19 <sup>th</sup> May 2011	June 2011

#### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2416561 Fax. no.: 2438528

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/80* 

Date: 14<sup>th</sup> February 2018

*To*, **M/s ALCON Constructions (Goa) Pvt. Ltd.,** Sukerkar Mansion, 1<sup>st</sup> Floor, M. G. Road, Panaji, Goa – 403 001

# Sub.: Prior environmental clearance for proposed residential development activity in survey no. 112/1, 112/2(P), in Taleigao village, Tiswadi taluka, North Goa-reg.

Sir,

I am directed to refer to your application (*i.e. Form-1, Form-1A*) dated  $25^{\text{th}}$  July 2016 seeking amendment in prior Environmental Clearance (EC) as mandated in the EIA Notification, 2006 (*as amended till date*) for proposed residential development activity in the property bearing survey no. 112/1, 112/2(P), in Taleigao village, Tiswadi taluka, North Goa. Accordingly, the above proposal has been appraised under '**8(a)** – **B2 category**': *Building and construction project*. Subsequently, the Goa State Expert Appraisal Committee (*Goa-SEAC - hereinafter referred as 'Committee'*) conducted the site-inspection on 16<sup>th</sup> August 2016 and was followed by project-specific presentation by the NABET/QCI-accredited environmental consultant (M/s Aditya Environmental Services, Mumbai) on behalf of the Project (PP) during 75<sup>th</sup> SEAC meeting held on 22<sup>nd</sup> September 2016 wherein certain site / project-specific observations were made to be complied with by the PP. Thereafter, the Goa-SEAC ascertained / verified the compliances submitted by the PP during its subsequent 78<sup>th</sup> meeting held on 3<sup>rd</sup> November 2016 and was recommended to the Authority for grant of prior EC.

1. Project details and salient features of the proposed developmental activity, as submitted by the proponent, is as under –

#### A. Details of property and project:-

1. Total plot area	– 11,988.67 Sq mts.
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2. Proposed built up Area -22,834.51 Sq.mts.

- 3. FSI Area -- 13,169.60 Sq. mts
- 4. Total No. Of Apartments -- 128 nos
- 7. Total Car Parking provided --194 nos

#### B. Water requirement:

- Source-PWD tankers, STP treated water and Government supply.
- a) During construction phase 9 CMD(2CMD for domestic and 7CMD for construction).
- **b) During operational phase** Source- PWD **(74 CMD)** for domestic purpose and treated water (59CMD) from sewage treatment plant (STP) for gardening, flushing, Ac –cooling and waterbody.

C. <u>Wastewater generation</u> – Total sewage water generated during construction phase is 1.6 CMD. During Operation phase sewage generated will be 94 CMD which will be treated in Sewage Treatment plant of 100 KLD.

#### D. Solid waste generation -

- a. During construction phase -75 kg/day of solid waste
- b. During operational phase -384 kg/day of solid waste.
- E. <u>Power requirement –</u>Source-Goa Electricity Department
  - a. Construction phase 15 KVA
  - b. Operations phase -1000 KVA.

Accordingly, The Authority, *during its 36<sup>th</sup> meeting scheduled on 6<sup>th</sup> December 2016*, deferred the decision for want of time to peruse relevant project details in light of its validity expiring by 8<sup>th</sup> December 2016.

Thereafter, Goa SEAC /SEIAA was reconstituted by the MoEF & CC vide Notification dated 28<sup>th</sup> June 2017 and accordingly, the said proposal was taken up by the SEIAA for discussion during its 37<sup>th</sup>, 38<sup>th</sup> 39<sup>th</sup> and 41<sup>st</sup> meetings held on 06 September, 05<sup>th</sup> October, 2017, 10<sup>th</sup> January 2018, and on 05<sup>th</sup> February 2018. Based on the deliberations and detailed scrutiny of the same, the Authority decided to consider the said residential development proposal for grant of environment clearance (EC) under the provision of the Environment Impact Assessment (EIA) Notification, 2006; as amended subject to compliance to following <u>'Specific Conditions'</u> prior to initiate any construction activity/work on site:

a. The approach road leading to the site should be constructed prior to commencement of any construction activity at site as per the regulations of the Town & Country Planning Department.

- b. PP has to put crash barrier along the Nallah/St. Inez Creek.
- c. PP should take a note that rainwater discharge should be allowed towards the downstream of the nallah.
- d. The PP should adhere to the Commitment on access road to be maintained during construction phase be prepared and submitted at the time of post-EC compliance.
- e. PP should take enough precaution for Disaster management Plan in case of urban flooding /Nallah flooding during monsoon.
- f. PP has to dispose of current dumped waste.
- g. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal and treatment / air and water pollution / waste-water management.
- h. PP needs to ensure that no treated water or any waste sewage shall be discharged into any water body. E-waste shall be disposed through Authorised vendor as per E-waste (*Management and Handling*) Rules, 2011.
- i. Project Proponent (PP) should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage only to enable installation of solar panels towards south facing walls as and when made applicable in future.
- j. The Project Proponent shall utilise fly ash bricks in masonry works.
- k. The PP shall use construction debris for land filling wherever applicable.
- 1. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- m. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in

buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

- n. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- o. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning, etc. shall be done.
- p. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- q. Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.
- r. The project proponent will provide landscape bed of 600mm wide X 600mm deep along the periphery of the plot to carry out plantation of trees. The treated water from the sewage treatment plant will be pumped through high flow drips on these beds to prevent outflow of treated sewage water outside the premises.
- s. Areas which are marked as **No Development Zone (NDZ)** should be year marked on site and no construction shall be carried out in the said NDZ. Land Profile of NDZ shall not be altered.
- t. No construction shall be carried out in the property which is identified as private forest, if any.
- u. PP should obtain all the requisite permissions/NOCs/Licenses etc from all the competent authorities before commencement of any activity at site.

Further, progress will be reviewed after six months *(minimum 3 times in a year) depending upon progress of the work.* Further, the compliance to these conditions as and when submitted by PP will be verified /ascertained by the authority to propose additional conditions if any.

- 2. Further, the Authority has decided that PP needs to comply to the following "General Conditions":
  - a. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
  - b. *Solar power generation* Every major consumer of conventional power will have to generate and opt for certain percentage of power generation from the non-conventional sources. In this context, Project Proponent (PP) should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage only to enable installation of solar panels as and when made applicable in future. In addition, south-facing walls to be utilized to install solar panels to harness optimum solar energy. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heater system. PP should install, after checking feasibility, solar-plus-hybrid non-conventional source as source of energy.
  - c. PP should adopt roof-top rainwater harvesting / conservation measures to optimally utilize the water availability by constructing sumps for collection of rainwater as per the site-specific location details provided.
  - d. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal and treatment / air and water pollution / waste-water management.
  - e. PP should not disturb the natural drainage and as far as possible and maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment.
  - f. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization / zoning.
  - g. PP should submit half-yearly compliance report(s) in hard as well as soft copy format to the Authority for the period upto project completion.
  - h. This environmental clearance is issued subject to land use verification. Local authority
     / planning authority should ensure this with respect to Rules, Regulations,
     Notifications, Government Resolutions, Circulars, etc. issued if any, from time to time.
     Judgements / Orders issued by Hon'ble High Court, NGT, Supreme Court regarding

DCR provisions, environmental issues applicable in this matter should be verified by the competent authorities.

- i. PP should ensure and ascertain that 'civil plans' which were submitted to the Committee/ Authority during the process of project appraisal be submitted to other line Departments / agencies concerned while seeking NOC / Consents/ Permissions, as applicable. If any discrepancy is found in the plans submitted or details provided may be reported to this Authority. This environmental clearance is issued with respect to the environmental considerations and it does not mean that Goa-SEIAA approved the proposed land.
- j. PP needs to ensure that no treated water or any waste sewage shall be discharged into any water body. STP of suitable capacity shall be installed considering the quantity / quality of waste water generation.
- k. E-waste if any shall be disposed through Authorised vendor as per E-waste (*Management & Transboundary Movement*) Rules, 2016.
- This environmental clearance is issued subject to obtaining NOC from the Forestry & Wildlife angle including clearance from the Standing Committee of the National Board for wildlife, if applicable. The grant of environmental clearance does not necessarily imply that Forestry & Wildlife clearance has been granted to the project, which has to be dealt separately by the competent authorities in accordance with law.
- m. The height, construction gross built up area of proposed construction is 22, 834.51 Sq.mts shall be in accordance with the existing FSI/ FAR norms of the local body and planning authorities and it should ensure the same along with survey number before approving layout plan and before according commencement certificate to proposed work, Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.
- n. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- 3. Further, the PP is required to comply with the following <u>"General Conditions" during</u> <u>construction phase:-</u>

- a. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the Authority within 30 days of starting construction work at site.
- b. Permission to draw groundwater, as applicable, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) government of Goa.
- c. Project proponent shall not make any change in the Surface Layout Plan / Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project proponent need to inform this Authority.
- d. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
- e. The diesel generator sets (D.G. set) to be used during construction / after commissioning should be low-sulphur diesel type and should conform to Environment (*Protection*) Rules prescribed for air and noise emission standards as laid down by the Goa State Pollution Control Board (GSPCB).
- f. The installation of the Sewage Treatment Plant (STP) if any should be certified by the GSPCB and a report in this regard should be submitted to the Authority before the STP is commissioned.
- g. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche and first aid room etc.
- h. Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of waste water and solid waste generated during the construction phase should be ensured.
- i. The solid waste generated should be properly segregated. Dry /inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.

- j. Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved site with the approval of competent authority.
- k. Arrangements shall be made that waste water and storm water do not get mixed.
- 1. All the top soil excavated during construction activities should be stored if or use in horticulture/landscape development within the project site.
- m. Additional soil for levelling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- n. Green-belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the State Forest / Agriculture Department.
- o. Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- p. Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured so that they should not leach into ground water.
- q. Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary authorisation of the GSPCB.
- r. The diesel requires for operating DG sets shall be stored in underground tanks and if required, Clearance from concerned authority shall be taken.
- s. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standard and should be operated during non-peak hrs.

- t. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level construction phase, so as to conform to the stipulated standard by CPCB/ GSPCB.
- u. The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquakes, adequacy of fire fighting equipments etc. as per National Building Code (NBC) including measures from lighting.
- v. Storm water controlled and its re-use as per Central Ground Water Board (CGWB) and Bureau of Indian Standards (BIS) for various applications.
- w. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- x. The groundwater level and its quality should be monitored regularly in consultation with ground water authority of the Water Resources Department (WRD), Government of Goa.
- y. The installation of the sewage treatment plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the GSPCB before the project is commissioned for operation. Treated effluent released from STP shall be recycled / refused to the maximum extent possible. Discharge of this unused treated effluent, if any should be discharged in the sewer line. Treatment of 100% grey water through the centralised treatment should be done. Necessary measures should be adopted to mitigate the odour problem from STP.
- z. Use of glass may be reduced upto 40% to reduce electricity consumption and load on air-conditioning. If necessary, use high quality double glass with special reflective coating in windows.
- aa. Roof should meet prescriptive requirement as per energy conservation building code by using appropriate thermal insulation material.
- bb. Energy conservation measures like installation of LEDs' for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use of CFLs / TFLs, if any, should be properly

collected and disposed off / sent for recycling as per the prevailing guidelines / rules of the regulatory authority to avoid mercury contamination.

- cc. Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the environment (protection) Act 1986. The height of stack of DG sets should be equal to the height needed for the combine capacity of all proposed DG sets.
- dd. Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- ee. Traffic congestions near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalised and no public place should be utilised.
- ff. opaque wall should meet prescriptive requirement as per energy conservation board which is proposed to mandatory for all air conditioned spaces while it is aspiration for non- air conditioned spaces by use of appropriate thermal insulation material to fulfil requirement.
- gg. The buildings should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
- hh. Regular supervision of the above and other measures for monitoring should be in placed all through the construction phase, so as to avoid disturbance to the surroundings.
- ii. Under the provisions of Environment Protection Act 1986, legal action shall be initiated against the PP if it was found that construction of the project has been started without obtaining EC.
- jj. Six monthly compliance reports should be submitted to the MOEF with copy to the Goa-SEIAA and GSPCB.

- 4. Further, the Authority decided to direct the PP to comply with the following <u>"General</u> <u>Conditions" during post-construction phase:-</u>
  - a. PP shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. The PP to explore possibility of utilising excess treated water in the adjacent area for gardening before discharging into sewer line. No physical occupation of allotment will be given unless all above said environmental infra structure is installed and made functional including water requirement prior certification from appropriate authority shall be obtained.
  - b. Wet garbage should be treated by organic waste convertor and treated waste (manure) should be utilise in the existing premises foe gardening. And no wet garbage will be disposed outside the premises. Local authority should ensure compliance to this.
  - c. A complete set of all the documents submitted to Goa-SEIAA should be forwarded local authority, GSPCB and Planning authority.
  - d. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the Goa-SEIAA.
  - e. Separate funds shall be allocated for implementation of environmental protection measures /EMP along with item wise breaks-up. The funds earmarked for the environment protection measures shall not be diverted for other purposes.
  - f. A copy of the environmental clearance letter shall be sent by PP to the concerned Village Panchayat and planning authority as applicable, from which suggestions / representation, if any, were received while processing the proposal. The EC letter shall also be put on the company's website by PP within one week time period from date of issue of environmental clearance.
  - g. The PP shall upload the status of the compliance of the stipulated EC conditions, including results of monitoring data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF & CC, the respective Zonal office, CPCB and the GSPCB.

The pollutant levels in respect of SPM, RSPM,  $SO_2$  and  $NO_X$  (*ambient levels as well as D.G. stack emissions*) shall be monitored.

- h. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V is to be submitted to the GSPCB as prescribed under the Environment (*Protection*) Rules 1986 (as amended) and subsequently shall also be put on the company's website along with the status of the compliance of the EC conditions and shall also be sent to the respective Regional Office of the MoEF & CC.
- i. Consent to Operate shall be obtained from GSPCB before operation, failing which the Environmental Clearance herein shall be deemed to be withdrawn.
- j. Sewage Treatment Plant (STP) shall be installed at site. The STP should be certified by an independent expert and adequacy report in this regard should be submitted to GSPCB before the project is commissioned for operation. Necessary measures should be made to mitigate the odour problem from STP.
- k. The solid waste (dry as well as wet garbage) generated should be properly collected and segregated. Organic Waste Converter shall be installed by RWA for the treatment of biodegradable (wet) garbage generated within the housing complex. Non-Biodegradable waste should be outsourced properly after recovery of recyclable material. Adequate measures should be taken to prevent odour problem.
- 1. Utilization of Diesel power generating sets is subject to power failure condition only. The DG sets proposed as a source of power back up during operation phase should be of enclosed type, low sulphur diesel run and conform to rules made under the Environment (Protection) Act, 1986. The DG sets should be subjected to periodic noise and stack monitoring in consultation with GSPCB. Waste/used diesel should be stored and managed as per the Hazardous and other Wastes (Management & Transboundary Movement) Rules, 2016 as amended.
- m. Noise should be controlled to ensure that it does not exceed the prescribed standards both during day & night time.
- n. The ground water drawl from existing/proposed bore wells if any should be done only with the prior permission of Ground Water Board. The ground water level and its quality should also be monitored regularly both during construction and operation phase in consultation with Ground Water Board.

- o. Traffic congestion near the entry and exit points from the roads adjoining the project site must be avoided. Parking should be fully internalized and no public space should be utilized.
- p. Energy Conservation measures such as solar lighting for common area, solar water heating system, CFLs/TFLs for lighting of areas, LED lights for signage, solar inverters on the etc should be adopted.
- q. Used CFLs/TFLs should be properly collected and disposed off/ sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.
- r. A Report on energy conservation measures conforming to energy conservation norms finalized by Bureau of energy Efficiency should be prepared incorporating details about building materials and technology, R & U factors etc and submit to the State Expert Appraisal Committee and a copy to GSPCB in three months time.
- 5. Further this EC is issued without prejudice to the action initiated in the Environment (*Protection*) Act or any court case pending in the court of law. As such, it does not mean that the PP has not violated any environmental laws in the past and whatever decision under the said Act by the Hon'ble Court will be binding on the PP. Hence, this environmental clearance does not give immunity to the PP in the case complaint is filed against, if any, or action initiated under the said Act.
- 6. In case of submission of false document and non-compliance to any of the stipulated conditions, this Authority will revoke or suspend the EC without any intimation and initiate appropriate legal action under the Environment (*Protection*) Act, 1986 (*as amended till date*).
- 7. E-waste generated in the complex should be managed as per CPCB guidelines on E-waste management.
- **8.** The Goa-SEIAA reserves their right to add any stringent condition or to revoke the environmental clearance, if conditions stipulated above are not implemented to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- 9. In addition, the following conditions shall be specifically complied with:

- 1. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani or Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter will be available on the PP website.
- 2. Validity of the Environmental Clearance (EC) accorded shall be for a period of 07 (seven) years from the date of its issue.
- 3. These stipulations would be enforced among others under the provisions of Water *(Prevention and Control of Pollution)* Act, 1974, the Air *(Prevention and Control of Pollution)* Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
- 4. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by State Environment Impact Assessment Authority.
- 5. Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.
- 6. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully,

*Sd/-*

(Parag Nagarcenkar) Director Environment & Member Secretary, Goa-SEIAA

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## GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

1<sup>st</sup> Floor, Dempo Towers, Patto-Panaji Goa- 403 001 e-mail: goaseac@gmail.com

*No:* 3 – 181 – 2010/STE-DIR/70

Date: 22<sup>nd</sup> January 2018

То,

**The Managing Director,** Goa Waste Management Corporations, Hindustan Waste Treatment Pvt. Ltd Calangute, Bardez, Goa – 403 511.

#### Sub.: Proposed enhancement in existing capacity from 100 TPD to 250 TPD +20% of the Solid Waste Management Facility at its plant operational at Saligao, Bardez Taluka, North Goa - Issuance of the Prior Environmental Clearance (EC) – Reg.

#### Ref.:

(1) Read EC issued vide letter no. 03 – 181 – 2010/STE-DIR/ 91 dated 0 3/03/2015.

(2) Application letter dated 06/12/2017 for environmental clearance for proposed enhancement of existing capacity from 100 TPD to 250 TPD +20% of the Solid Waste Management Facility of solid waste Management plant at Saligao, Bardez, Goa.

#### Sir,

Whereas the Goa Waste Management Corporations, Hindustan Waste Treatment Pvt. Ltd approached this Authority (*i.e. Goa-SEIAA*), seeking prior environmental clearance (EC) for environmental clearance (EC) for proposed enhancement of existing capacity from **100 TPD to 250 TPD +20%** of the solid waste management facility of solid waste Management plant at Saligao, Bardez, Goa.

The matter, was considered by the Goa State Expert Appraisal Committee (Goa-SEAC) and accordingly conducted site inspection of the proposed site on 16<sup>th</sup> December 2017. During inspection it was noted one cell of the landfill has been constructed and 25% has been utilised for

inert waste. The committee during inspection also observed that the operator has remediated the existing waste dump site RDF generated has been stacked on site.

The committee perused the application and noted that enhancement of existing capacity from (100 TPD to 250 TPD +20%) of at Calangute proposed additional equipments as follows:

#### 1. Organic Extrusion Press

2. **Twister for processing of segregated organic waste** for feeding onto the fermenters the proposed twister can be an independent stream for handling the biodegradable organic waste . The proposed capacity of the twister shall be 10 TPH

3. Filter screw press (FSP) followed by sedimentation tank for removal of grit/ Beach sand and low micron plastic screening unit

4. Bio methanisation system consisting of buffer tank and fermenter

#### 5. sludge dewatering units

4. RDF line consist of RDF drums, conveyors

5. Multi deck vibratory screens and RDF storage shed,

6. **ETP plant** for upgradation to 250 TPD, biogas Genset based power plant consisting of Gas holder, H2S gas scrubbing system, Gas Engine, Gas flare & its associated components, one DG sets of 100 KVA capacity,

7.**Mobile Equipments** Front End Loader (2 nos), Skid Steer Loader(4 nos), Trucks with Tanker (2 nos), Tractor (2 nos), Truck with grit suction Tanker arrangement (2 nos), RDF, Recyclable & compost storage shed, Tree Mulcher, Thermocol & syrofoam Compactor will be added to compact the thermocol & styrofoam which being received at the plant.

Further, the Committee noted that PP do not intend to extend the existing landfill at the proposed site and will utilize the existing landfill for disposal of inert waste generated after processing the solid waste the inert waste is analysed and the analysis report of inert waste shows that there is no hazardous constituents' .and the same to be used for reclamation.

8. Additional road, utilities, power, water, buildings, sheds which are necessary for the completeness of the plant up gradation to 250 TPD.

The Goa-SEAC also noted MOEF & CC has issued the OM dated 7<sup>th</sup> November 2017 wherein the MOEF has clarified that the municipal solid waste management involves various steps like segregation, composting, refuse derived fuel (RDF) making waste to energy generation through waste to energy plants and disposal in scientist landfills. The above activities, except landfill site, if proposed as standalone activities are not covered under item 7 (i) of EIA Notification 2006, hence do not require prior EC. In case the activities of composting, RDF making and waste to energy plant (up to Capacity of 15 MW) are proposed at an existing landfill site, they do not attract the provision of the EIA notification 2006.

In view of the OM dated 7<sup>th</sup> November 2017 issued by MOEF & CC which specifies that provision of the EIA Notification 2006 are not attracted if the treatment facility proposed at existing landfill site or stand alone proposed site proposed site for expansion would not attract the provision of EIA notification as the said project for expansion proposed on an existing landfill and no expansion of landfill is proposed the project only envisages segregation of waste and treatment of bio degradable waste through bio methanation including generation of biogas and electricity from biogas, composting and refuse derived fuel (RDF).

The Authority during its 39<sup>th</sup> Goa-SEIAA meeting held on 10/01/2018 perused the Office Memorandum (O.M.) issued by MOEF & CC dated 7<sup>th</sup> November 2017 and accordingly accepted the SEAC's recommendations. Authority noted that the present application does not involve construction of additional landfill and hence does not require prior environmental clearance (EC) as per the OM dated 7<sup>th</sup> November 2017 issued by MOEF & CC.

However the Authority decided to recommend the following <u>Additional Specific Conditions</u> to the EC referred at Ref No.(1) issued earlier by this authority.

- 1. All new waste shall be handled under closed sheds with proper lighting and ventilation arrangement.
- 2. A separate storage shed shall be provided to store RDF, Recyclable & Compost.
- 3. A separate Tree Mulcher shall be added to mulch green cuts and garden waste.

- 4. Thermocol & Styrofoam Compactor will be provided to compact the thermocol.
- 5. A proper drainage system shall be provided to convey the wash water & spillage from the existing as well as from the proposed units of the facility, to the proposed ETP. There shall be no spill over of such effluent into the Storm water drain. The Storm water drain shall be specifically for the rain water system and it shall be free from any effluent / wash water at any point of time.
- 6. The project proponent shall ensure that the number of trucks carrying waste from the proposed waste catchments area and reaching the MSW processing facility shall be minimum in numbers. Transportation of wastes to be undertaken in closed trucks to ensure minimum number of trucks engaged to transport the waste from the locations referred at (x) above.
- 7. The project proponent shall ensure that tipping floor is completely enclosed.
- 8. Provision may be made for solar water heaters and solar power roof-tops facing towards South as well as south-facing walls to be effectively utilized to optimally harness solar energy. Further, considering the project-specific site, PP may necessarily explore the possibility of energy conservation by hybrid energy sources towards minimizing power requirements through national grid.

Yours faithfully,

*Sd/-*(Parag Nagarcenkar) Member Secretary, Goa-SEIAA

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#### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

1<sup>st</sup> Floor, Dempo Towers, Patto-Panaji Goa. 403 001 e-mail: <u>goaseac@gmail.com</u>

*No:* 3 – 181 – 2010/STE-DIR/69

Date: 22<sup>nd</sup> January 2018

То,

#### The Managing Director,

Goa Waste Management Corporations, Hindustan Waste Treatment Pvt. Ltd Calangute, Bardez, Goa – 403 511.

# Sub.: Establishment of Solid Waste Management Facility (SWMF) at Cacora, Quepem Taluka, South Goa - Issuance of the revised Environmental Clearance (EC) – Reg.

#### Ref.:

(a) Your letter no. 3-209-2012/STE-DIR/Part/1628 dated 19<sup>th</sup> February 2014.

(b) SEAC letter no. 3/181/2012/STE-DIR/Part-I/EIA-GOA/93 dated 20<sup>th</sup> March 2014.

(c) Your letter no. 3-209-2012/STE-DIR/Part/868 dated 9<sup>th</sup> September 2014.

(d) Your letter no. 3-209-2012/STE-DIR/Part-16B/SWMC-17 dated 28<sup>th</sup> November 2014.

(e) Read EC letter no. 03 - 181 - 2010/STE-DIR/69 dated 5<sup>th</sup> December 2014.

(f) Minutes of the Public Hearing conducted on 14<sup>th</sup> November 2017.

Sir,

This has a reference to your letter referred to at at (a) above seeking Terms of References (ToRs') to conduct EIA study for proposed Solid Waste Management Facility (SWMF) at Cacora in South Goa, letter referred to at (b) above, Goa-SEAC's communication regarding issuance of Terms of References (ToRs'), letter referred to at (c) above, requesting for project-specific presentation before the EIA Authority and letter referred to at (d) above, requesting for issuance of environmental clearance (EC) for the proposed SWMF at Cacora.

(e) above Establishment of Solid Waste Management Facility (SWMF) at Cacora, Quepem Taluka, South Goa - Issuance of the Prior Environmental Clearance (EC), letter referred to at (f)

above, Public Hearing conducted on 14<sup>th</sup> November 2017 and Minutes of the said public hearing was taken up on record by the Authority during its 39<sup>th</sup> meeting held on 10/01/2018.

In this context, I am directed to inform you that said application (*i.e. Form-I*) along with enclosed information has been screened and appraised by the Goa-SEAC under Category 7 (i) – Common Municipal Solid Waste Management, as per the 'Schedule' annexed to the EIA Notification, 2006 (as amended) during its 17<sup>th</sup> and 18<sup>th</sup> Goa-SEAC meetings held on 24<sup>th</sup> February and 11<sup>th</sup> March 2014 respectively. Subsequently, based on the recommendations of the Goa-SEAC during its 28<sup>th</sup> meeting held on 4<sup>th</sup> December 2014, the Goa-SEIAA during its 17<sup>th</sup> meeting held on 5<sup>th</sup> December 2014 has considered the proposal and accordingly it is noted that-

- The proposal is for grant of prior Environmental Clearance (EC) under the EIA Notification, 2006 for setting up of proposed Solid Waste Management Facility (SWMF) at Cacora in Quepem Taluka of South Goa and located in survey nos. 165/1(Part), 164/8(Part), 167, 168/1, 168/2 and 169 of Cacora village of Quepem Taluka. Salient project details of the proposed SWMF are as under:
  - a. Total plot area: 82,750 sq.mts which is proposed to be notified as Industrial Area.
  - b. Proposed treatment / handling capacity of the SWM facility : 100 Tones per day
  - c. Major sections of the SWM facility:
    - i. Material Segregation and Recycling Center
    - ii. Bio-methanation and Composting section
    - iii. Scientific secured Landfill
  - d. Water Requirement: 10 KLD + *it is also proposed to utilize recycled water as per need.*
  - e. Electrical Requirement: 549.64 KW + *it is also proposed to generate captive energy for in-house utilization.*
- 2. The proposed site is an existing dumping site which is being used for unscientific dumping of garbage for around 12 years. The project proponent (PP) proposes to remediate the present site by adapting to enviro-friendly disposal of the dumped garbage in addition to scientific treatment of the incoming waste through material and energy recovery. The existing old dump waste of approximate 50,000 tons which is lying at the site to the plant facility needs to be remediated to recover recyclables, compost, inert and RDF. The recovered components shall be scientifically disposed and the land shall be made free of dump or any recovered components within next three years excluding Monsoon period.

- **3.** Vide judgment dated 13<sup>th</sup> August 2013 passed in Suo Motto Writ Petition No.2 of 2007, Hon'ble High Court of Bombay at Goa has directed the State Government to establish and set-up waste disposal / treatment facilities in the State within a years timeframe.
- **4.** In addition, the project proponent has also submitted secondary data including documents and reports that highlight the present degraded status of the site, directions issued by the Goa State Pollution Control Board (GSPCB) to the Cacora-Curchorem Municipal Council, copies of the pertinent Court Orders, site plan and maps of the area and plans of the proposed facility.
- 5. Procedure towards collection of primary data, in terms of the ToRs' issued, has already been initiated by the project proponent through the empanelled environmental consultant M/s National Environmental Engineering Research Institute (NEERI), Nagpur.

In view of the above, Goa-SEIAA has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following **"General Conditions",-**

1. The PP should comply with all the measures towards environment management as envisaged and documents in the Tender Document (*i.e. Concept Note and the Request for Proposal (RFP)*.

2. PP should comply with the terms and conditions as stipulated by the Goa State Pollution Control Board (GSPCB) while issuing Consent to establish under the Air and Water Acts as well as Authorization issued under the Municipal Solid Waste (*Management and Handling*) Rules, 2000.

3. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.

4. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. In any case, no varieties of *acacia* be used either as avenue plantations or as live-fencing.

5. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.

6. PP should carry out assessment on the pre-construction vis-à-vis functioning of the landfill site, through M/s NEERI, Nagpur. The depth of the proposed landfill facility be decided based on the existing hydro-geological status of the site and accordingly necessary clearance / NOC should be obtained from the Groundwater Authority concerned, as applicable.

7. In the event of a modification / alteration / expansion in the project profile or change in the implementing agency / executing agency, a fresh reference shall be made to the Goa-SEIAA / Regional Office of the Ministry of Environment, Forests and Climate Change (*MoEF&CC*), as applicable.

9. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other reasons such as submission of false and misleading information, etc.,

10. The PP shall get the site conditions monitored and submit details at regular intervals to this Authority during all stages of the project initiation, execution, and implementation.

Further, I am directed to inform you that, in supersession of the earlier environmental clearance (EC) dated 5<sup>th</sup> December 2015 the applicant have submitted the revised EIA document prepared by M/s National Environmental Engineering Research Institute (NEERI), Nagpur on 6<sup>th</sup> June 2016. Based on the site-specific characteristics vis-a-vis the Office Memorandum (O.M.) issued by the Ministry of Environment, Forests and Climate Change (MoEF & CC) vide no. J-11013-36/2014-IA-I dated 10<sup>th</sup> December 2014, the Committee, during its 68<sup>th</sup> meeting held on 16<sup>th</sup> June 2016 has recommended that Public Consultative process is mandated for the said project-activity. Accordingly, Public Hearing conducted on 14<sup>th</sup> November 2017. Minutes of the public hearing has been perused and discussed by the Committee in its 86<sup>th</sup> Goa-SEAC meeting held on 23<sup>rd</sup> November 2017 and recommended the said proposal to Goa-SEIAA.

The Authority during its 39<sup>th</sup> Goa -SEIAA meeting held on 10/01/2018 has accepted the said recommendations and accordingly decided to grant revised environmental clearance (EC) to the said project under the provision of EIA Notification 2006, *(as amended)* with following "Additional Specific Conditions":

- 9. All new waste shall be handled under closed sheds with proper lighting and ventilation arrangement.
- 10. A separate storage shed shall be provided to store RDF, Recyclable & Compost.

- 11. A separate Tree Mulcher shall be added to mulch green cuts and garden waste.
- 12. Thermocol & Styrofoam Compactor will be provided to compact the thermocol.
- 13. A proper drainage system shall be provided to convey the wash water & spillage from the existing as well as from the proposed units of the facility, to the proposed ETP. There shall be no spill over of such effluent into the Storm water drain. The Storm water drain shall be specifically for the rain water system and it shall be free from any effluent / wash water at any point of time.
- 14. The project proponent shall ensure that the number of trucks carrying waste from the proposed waste catchments area and reaching the MSW processing facility shall be minimum in numbers. Transportation of wastes to be undertaken in closed trucks to ensure minimum number of trucks engaged to transport the waste from the locations referred at (x) above.
- 15. The project proponent shall ensure that tipping floor is completely enclosed.
- 16. The facility will treat a total waste upto125 tons per day.
- 17. Provision may be made for solar water heaters and solar power roof-tops facing towards South as well as south-facing walls to be effectively utilized to optimally harness solar energy. Further, considering the project-specific site, PP may necessarily explore the possibility of energy conservation by hybrid energy sources towards minimizing power requirements through national grid.

In addition, the following conditions shall be specifically complied with:

- 7. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani or Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter will be available on the PP website.
- 8. Validity of the Environmental Clearance (EC) accorded shall be for a period of 07 (seven) years from the date of its issue.

- 9. These stipulations would be enforced among others under the provisions of Water *(Prevention and Control of Pollution)* Act, 1974, the Air *(Prevention and Control of Pollution)* Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
- 10. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by State Environment Impact Assessment Authority.
- 11. Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.
- 12. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully,

*Sd/-*(Parag Nagarcenkar) **Member Secretary, Goa-SEIAA** 

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### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat, 3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438303 Fax. no.: 2438528 *e-mail: goaseac@gmail.com* 

No: 3 – 181 – 2010/STE-DIR/ 41

Date: 18<sup>th</sup> November 2016

To, **Managing Director**, Goa State Infrastructure Development Corporation (GSIDC), 7<sup>th</sup> Floor, EDC House, Dr. Atmaram Borkar Road, Panaji, Goa – 403001

# Sub: - CRZ clearance for construction of bridge across river Mandovi at panaji including approaches on NH-17 (now NH-66) between Pundalik nagar junction (Porvorim) to Merces junction (Panaji) – application as per clause 4.2 (ii) of the CRZ Notification, 2011 - reg.,

Ref.:

- (i) Hon'ble NGT Order in the matter of an Execution Application no. 48/2016 (WZ) in Application No. 85/2015 (WZ) i.e. *Goa Foundation, through its Secretary V/s Goa State Infrastructure Development Corporation (GSIDC) & Ors.*,
- (ii) Your application vide letter no. GSDIC/Engg/Works/1000/4717 dated 3<sup>rd</sup> November 2016.
- (iii) Recommendations of the Goa Coastal Zone Management Authority (*GCZMA*) vide letter no. GCZMA/N/13-14/95/1143 dated 8<sup>th</sup> August 2016.
- (iv) Letter from the GCZMA vide no. GCZMA/APPLN No.85/2015/WZ/NGT/05/1646 dated 9<sup>th</sup> November 2016.
- (v) Your e-mail communicated dated 9<sup>th</sup> November 2016 enclosing therein point-wise reply to points raised by M/s Goa Foundation in its representation dated 4<sup>th</sup> November 2016.
- (vi) Your compliance vide letter no. GSIDC/Engg/Works/1000/4892 dated 15<sup>th</sup> November 2016.

#### Sir,

With reference to your application mentioned at sr. no. (ii) as well as recommendations forwarded by the Goa Coastal Zone Management Authority (GCZMA) vide (iii) above, this is to inform you that the said matter, *as per the provision 4 (2) (ii) referred in the 'Amendment' of the CRZ Notification, 2011*, was taken up for consideration during 35<sup>th</sup> Authority meeting held on 10<sup>th</sup> November 2016.

During the said meeting and subsequent project appraisal, the Authority perused following documents / details –

- 'Order' pronounced by the Hon'ble National Green Tribunal (NGT), Pune bench dated 27<sup>th</sup> October 2016 in an Execution Application no. 48/2016 (WZ) in Application No. 85/2015 (WZ) – i.e. in the matter of *Goa Foundation, through its Secretary V/s Goa State Infrastructure Development Corporation (GSIDC) & Ors.*,
- Goa State Expert Appraisal Committee's (Goa-SEAC hereinafter referred as 'Committee') recommendations considered during its 79<sup>th</sup> meeting held on 8<sup>th</sup> November 2016.
- 3. NOC / Recommendations of the GCZMA issued to the Project Proponent (PP) vide letter no. GCZMA/N/13-14/95/1143 dated 8<sup>th</sup> August 2016.
- 4. Environment Impact Assessment (EIA) Report prepared by M/s Fine Envirotech Engineers, Mumbai prepared during August 2015 and revised report of April 2016.
- Study on influence of new bridge piers on bed morphology and rive banks of Mandovi River – report prepared by the National Institute of Oceanography (NIO) during October 2015.
- 6. Representation received from **M/s Goa Foundation**, Mapusa vide letter no. Nil dated 4<sup>th</sup> November 2016.

Further, subsequent to (a) the project-specific presentations by Environmental Consultant **M/s Fine Envirotech Engineers**, Mumbai and (b) Technical presentation by Project Contractor - **M/s Larson and Tubro Ltd**., the Authority also conducted site-inspection of the proposed project area to ascertain on-site conditions / environmental safeguards undertaken and has noted the following salient observations.

- i. The land tract starting from Merces circle upto Kadamba stand comes under the modified design for the bridge portion coming from Ponda end which will result in minimal mangrove removal as against the initial design. The said area is coming under survey numbers 47, 48, 58, 59, 73, 74 of village Morombi-O-Piqueno as mentioned in *Annexure–V* of communication referred at (vi) above. Further, mangrove cutting will be limited only in areas where only pile foundation is proposed; rest of the mangrove tract/zone will remain undisturbed causing less damage. It will also reduce the mangrove felling as envisaged during the initial phase of construction design.
- ii. On perusal of the study (*page nos. 51- 52*) entitled "Study on influence of new bridge piers on bed morphology and river banks of Mandovi river" conducted by the National Institute of Oceanography (NIO) during October 2015, it was noted that new bridge piers are being collocated and aligned with old bridge piers. Number of piers are being reduced considerably (*i.e. only 4 nos. of piers for the third bridge compared to 12 nos. each for the two earlier bridges*) thereby the effect of the new bridge piers is

minimal on the local hydrodynamics and morphology. Further, the study has also concluded that along the bed morphology and river banks of Mandovi the changes in flow speed are insignificant and therefore, it can be observed that the presence of new bridge piers do not have significant influence on the hydrodynamics in the study region. In the vicinity of piers the flow velocities are observed to be reduced that will help in deposition of sediments.

- iii. The PP has already obtained relevant permissions from (a) Department of Forests, (b) Goa State Pollution Control Board (*GSPCB*), (c) Goa Coastal Zone Management Authority (*GCZMA*), (d) Town & Country Planning (*TCP*) Department, (e) Water Resources Department (*WRD*), (f) Captain of Ports (*CoP*) and (g) Directorate of Tourism.
- iv. The main bridge column is supported by pile foundation with free flowing spaces in between and pier-cap on the top which obstructs very less part of the flow during high and low tides. The sharp corners of the pile foundation cap will be covered on all corners by round pipes (*i.e. fenders*) to avoid sharp-edge disturbances in the flow of river. This will also serve the purpose of reducing impact of the plying vessels / barges, etc. on the piers.
- v. PP has responded to points raised by the M/s Goa Foundation point-wise, copy of which was presented during the project-specific presentation and were felt to be satisfactorily complied with.

Subsequently, on perusal of GCZMA recommendations (*as referred in (3) above*) and SEAC's observations (*as referred in (2) above*), the Authority has decided to grant the CRZ clearance for construction of  $3^{rd}$  Mandovi bridge subject to submission of appraisal of mangrove assessment / replantation from forest Department. In addition, the PP is also required to comply with the following 'Specific Conditions' during the entire tenure of the project activity (*i.e. preconstruction / during construction / post-construction*).

- (i) Periodic and regular examinations of exposed concrete structures for fouling encrustations and to take the necessary antifouling measures to avoid weakening of the pile structures.
- (ii) Quarterly pelagic and benthic sampling be done at strategic locations in consultations with the Benthic Biology division of NIO, to assess diversity and density of Planktons and Benthic biota respectively; until completion of the project and for a period of at least 1 year thereafter. In addition, also revise the listing of marine biota provided in Annexure –III A-F (*page No. 75-77*) in EIA report.
- (iii)The PP shall carry out mangrove plantation in consultation with the Goa State Biodiversity Board (*GSBB*) and the Department of Forests.

- (iv)The temporary cofferdams erected by the PP should not hamper the flow of water in any way and the same should be removed immediately after 30 days upon completion of the proposed work.
- (v) The gangway constructed for free movement of the manpower engaged in the construction work and platforms constructed in the river for construction work has to be removed within 3 months of the completion of the work.
- (vi)Monitoring of Ambient Air Quality, Noise-level monitoring, ground and surface-water monitoring throughout the construction phase of the said project shall be carried out and results shall be prominently displayed at the site. The location of Ambient Air Quality Monitoring (*AAQM*) stations and its frequency shall be decided in consultation with the Goa State Pollution Control Board (*GSPCB*).
- (vii)Disposal of debris including the excavated material during construction phase shall not create adverse effect on neighbouring communities and shall be disposed-off within the project site with the approval of the Competent Authority concerned, after taking the necessary precaution for general safety and health aspects.
- (viii) Use of diesel generator sets during construction phase should be enclosed type and confirm to Environment (*Protection*) Act / Rules for air and noise emission standards.
- (ix) Structural design aspects in accordance with the seismic zone shall be strictly adhered to National and International standards / codes shall be practiced for structural safety of the bridge.
- (x) The construction materials and debris shall be properly stored and handled to avoid negative impacts such as air pollution and public nuisance by blocking the roads / public access. Appropriate barricading shall be done and signboards shall be put at such sites.
- (xi) Disaster Management Plan (*DMP*) for preparedness to meet with all types of likelihood disasters / unforeseen conditions shall be prepared before commencing further construction activity. This aspect was discussed during the technical presentation made during the meeting and was found satisfactory.
- (xii) Traffic congestion on roads approaching to the proposed project site and nearby highways (main roads) must be avoided by taking appropriate / suitable measures including signages, online / automatic displays, etc.,
- (xiii) Post monitoring on bed morphology has to be carried out by the PP for a period of atleast one year after completion of the project activity.
- (xiv) The PP should submit half-yearly compliance report in hard and soft-copy format to the Authority for a period upto project completion.
- (xv) The PP shall upload the status of the compliance to above-referred conditions, including results obtained during monitoring of data, on their website and shall update the same periodically.

Further, while appraising the aforesaid proposal, the Authority has also relied on the fact about the great convenience for traffic, as the third bridge will by-pass the traffic inflow and aid in diverting the same on the National Highway (NH 66), on its completion and avoid traffic congestion considerably.

This CRZ clearance is issued -

- (i) with respect to the environmental considerations and is subject to ensuring compliance by the PP to Rules / Regulations / Govt. Resolutions / Circulars issued from time-to-time by Authorities concerned. In addition, the PP is mandated to comply with other provisions of the CRZ Notification, 2011 (*as amended*) as well.
- (ii) Without prejudice to action initiated in the Environment (*Protection*) Act, 1986 or the Rules made thereunder or any court cases pending in the court of law. As such, it does not mean that the PP has not violated any environmental laws in the past and whatever decision under the said Act / Rules, as applicable, by the Hon'ble Court will be binding on the PP. Hence, this CRZ clearance does not give immunity to the PP in case complaint filed against it, if any, initiated under the said Act.
- (iii) In case of submission of false documents and non-compliance to any of the stipulated conditions, this Authority will revoke or suspend the CRZ clearance without any intimation and initiate appropriate legal action under the Environment (*Protection*) Act, 1986 (*as amended till date*).

Yours sincerely,

*Sd./-*(Mr. Srinet Kothwale) **Member Secretary, Goa-SEIAA** & Director, Department of Environment, Goa

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### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

3rd Floor, Dempo Towers, Patto, Panaji, Goa - 403 001Phone nos.: 2438303Fax. no.: 2438528

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/40* 

Date: 31<sup>st</sup> October 2016

*To,* **M/s Gera Development Private Limited,** 200, Gera Plaza, Boat club road, Pune – 411001.

## Sub.: Prior environmental clearance for proposed construction of a building construction project 'Enchanted woods' at survey no. 33/1, Candola village, Ponda Taluka, Goa.- reg.,

Sir,

I am directed to refer to your application (*i.e. Form-1, Form-1A*) dated 8<sup>th</sup> February 2016 seeking prior Environmental Clearance (EC) as mandated in the EIA Notification, 2006 (*as amended till date*) for proposed construction of a building construction project **'(Enchanted woods)** ' in the property bearing survey no. 33/1, Candola village, Ponda Taluka, Goa. Accordingly, the above proposal has been appraised under '**8(a)** – **B2 category**': *Building and construction project*. Subsequently, the Goa State Expert Appraisal Committee (*Goa-SEAC - hereinafter referred as 'Committee*') conducted the site-inspection on 01<sup>st</sup> March 2016 and was followed by project-specific presentation by the NABET/QCI-accredited environmental consultant (*M/s Sadekar Enviro Engineers Pvt. Ltd, Panaji, Goa*) on behalf of the Project Proponent (PP) during its 64<sup>th</sup> meeting held on 21<sup>st</sup> April 2016. Thereafter, the Goa-SEAC ascertained / verified the compliances during its subsequent meetings i.e. (66<sup>th</sup>/5<sup>th</sup> May, 68<sup>th</sup>/16<sup>th</sup> June, 69<sup>th</sup>/12<sup>th</sup> July, 70<sup>th</sup>/26<sup>th</sup> July -2016) and during 73<sup>rd</sup> Goa-SEAC meeting held on 1<sup>st</sup> September 2016, the aforementioned proposal was forwarded to Goa State Environment Impact Assessment Authority (*Goa-SEIAA – hereinafter referred as "Authority*).

1. Project details and salient features of the proposed developmental activity, as submitted by the proponent, is as under –

#### A. Details of property and project:-

1. Total plot area	- 1, 26, 040 Sq mts.
2. Proposed built up Area	- 1, 01,147.69 Sq.mts.
3. Total No. of Flats	784 numbers.
4. Total No. Of Villas	44 numbers.
5. Total No. of Shops	44 numbers.
6. Total no. of offices	— 13 numbers.
7. Total Car Parking provided	= 1056 cars.

#### B. Water requirement:

#### Source-PWD tankers, STP treated water and Government supply.

- **a) During construction phase 150 CMD** (50CMD for domestic and 100 CMD for construction).
- **b) During operational phase 494 CMD** (463 CMD residential complex and 31 CMD for Commercial complex)
- C. <u>Wastewater generation</u> Total sewage generated during construction phase-12 CMD. During Operation phase sewage generated will be treated in a full fledged 3 STP (150 KLD x 2 nos) and (100 KLDx1 no) = (Total 400 KLD).

#### D. Solid waste generation -

- c. During construction phase -75 kg/day of solid waste
- d. During operational phase -1937 kg/day of solid waste.

#### E. Power requirement -

- c. Construction phase 50 KW (Source- GSEB) 2 DG sets of 150 KVA.
- d. Operation phase 7595 KW (Source- GSEB) 2 DG sets of 150 KVA.
- 10. Accordingly, during 34<sup>th</sup> Goa-SEIAA meeting held on 4<sup>th</sup> October 2016, authority perused all the details of project and after detailed deliberation and discussion on the said matter decided to accord prior environmental clearance (EC) in terms of the EIA Notification 2006, as amended subject to compliance to following <u>'Specific Conditions'</u> prior to initiate any construction activity/work on site:
- v. The approach road leading to the site should be constructed prior to commencement of any construction activity at site as per the regulations of the Town & Country Planning Department.

- w. Areas which are marked as **No Development Zone (NDZ)** should be year marked on site and no construction shall be carried out in the said NDZ. Land Profile of NDZ shall not be altered.
- x. No construction shall be carried out in the property which is identified as private forest, if any.
- y. PP should obtain all the requisite permissions/NOCs/Licenses etc from all the competent authorities before commencement of any activity at site.

Further, progress will be reviewed after six months *(minimum 3 times in a year) depending upon progress of the work*. Further, the compliance to these conditions as and when submitted by PP will be verified /ascertained by the authority to propose additional conditions if any.

- 11. Further, the Authority has decided to grant prior environmental clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-
- o. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- p. *Solar power generation* Every major consumer of conventional power will have to generate and opt for certain percentage of power generation from the non-conventional sources. In this context, Project Proponent (PP) should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage only to enable installation of solar panels as and when made applicable in future. In addition, south-facing walls to be utilized to install solar panels to harness optimum solar energy. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heater system. PP should install, after checking feasibility, solar-plus-hybrid non-conventional source as source of energy.
- q. PP should adopt roof-top rainwater harvesting / conservation measures to optimally utilize the water availability by constructing sumps for collection of rainwater as per the site-specific location details provided.
- r. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal and treatment / air and water pollution / waste-water management.

- s. PP should not disturb the natural drainage and as far as possible and maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment.
- t. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization / zoning.
- u. PP should submit half-yearly compliance report(s) in hard as well as soft copy format to the Authority for the period upto project completion.
- v. This environmental clearance is issued subject to land use verification. Local authority / planning authority should ensure this with respect to Rules, Regulations, Notifications, Government Resolutions, Circulars, etc. issued if any, from time to time. Judgements / Orders issued by Hon'ble High Court, NGT, Supreme Court regarding DCR provisions, environmental issues applicable in this matter should be verified by the competent authorities.
- w. PP should ensure and ascertain that 'civil plans' which were submitted to the Committee/ Authority during the process of project appraisal be submitted to other line Departments / agencies concerned while seeking NOC / Consents/ Permissions, as applicable. If any discrepancy is found in the plans submitted or details provided may be reported to this Authority. This environmental clearance is issued with respect to the environmental considerations and it does not mean that Goa-SEIAA approved the proposed land.
- x. PP needs to ensure that no treated water or any waste sewage shall be discharged into any water body. STP of suitable capacity shall be installed considering the quantity / quality of waste water generation.
- y. E-waste if any shall be disposed through Authorised vendor as per E-waste (*Management & Transboundary Movement*) Rules, 2016.
- z. This environmental clearance is issued subject to obtaining NOC from the Forestry & Wildlife angle including clearance from the Standing Committee of the National Board for wildlife, if applicable. The grant of environmental clearance does not necessarily imply that Forestry & Wildlife clearance has been granted to the project, which has to be dealt separately by the competent authorities in accordance with law.

- aa. The height, construction gross built up area of proposed construction is 1, 01,147.69 Sq.mts shall be in accordance with the existing FSI/ FAR norms of the local body and planning authorities and it should ensure the same along with survey number before approving layout plan and before according commencement certificate to proposed work, Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.
- bb. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
  - 12. Further, the PP is required to comply with the following <u>"General Conditions"</u> <u>during construction phase:-</u>
- kk. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the Authority within 30 days of starting construction work at site.
- ll. Permission to draw groundwater, as applicable, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) government of Goa.
- mm. Project proponent shall not make any change in the Surface Layout Plan / Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project proponent needs to inform this Authority.
- nn. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
- oo. The diesel generator sets (D.G. set) to be used during construction / after commissioning should be low-sulphur diesel type and should conform to Environment (*Protection*) Rules prescribed for air and noise emission standards as laid down by the Goa State Pollution Control Board (GSPCB).
- pp. The installation of the Sewage Treatment Plant (STP) if any should be certified by the GSPCB and a report in this regard should be submitted to the Authority before the STP is commissioned.

- qq. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche and first aid room etc.
- rr. Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of waste water and solid waste generated during the construction phase should be ensured.
- ss. The solid waste generated should be properly segregated. Dry /inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- tt. Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved site with the approval of competent authority.
- uu. Arrangements shall be made that waste water and storm water do not get mixed.
- vv. All the top soil excavated during construction activities should be stored if or use in horticulture/landscape development within the project site.
- ww.Additional soil for levelling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- xx. Green-belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the State Forest / Agriculture Department.
- yy. Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- zz. Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured so that they should not leach into ground water.

- aaa. Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary authorisation of the GSPCB.
- bbb. The diesel requires for operating DG sets shall be stored in underground tanks and if required, Clearance from concerned authority shall be taken.
- ccc. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standard and should be operated during non-peak hrs.
- ddd. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level construction phase, so as to conform to the stipulated standard by CPCB/ GSPCB.
- eee. The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquakes, adequacy of fire fighting equipments etc. as per National Building Code (NBC) including measures from lighting.
- fff. Storm water controlled and its re-use as per Central Ground Water Board (CGWB) and Bureau of Indian Standards (BIS) for various applications.
- ggg.Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- hhh. The groundwater level and its quality should be monitored regularly in consultation with ground water authority of the Water Resources Department (WRD), Government of Goa.
- iii. The installation of the sewage treatment plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the GSPCB before the project is commissioned for operation. Treated effluent released from STP shall be recycled / refused to the maximum extent possible. Discharge of this unused treated effluent, if any should be discharged in the sewer line. Treatment of 100% grey

water through the centralised treatment should be done. Necessary measures should be adopted to mitigate the odour problem from STP.

- jjj. Use of glass may be reduced upto 40% to reduce electricity consumption and load on air-conditioning. If necessary, use high quality double glass with special reflective coating in windows.
- kkk.Roof should meet prescriptive requirement as per energy conservation building code by using appropriate thermal insulation material.
- III. Energy conservation measures like installation of LEDs' for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use of CFLs / TFLs, if any, should be properly collected and disposed off / sent for recycling as per the prevailing guidelines / rules of the regulatory authority to avoid mercury contamination.
- mmm. Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the environment (protection) Act 1986. The height of stack of DG sets should be equal to the height needed for the combine capacity of all proposed DG sets.
- nnn.Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- ooo.Traffic congestions near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalised and no public place should be utilised.
- ppp.opaque wall should meet prescriptive requirement as per energy conservation board which is proposed to mandatory for all air conditioned spaces while it is aspiration for non- air conditioned spaces by use of appropriate thermal insulation material to fulfil requirement.
- qqq.The buildings should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.

- rrr. Regular supervision of the above and other measures for monitoring should be in placed all through the construction phase, so as to avoid disturbance to the surroundings.
- sss. Under the provisions of Environment Protection Act 1986, legal action shall be initiated against the PP if it was found that construction of the project has been started without obtaining EC.
- ttt. Six monthly compliance reports should be submitted to the MOEF with copy to the Goa-SEIAA and GSPCB.
  - 13. Further, the Authority decided to direct the PP to comply with the following "General Conditions" during post-construction phase:
    - s. PP shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. The PP to explore possibility of utilising excess treated water in the adjacent area for gardening before discharging into sewer line. No physical occupation of allotment will be given unless all above said environmental infra structure is installed and made functional including water requirement prior certification from appropriate authority shall be obtained.
    - t. Wet garbage should be treated by organic waste convertor and treated waste (manure) should be utilise in the existing premises foe gardening. And no wet garbage will be disposed outside the premises. Local authority should ensure compliance to this.
    - u. A complete set of all the documents submitted to Goa-SEIAA should be forwarded local authority, GSPCB and Planning authority.
    - v. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the Goa-SEIAA.

- w. Separate funds shall be allocated for implementation of environmental protection measures /EMP along with item wise breaks-up. The funds earmarked for the environment protection measures shall not be diverted for other purposes.
- x. A copy of the environmental clearance letter shall be sent by PP to the concerned Village Panchayat and planning authority as applicable, from which suggestions / representation, if any, were received while processing the proposal. The EC letter shall also be put on the company's website by PP within one week time period from date of issue of environmental clearance.
- y. The PP shall upload the status of the compliance of the stipulated EC conditions, including results of monitoring data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF & CC, the respective Zonal office, CPCB and the GSPCB. The pollutant levels in respect of SPM, RSPM, SO<sub>2</sub> and NO<sub>x</sub> (*ambient levels as well as D.G. stack emissions*) shall be monitored.
- z. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V is to be submitted to the GSPCB as prescribed under the Environment (*Protection*) Rules 1986 (as amended) and subsequently shall also be put on the company's website along with the status of the compliance of the EC conditions and shall also be sent to the respective Regional Office of the MoEF & CC.
- aa. Consent to Operate shall be obtained from GSPCB before operation, failing which the Environmental Clearance herein shall be deemed to be withdrawn.
- bb. Sewage Treatment Plant (STP) shall be installed at site. The STP should be certified by an independent expert and adequacy report in this regard should be submitted to GSPCB before the project is commissioned for operation. Necessary measures should be made to mitigate the odour problem from STP.
- cc. The solid waste (dry as well as wet garbage) generated should be properly collected and segregated. Organic Waste Converter shall be installed by RWA for the treatment of biodegradable (wet) garbage generated within the housing complex. Non-Biodegradable waste should be outsourced properly after recovery of recyclable material. Adequate measures should be taken to prevent odour problem.

- dd. Utilization of Diesel power generating sets is subject to power failure condition only. The DG sets proposed as a source of power back up during operation phase should be of enclosed type, low sulphur diesel run and conform to rules made under the Environment (Protection) Act, 1986. The DG sets should be subjected to periodic noise and stack monitoring in consultation with GSPCB. Waste/used diesel should be stored and managed as per the Hazardous and other Wastes (Management & Transboundary Movement) Rules, 2016 as amended.
- ee. Noise should be controlled to ensure that it does not exceed the prescribed standards both during day & night time.
- ff. The ground water drawl from existing/proposed bore wells if any should be done only with the prior permission of Ground Water Board. The ground water level and its quality should also be monitored regularly both during construction and operation phase in consultation with Ground Water Board.
- gg. Traffic congestion near the entry and exit points from the roads adjoining the project site must be avoided. Parking should be fully internalized and no public space should be utilized.
- hh. Energy Conservation measures such as solar lighting for common area, solar water heating system, CFLs/TFLs for lighting of areas, LED lights for signage, solar inverters on the etc should be adopted.
- ii. Used CFLs/TFLs should be properly collected and disposed off/ sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.
- jj. A Report on energy conservation measures conforming to energy conservation norms finalized by Bureau of energy Efficiency should be prepared incorporating details about building materials and technology, R & U factors etc and submit to the State Expert Appraisal Committee and a copy to GSPCB in three months time.
- 14. Further this EC is issued without prejudice to the action initiated in the Environment (*Protection*) Act or any court case pending in the court of law. As such, it does not mean that the PP has not violated any environmental laws in the past and whatever decision under the said Act by the Hon'ble Court will be binding on the PP. Hence, this environmental clearance does not give immunity to the PP in the case complaint is filed against, if any, or action initiated under the said Act.

- **15.** In case of submission of false document and non-compliance to any of the stipulated conditions, this Authority will revoke or suspend the EC without any intimation and initiate appropriate legal action under the Environment (*Protection*) Act, 1986 (*as amended till date*).
- **16.**E-waste generated in the complex should be managed as per CPCB guidelines on E-waste management.
- **17.** The Goa-SEIAA reserves their right to add any stringent condition or to revoke the environmental clearance, if conditions stipulated above are not implemented to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- 18. In addition, the following conditions shall be specifically complied with:
  - 13. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani or Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter will be available on the PP website.
  - 14. Validity of the Environmental Clearance (EC) accorded shall be for a period of 07 (seven) years from the date of its issue.
  - 15. These stipulations would be enforced among others under the provisions of Water (*Prevention and Control of Pollution*) Act, 1974, the Air (*Prevention and Control of Pollution*) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
  - 16. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by State Environment Impact Assessment Authority.
  - 17. Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.

18. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully,

*Sd./-*(Srinet N. Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

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#### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

3rd Floor, Dempo Towers, Patto, Panaji, Goa - 403 001Phone nos.: 2438303Fax. no.: 2438528

e-mail: goaseac@gmail.com

No: 3 – 181 – 2010/STE-DIR/ 23

Date: 5<sup>th</sup> August 2016

To,

M/s Trinitas Realtors India LLP, Floor 8, Muttha Chamber, Senapati Bapat Marg, Pune -411016

Sub.: Proposed Residential cum Commercial complex in Survey No. 198/1 of Sancoale village, Mormugao taluka, Goa by M/s Trinitas Realtors India LLP – reg.,

Ref: (1) This office letter no. No: 3 – 181 – 2010/STE-DIR/21 dated 4<sup>th</sup> August 2016.

Sir,

In partial correction of our letter referred at Sr.No. (1) above at page 3 of the letter under the item at Sr.No. (7) under the heading <u>Waste Water Generation</u> the word "SBR" appearing in first line may instead be corrected and read as "MBBR".

Further, other contents of the said letter remains unchanged.

Yours faithfully,

*Sd/-*

(Vikas .S.N. Gaunekar) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

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#### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

3rd Floor, Dempo Towers, Patto, Panaji, Goa - 403 001Phone nos.: 2438303Fax. no.: 2438528

e-mail: goaseac@gmail.com

No: 3 – 181 – 2010/STE-DIR/ 21

Date: 4<sup>th</sup> August 2016

*To,* **M/s Trinitas Realtors India LLP,** Floor 8, Muttha Chamber, Senapati Bapat Marg, Pune -411016

## Sub.: Proposed Residential cum Commercial complex in Survey No. 198/1 of Sancoale village, Mormugao taluka, Goa by M/s Trinitas Realtors India LLP – reg.,

Sir,

I am directed to refer to your application (*i.e. Form-1, Form-1A*) dated 12<sup>th</sup> February 2016 seeking prior Environmental Clearance (EC) as mandated in the EIA Notification, 2006 (as amended till date) for proposed development of residential-cum-commercial complex in Survey No. 198 of Sancoale village, Mormugao taluka, Goa. Accordingly, the above proposal has been appraised under '8(b) – B2 category': Building and construction project on the basis of the documents enclosed with application by the Goa State Expert Appraisal Committee (Goa-SEAC - hereinafter referred as 'Committee'). Subsequently, the Committee conducted the siteinspection on 01<sup>st</sup> March 2016 and thereafter the Project Proponent (PP) through M/s Aditya Environmental Services, Goa. (NABET/QCI-accredited environmental consultant) made the project-specific presentation during its 62<sup>nd</sup> meeting held on 05<sup>th</sup> April 2016 seeking Terms of References (ToRs') to conduct EIA study for the project. Further, the Committee issued Terms of References (ToRs') vide letter no. 3/181/2012/STE-DIR/Part-I/EIA-Goa/06 dated 13<sup>th</sup> April. Later, project Proponent submitted EIA report on 19th July 2016 and on subsequent perusal of the EIA report during its consecutive meetings, (i.e. 70<sup>th</sup> meeting held on 26<sup>th</sup> July 2016 and 71<sup>st</sup> meeting held on 29th July 2016) the Committee noted that the submitted document is a compilation of data of rapid EIA covering summer and 1<sup>st</sup> phase of monsoon season. The Consultant addressed all the points raised in the ToRs' in various functional areas necessary for environment impact appraisal. The Committee has noted that the EIA report is replete with relevant technical details and recommended the proposal for grant of environmental clearance (EC) to this Authority.

Thereafter, the Authority deliberated on Committee's recommendations vis-a-vis verified the compliances/EIA report submitted by the PP, during its 33<sup>rd</sup> meeting held on 2<sup>nd</sup> August 2016 and decided to grant prior environmental clearance for the proposed developmental activity subject to the specific conditions to be incorporated in EC which are stated below:

- 1. Considering the scale of the construction proposed the movement of heavy vehicles and building materials during construction phase to the site shall be strictly during non-peak hours.
- 2. The phase-wise construction plans / schedule be submitted to the Authority.
- 3. Efficient construction debris management system during construction phase be prepared and submitted at the time of post-EC compliance.
- 4. All sources of sediments at the site shall be effectively contained and handled avoiding its discharge into storm-water drainages on site during construction phase.
- 5. All avenue plantations shall be done prioritizing local species ensuring a good sapling survival rate. The landscape work may be undertaken simultaneously with the construction of the project.
- 6. As submitted by the PP in the EIA report, the necessary recommendation in terms of road alignment to be incorporated to reduce accident hazards.
- 7. Any pertinent observation in the scope of environmental safety and protection, not covered in the EIA submitted by the PP, however observed at any phase of construction must be immediately reported to the Authority for requisite intervention / action in the matter.
- 8. Considering the scale of the project, the PP may consider an appropriate budgetary allocation benefiting the local communities. The details of the same may be submitted to the Authority.
- Project details and salient features of the proposed developmental activity, as submitted by the proponent, is as under –

1. Total plot area – 1,28,925 Sqmts.

- a. Area under Settlement Zone -1,18,795 sq.mts.
- b. Area under Commercial Zone 10,130 sq.mts.
- 2. Total built up Area 2,00,802.60 sq.mts.
- 3. Height of building 24 mts (*Commercial*) +15 mts + stilt (*residential zone*)
- 4. Expected occupancy 11,287 nos. of people
- 5. Parking Proposed 2164 residential + 249 Commercial= Total Parking=2413.
- 6. Water requirement: Source- PWD and water tankers.
  - **a) During construction phase 73 CMD** (37CMD for domestic 21 CMD for flushing and 15 CMD for construction)
  - **b) During operational phase 2285.33** CMD (1109.42 CMD *is fresh source and* 1175.91 CMD *is STP-treated water*).

Wastewater generation – 1433 CMD to be treated in SBR-based 1480 -KLD capacity STP. It will generate 1175 CMD of treated water (483 CMD for sewer line & 340CMD for landscaping 0.75 kg. of dry sludge /day will be generated.

#### 8. Solid waste generation -

- e. During construction phase 0.22 tones of solid waste / day
- f. During operational phase (1669 kg/day of Biodegradable and 2,243 kg/day non-biodegradable).

#### 9. Power requirement -

- e. Construction phase 250 KW
- f. Operation phase 22,799.40 KW through GEL
   Back-up power through (a) 5 D.G. sets of 500 KVA capacity each) and (b) 1
   D.G. set of 250 KVA capacity.

Accordingly, the Authority has decided to grant prior environmental clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

- cc. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- dd. *Solar power generation* Every major consumer of conventional power will have to generate and opt for certain percentage of power generation from the non-conventional sources. In this context, Project Proponent (PP) should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage only to enable installation of solar panels as and when made applicable in future. In addition, south-facing walls to be utilized to install solar panels to harness optimum solar

energy. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heater system. PP should install, after checking feasibility, solar-plus-hybrid non-conventional source as source of energy.

- ee. PP should adopt roof-top rainwater harvesting / conservation measures to optimally utilize the water availability by constructing sumps for collection of rainwater as per the site-specific location details provided.
- ff. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal and treatment / air and water pollution / waste-water management.
- gg. PP should not disturb the natural drainage and as far as possible and maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment.
- hh. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization / zoning.
- ii. PP should submit half-yearly compliance report(s) in hard as well as soft copy format to the Authority for the period upto project completion.
- jj. This environmental clearance is issued subject to land use verification. Local authority / planning authority should ensure this with respect to Rules, Regulations, Notifications, Government Resolutions, Circulars, etc. issued if any, from time to time. Judgements / Orders issued by Hon'ble High Court, NGT, Supreme Court regarding DCR provisions, environmental issues applicable in this matter should be verified.
- kk. PP should ensure and ascertain that 'civil plans' which were submitted to this Authority during the process of project appraisal be submitted to other line Departments / agencies concerned while seeking NOC / Consents, as applicable. If any discrepancy is found in the plans submitted or details provided may be reported to this Authority. This environmental clearance is issued with respect to the environmental considerations and it does not mean that Goa-SEIAA approved the proposed land.
- 11. PP needs to ensure that no treated water or any waste sewage shall be discharged into any water body. STP of suitable capacity shall be installed considering the quantity / quality of waste water generation.
- mm. E-waste shall be disposed through Authorised vendor as per E-waste (*Management and Handling*) Rules, 2011.

- nn. This environmental clearance is issued subject to obtaining NOC from the Forestry & Wildlife angle including clearance from the Standing Committee of the National Board for wildlife, if applicable. This environmental clearance does not necessarily imply that Forestry & Wildlife clearance has been granted to the project, which will be considered separately on merit.
- oo. The height, construction gross built up area of proposed construction **is 2,00,802.60 Sq.mts** shall be in accordance with the existing FSI/ FAR norms of the urban local body and it should ensure the same along with survey number before approving layout plan and before according commencement certificate to proposed work, Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.
- pp. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.

Further, the PP is advised to comply with the following "General Conditions" during construction phase:-

- uuu. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the Authority within 30 days of starting construction work at site.
- vvv.Permission to draw groundwater, as applicable, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD).
- www. Project proponent shall not make any change in the Surface Layout Plan / Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the Authority.
- xxx.Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
- yyy. The diesel generator sets (D.G. set) to be used during construction / after commissioning should be low-sulphur diesel type and should conform to Environment (*Protection*) Rules prescribed for air and noise emission standards as laid down by the GSPCB.
- zzz. The installation of the Sewage Treatment Plant (STP) if any should be certified by the GSPCB and a report in this regard should be submitted to the Authority before the STP is commissioned.

- aaaa. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche and first aid room etc.
- bbbb. Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of waste water and solid waste generated during the construction phase should be ensured.
- cccc. The solid waste generated should be properly segregated. Dry /inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- ddd. Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved site with the approval of competent authority.
- eeee. Arrangements shall be made that waste water and storm water do not get mixed.
- ffff. All the top soil excavated during construction activities should be stored if or use in horticulture/landscape development within the project site.
- gggg. Additional soil for levelling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- hhhh. Green-belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the State Forest / Agriculture Department.
- iiii. Soil and ground water samples will be tasted to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- jjjj. Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured so that they should not leach into ground water.
- kkkk. Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the GSPCB.
- III. The diesel requires for operating DG sets shall be stored in underground tanks and if required, Clearance from concerned authority shall be taken.

- mmmm. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standard and should be operated during non-peak hrs.
- nnnn. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level construction phase, so as to conform to the stipulated standard by CPCB/ GSPCB.
- 0000. The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquakes, adequacy of fire fighting equipments etc. as per National Building Code (NBC) including measures from lighting.
- pppp. Storm water controlled and its re-use as per Central Ground Water Board (CGWB) and Bureau of Indian Standards (BIS) for various applications.
- qqqq. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- rrrr. The groundwater level and its quality should be monitored regularly in consultation with ground water authority of the Water Resources Department (WRD), Goa.
- ssss. The installation of the sewage treatment plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the GSPCB before the project is commissioned for operation. Treated effluent released from STP shall be recycled / refused to the maximum extent possible. Discharge of this unused treated effluent, if any should be discharged in the sewer line. Treatment of 100% grey water through the centralised treatment should be done. Necessary measures should be adopted to mitigate the odour problem from STP.
- tttt. Use of glass may be reduced upto 40% to reduce electricity consumption and load on air-conditioning. If necessary, use high quality double glass with special reflective coating in windows.
- uuuu. Roof should meet prescriptive requirement as per energy conservation building code by using appropriate thermal insulation material.
- vvvv. Energy conservation measures like installation of LEDs' for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use of CFLs / TFLs, if any, should be properly collected and disposed off / sent for recycling as per the prevailing guidelines / rules of the regulatory authority to avoid mercury contamination.

- www. Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the environment (protection) Act 1986. The height of stack of DG sets should be equal to the height needed for the combine capacity of all proposed DG sets.
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- yyyy. Traffic congestions near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalised and no public place should be utilised.
- zzzz. opaque wall should meet prescriptive requirement as per energy conservation board which is proposed to mandatory for all air conditioned spaces while it is aspiration for non- air conditioned spaces by use of appropriate thermal insulation material to fulfil requirement.
- aaaaa. The shades should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
- bbbbb. Regular supervision of the above and other measures for monitoring should be in placed all through the construction phase, so as to avoid disturbance to the surroundings.
- ccccc. Under the provisions of Environment Protection Act 1986, legal action shall be initiated against the PP if it was found that construction of the project has been started without obtaining EC.
- dddd. Six monthly compliance reports should be submitted to the MOEF with copy to the Goa-SEIAA and GSPCB.

Further, the PP is advised to comply with the following "General Conditions" during

#### post-construction phase:-

a. PP shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. The PP to explore possibility of utilising excess treated water in the adjacent area for gardening before discharging into sewer line. No physical occupation of allotment will be given unless all above said environmental infra structure is installed and made functional including water requirement prior certification from appropriate authority shall be obtained.

- b. Wet garbage should be treated by organic waste convertor and treated waste (manure) should be utilise in the existing premises foe gardening. And no wet garbage will be disposed outside the premises. Local authority should ensure compliance to this.
- c. A complete set of all the documents submitted to Goa-SEIAA should be forwarded local authority / GSPCB.
- d. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the Goa-SEIAA.
- e. Separate funds shall be allocated for implementation of environmental protection measures /EMP along with item wise breaks-up. The funds earmarked for the environment protection measures shall not be diverted for other purposes.
- f. A copy of the environmental clearance letter shall be sent by PP to the concerned local body / municipal council / city corporation, as applicable, from whom suggestions / representation, if any, were received while processing the proposal. The EC letter shall also be put on the company's website by PP.
- g. The PP shall upload the status of the compliance of the stipulated EC conditions, including results of monitoring data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF&CC, the respective Zonal office, CPCB and the GSPCB. The pollutant levels in respect of SPM, RSPM, SO<sub>2</sub> and NO<sub>X</sub> (*ambient levels as well as D.G. stack emissions*) shall be monitored.
- h. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V is to be submitted to the GSPCB as prescribed under the Environment (*Protection*) Rules 1986 (as amended) and subsequently shall also be put on the company's website along with the status of the compliance of the EC conditions and shall also be sent to the respective Regional Office of the MoEF&CC.
- i. The EC is being issued without prejudice to the action initiated in the Environment (*Protection*) Act or any court case pending in the court of law. As such, it does not mean that the PP has not violated any environmental laws in the past and whatever decision under the said Act by the Hon'ble Court will be binding on the PP. Hence, this environmental clearance does not give immunity to the PP in the case complaint is filed against, if any, or action initiated under the said Act.
- j. In case of submission of false document and non-compliance to any of the stipulated conditions, this Authority will revoke or suspend the EC without any intimation and initiate appropriate legal action under the Environment (*Protection*) Act, 1986 (*as amended till date*).

k. The Goa-SEIAA reserves their right to add any stringent condition or to revoke the environmental clearance, if conditions stipulated above are not implemented to the satisfaction of the Authority or for that matter, for any other administrative reasons.

#### In addition,

- Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani or Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter will be available on the PP website.
- 2. Validity of the Environmental Clearance (EC) accorded shall be for a period of 07 (seven) years from the date of its issue.
- **3.** Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully,

*Sd/-*(Vikas .S.N. Gaunekar) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

\*\*\*\*\*\*

#### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

3rd Floor, Dempo Towers, Patto, Panaji, Goa - 403 001Phone nos.: 2438303Fax. no.: 2438528

e-mail: goaseac@gmail.com

No: 3 – 181 – 2010/STE-DIR/ 07

Date: 15th April 2016

То,

#### M/s Parsavnath Developers,

*PoA* through M/s Gera Developments Pvt. Limited, 200, Boat club road, Pune – 411001

# Sub: - Environmental Clearance (EC) for proposed construction project of commercial building - 'Imperium V' in the property bearing plot no. 43/ 44 at EDC Patto Plaza Panaji, Tiswadi Taluka, North Goa.

Sir,

This has reference to your application dated 26th May 2015 and subsequent resubmission dated 25th June 2015 seeking prior environmental clearance (EC) for the proposed project of commercial building - 'Imperium V' in the property bearing plot no. 43/44 at EDC Patto Plaza, Panaji, Tiswadi Taluka, North Goa as mandated under the provisions of the Environment Impact Assessment (EIA) Notification, 2006 (as amended till date). Accordingly, the above proposal has been screened and appraised under Category 8 (a) - Building and construction projects (as per the Schedule annexed to the said notification) and as category 'B2' project on the basis of the documents enclosed with application. viz. Form-1 and Form-1A. Subsequently, Goa State Expert Appraisal Committee (Goa-SEAC - hereinafter referred as 'Committee') conducted the site-inspection on 14th July 2015 and was followed by project-specific presentation by the NABET/QCIaccredited environmental consultant (M/s Sadekar Enviro Engineers Pvt. Ltd, Panaji, Goa) on behalf of the Project Proponent (PP) during its 49th meeting held on 15th September 2015. However, based on the project specific presentation, the Committee opined that technical matters w.r.t. (a) odour-control measures, (b) energy conservation calculations, (c) water balance and effective provision for rainwater harvesting initiatives, (d) site-specific soil characteristics and hydro-geological status, (e) disaster mitigation measures vis-à-vis fire-fighting provisions, (f) landscape management and (g) availability of time-series data pertaining to land use / land cover and CRZ applicability, etc., were not made clear to enable environmental appraisal of the project. As such, the Goa-SEAC sought additional compliance and directed the Project Proponent (PP) to make the observation-specific presentation again. Accordingly, the Goa-SEAC ascertained / verified the compliance during its 51<sup>st</sup> Goa-SEAC meeting held on 15<sup>th</sup> October 2015. Subsequently, based on post-presentation discussions and verification of documents submitted by PP during 53<sup>rd</sup> Goa-SEAC meeting held on 5<sup>th</sup> November 2015, the aforementioned proposal was recommended to Goa State Environment Impact Assessment Authority (*Goa-SEIAA – hereinafter referred as "Authority*) for grant of environmental clearance (EC) under the **EIA Notification 2006 as amended**.

Further, the Committee's recommendations vis-à-vis submission of 'Ecology and Biodiversity report' were deliberated and verified during 28<sup>th</sup> Authority meeting held on 2<sup>nd</sup> February 2016 respectively and it was decided to accord prior environmental clearance (EC) as mandated in the EIA Notification, 2006, (as amended).

Accordingly, it has been noted that the aforementioned proposal is seeking prior environmental clearance (EC) as per the provisions of the EIA Notification, 2006; for proposed commercial building - **Imperium V** in plot no. 43/ 44 at EDC Patto Plaza, Panaji comprising of 2P + Ground floor + 8 floors, 21 shops, total 325 offices (24 nos. on 1<sup>st</sup> floor and 301 nos. on 2<sup>nd</sup> floor to 8<sup>th</sup> floor) and with 18 food stalls.

Project details and salient features of the proposed developmental activity, as submitted by the PP, is as under –

1.	Total Plot Area	-	5,213.10 sq.mts.
2.	Total Built-up area (BUA) pro	posed -	28,532.87 sq.mts.
3.	Green belt		230 sq.mts.
4.	Number of floors	-	2P+ Ground floor+8 floors
5.	Height of building	-	27.68 mts.
6.	Parking required	-	260 nos.
7.	Parking proposed -3	24 nos for 4	wheeler & $215 \text{ m}^2$ for 2 wheeler.

#### 8. Water Requirement -

- a) During Construction phase: 30 m<sup>3</sup> / day (will depend on the number of people working and water required for construction activities).
- b) During Operation phase: 75 m<sup>3</sup>/day
- c) *Fire fighting*: 120 m<sup>3</sup>
- 9. **Power Requirements -** Source : Goa State Electricity Board
  - (a) *Construction Phase:* 40KVA, Back-up provisions D.G. set (40 KVA X 1 no.)
  - (b) *Operation Phase*: 1840KVA, Back-up provisions D.G. set (750 KVA X 1 no.)
- 10. Waste Management: Solid waste is proposed to be segregated as biodegradable and non-biodegradable waste. Non-biodegradable waste will be disposed-off through collection facility of the Corporation of City of Panaji (CCP) and Bio-degradable waste is proposed to be treated at in-house organic waste convertor. While, liquid effluent (*i.e. Sewage*) is proposed to be connected to existing sewage drains for treatment at common sewage treatment plant at EDC, Patto, Panaji.

In view of the above, the State EIA Authority has decided to accord environmental clearance (EC) to the said project under the provision of EIA Notification, 2006; (*as amended*) subject to compliance to the following **"General Conditions"** <u>for pre-</u><u>construction phase</u>:-

- i. Provision may be made for solar water heaters and solar power roof-tops facing towards South as well as south-facing walls to be effectively utilized to optimally harness solar energy. Further, considering the project-specific site, PP may necessarily explore the possibility of energy conservation by hybrid energy sources towards minimizing power requirements through national grid.
- ii. PP shall explain the possibilities to adopt roof-top rainwater harvesting / conservation measures to optimally utilize the water availability by constructing sumps for collection of rainwater.

- iii. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal and its treatment / air and water pollution / waste-water management.
- iv. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its site-specific landuse categorization / zoning.
- v. PP should submit half-yearly compliance report(s) in hard as well as soft copy format to the Authority for the period upto project completion.
- vi. This environmental clearance is issued subject to restricting of total built up area **28,532.87 sq.mt.** In case of any increase would require re-appraisal by this Authority.
- vii. This environmental clearance is issued subject to land-use verification. Local authority / planning authority should ensure this with respect to Rules, Regulations, Notifications, Government Resolutions, Circulars, etc. issued, if any. Judgements / orders issued by Hon'ble High Court, Hon'ble NGT, Hon'ble Supreme Court regarding DCR provisions, environmental issues applicable in this matter should be verified. PP should submit exactly the same plans appraised by the Goa-SEAC and Goa-SEIAA. If any discrepancy found in the plans submitted or details provided in the above para may be reported to this Authority. This environmental clearance is issued with respect to the environmental consideration and it does not mean that Goa-SEIAA approved the proposed land.
- viii.PP to ensure no treated water or any waste sewage shall be discharged into any water body.
- ix. E-waste shall be disposed-off through authorised vendor as per E-waste (*Management and Handling*) Rules, 2011.
- x. 'Occupation Certificate' shall be issued to the project by the Corporation of city of Panaji/ NGPDA only after ensuring availability of drinking water and connectivity of the sewer line and/ or operationalization of Sewage Treatment Plant (STP) of appropriate capacity to the project.
- xi. This environmental clearance is issued subject to obtaining NOC from Forestry & Wildlife division including clearance from the standing committee of the

National Board for Wildlife, if applicable & this environmental clearance does not necessarily imply that Forestry & Wildlife clearance has been granted to the project and may be considered separately on merit.

- xii. The height, construction of built-up area of proposed development shall be in accordance with the existing FSI / FAR norms of the urban local body (*i.e. NGPDA*) and it should ensure the same along with survey number before approving layout plan and before according commencement certificate to proposed work. Further, Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.
- xiii. All required sanitary and hygienic measures should be in place on-site before starting construction activities and to be maintained throughout the construction phase.

Further, the project proponent is directed to comply with the following "General

#### Conditions" during construction phase:-

- a. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the Authority before start of any construction work at the site.
- b. The Project Proponent (PP) may use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- c. Permission to draw groundwater, if feasible, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction / operation of the project.
- d. PP shall not make any change in the Surface Layout Plan / Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and / or otherwise, the project would require a fresh appraisal by the Authority.
- e. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
- f. The diesel-generator sets (D.G. set) to be used during construction / after commissioning should use low-sulphur diesel and conform to Environment (*Protection*) Rules prescribed for air and noise emission standards as laid down by the GSPCB.

- g. The installation of the Sewage Treatment Plant (STP) if any should be certified by the GSPCB and a report in this regard should be submitted to the Authority before the STP is commissioned. Treated effluent discharged from STP shall be recycled / reused to the maximum extent possible. Discharge of this unused treated effluent, if any should be discharged in the common sewer line. Treatment of 100% grey-water by de-centralised treatment be prioritized. Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water. The possibility of using STP treated water to be used for flushing needs to explored.
- h. Appropriate remedial measures need to be adopted to mitigate the foul odour emanating (*due to its malfunctioning / non-operationalization or otherwise*) from the STP, if any.
- i. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche and first aid room, etc.
- j. Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. the safe disposal of waste water and solid waste generated during the construction phase should be ensured.
- k. The solid waste generated should be properly connected and segregated. Dry / inert solid waste should be disposed-off to the approved sites for land filling after recovering recyclable material.
- 1. Disposal of muck during construction phase should not create any adverse effect on the neighbouring entities / communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved site with the approval of the CCP.
- m. To the extent required all the top-soil excavated during construction activities, if any, should be stored separately and to be used in horticulture / landscape development within the project site subsequently.
- n. Additional soil for levelling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- o. Green belt development shall be carried out considering CPCB guidelines including selection of local plant species and in consultation with the State Forest / Agriculture Department.

- p. Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants due to proposed developmental activity. It is advisable that ground water level and its quality should be monitored (*at least seasonally pre-monsoon / monsoon / post-monsoon*) in consultation with the WRD.
- q. Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate nearby water courses / mangrove zone in the vicinity, if any and the dump sites for such materials must be secured so that they should not leach into ground water.
- r. Any hazardous waste generated during construction phase should be disposed off as per applicable rules with necessary approval / Authorization from the GSPCB.
- s. The diesel required for operating DG sets shall be stored in underground tanks and if required, NOC from concerned authority shall be taken, as applicable.
- t. Vehicles hired for bringing construction material on the site during non-peak hours should be in good condition and should have pollution under control (PUC) certificate and should conform to applicable air and noise emission standards.
- u. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level construction phase, so as to conform to the stipulated standard prescribed by the CPCB/ GSPCB.
- v. The approval of competent authority shall be obtained for structural safety of the buildings due to unlikely occurrence of earthquakes, adequacy of fire-fighting equipments, etc. as per National Building Code (NBC) including measures from thunder / lightening.
- w. Fixtures for showers, toilet flushing and drinking should be preferably of low flow either by use of aerators or pressure reducing devices or sensor based control.
- x. Use of glass may be reduced upto 40% so as to reduce electricity consumption and load on air conditioning. If necessary use of high-quality double glass with special reflective coating in windows may be preferred.
- y. Roof may meet prescriptive requirement as per energy conservation building code by using appropriate thermal insulation material to fulfil requirement.

- z. Energy conservation measures like installation of LEDs lights and tubes for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use of CFLs and TFLs should be properly installed and disposed-off as per the prevailing guidelines / rules of the regulatory authority to avoid mercury contamination.
- aa. D.G. sets proposed as source of backup power for elevators, common area illumination during operation phase should be with acoustic enclosure and with appropriate stack-height conforming to noise standards respectively as prescribed in Environment (*Protection*) Act, 1986.
- bb. Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- cc. Traffic congestions near entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalised and no public road / place be utilised for parking.
- dd.opaque wall should meet prescriptive requirement as per energy conservation board which is proposed to mandatory for all air conditioned spaces while it is aspiration for non- air conditioned spaces by use of appropriate thermal insulation material to fulfil requirement.
- ee. The building should have adequate buffer distance between the two separate plots to allow movement of fresh air and passage of natural light, air and ventilation. Regular supervision and other measures for monitoring the same should be in place during the construction phase, so as to avoid disturbance to the surroundings structures. If any.
- ff. Under the provisions of Environment (*Protection*) Act 1986, legal action shall be initiated against the PP if it was found that construction of the project has been started without obtaining the EC.
- gg.Six monthly compliance reports should be submitted to the MOEF & CC, Government of India with copy to the Goa-SEIAA and GSPCB.

Further, the project proponent is advised to comply with the following "General

#### Conditions" during post-construction phase:-

i. PP shall ensure completion of MSW disposal facility, green belt development prior to occupation of the buildings. The PP shall explore possibility of utilising excess treated water in the adjacent area for gardening before discharging into sewer line / safe disposal. No physical occupation of allotment will be given unless all above said environmental infrastructure is installed and made functional including water requirement. Accordingly, prior certification from appropriate authority shall be obtained.

- ii. Wet garbage should be treated by organic waste convertor and the productoutput (*i.e. manure*) should be utilised in the existing premises for gardening. In any case, no wet garbage shall be disposed outside the premises. CCP / local authorities should ensure this compliance strictly.
- iii. CCP / local authorities should ensure that no occupation certification is issued prior to operation of STP/MSW disposal etc. with due consent / authorization from the GSPCB.
- iv. A complete set of all the documents *(i.e. proposal along with relevant enclosures plans / maps, etc.,*) submitted to Goa-SEIAA should be forwarded to the CCP / local authority and GSPCB.
- v. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the Goa-SEIAA.
- vi. Separate funds shall be allocated for implementation of environmental protection measures / EMP along with item wise breaks-up. These costs shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year wise expenditure should reported to the GSPCB and this Authority.
- vii. A copy of the clearance letter shall be sent to the CCP / concerned local body ,by the PP if any, from whom suggestions /representation, if any, were received while processing the proposal. The PP shall also ensure that the EC letter shall also be put on the company's website.
- viii. The PP shall upload the status of the compliance of the stipulated EC conditions, including results of monitoring data on their website and shall update the same periodically. It shall simultaneously be sent to the regional office of MoEF, the respective Zonal office of the CPCB and the GSPCB. The criteria pollutant levels namely PM<sub>10</sub> / PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> (*ambient levels as well as stack emissions*) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
  - ix. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V is mandated to be submitted by the PP to the GSPCB as prescribed under the Environment (*Protection*) Rules 1986 (as amended). Subsequently, it shall also be

put on company's website along with the status of the compliance of the EC conditions and shall also be sent to the respective regional office of the MoEF.

- x. The EC is being issued without prejudice to the action initiated in the Environment (*Protection*) Act or any court case pending in the court of law and it does not mean that PP has not violated any environmental laws in the past and whatever decision under said Act or of the Hon'ble Court will be binding on the PP. Hence, this environmental clearance does not give immunity to the PP in the case filed against him, if any or action initiated under the said Act.
- xi. In case of submission of false document and non- compliance of stipulated conditions, this Authority will revoke or suspend the EC without any intimation and initiate appropriate legal action under Environment (Protection) Act, 1986.
- xii. The Goa-SEIAA and Goa-SEAC reserves their right to add any other stringent condition or to revoke the environmental clearance, if conditions stipulated are not implemented to the satisfaction of the Authority or for that matter, for any other administrative reason.
- xiii. PP shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani or Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter will be uploaded on the PP's website.
- xiv. Validity of the Environmental Clearance (EC) accorded shall be for a period of 07 (seven) years from the date of its issue.
- xv. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully,

Sd./-

(Srinet Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

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## **GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY**

EIA-Goa State Secretariat,

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438303 Fax. no.: 2438528

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/ 217* 

Date: 31<sup>st</sup>March 2016

То,

M/s Ocean View Properties LLP, Amrut Kumbh Appartments, B-5, 2<sup>nd</sup> Floor, Laxmi Park Colony, Bhide Hospital Lane, Opposite Hotel Sangram, Navi Peth, Pune – 411 030

## Sub.: Proposed construction of residential group-housing-cum-commercial project at survey no. 26/2 (Part) of village Baingiunim, Tiswadi Taluka, North Goa : grant of prior environmental clearance - reg.,

Sir,

I am directed to refer to your application (*i.e. Form-1, Form-1A*) dated  $15^{\text{th}}$  July 2015 seeking prior Environmental Clearance (EC) as mandated in the EIA Notification, 2006 (*as amended till date*) for proposed construction of residential group-housing cum commercial project in survey no. 26/2 (Part) of Bainguinim village, Tiswadi Taluka in North Goa District. Accordingly, the above proposal has been appraised under '**8(a)** – **B2 category**': *Building and construction project* on the basis of the documents enclosed with application by the Goa State Expert Appraisal Committee (*Goa-SEAC - hereinafter referred as 'Committee'*). Subsequently, the Committee conducted the site-inspection on  $27^{\text{th}}$  August 2015 and thereafter the Project Proponent (PP) made the project-specific presentation during its  $52^{\text{nd}}$  meeting held on  $20^{\text{th}}$  October 2015. Later, the Committee, during its  $53^{\text{rd}}$  meeting held on  $5^{\text{th}}$  November 2015, ascertained the compliances to post-presentation observations submitted by the PP dated  $26^{\text{th}}$  October 2015 and has recommended to this Authority for grant of environmental clearance.

Further, the Authority deliberated on the Committee's recommendations during its 27<sup>th</sup> meeting held on 10<sup>th</sup> December 2015 and conducted the site-inspection on 7<sup>th</sup> January 2016 during which clarifications in respect of (i) proposed plan for discharge of storm water and effluents – underground pipe-line networking, (ii) traffic management for one-time exit of about 600 cars as well as provision of emergency exit / access (*i.e. demarcation of any proposed road across the plot along its NDZ upto by-pass road at alto-Raibandar*), (iii) source of water

requirement vis-a-vis water harvesting initiatives and (v) energy conservation initiatives (i.e. South-facing walls to be utilized to install solar panels and effective utilization of roof-top to harness solar energy was sought from the PP. Thereafter, the compliance submitted was discussed by this Authority during its 28<sup>th</sup> meeting held on 2<sup>nd</sup> February 2016 and as decided, re-inspected the project site on 29<sup>th</sup> February 2016 to verify and ascertain alternate entry / exit to be utilized during emergency. Accordingly, the PP was directed to submit compliance to (a) provision of maintaining 10 mts. 'Right of way' at the intersection of the main access to the proposed plot area, (b) provision for widening the alternate access / culvert and (c) site-specific location detail of RWH tanks / water storage for fire-fighting provision.

Subsequently, the Authority during its  $29^{\text{th}}$  meeting held on  $10^{\text{th}}$  March 2016 discussed / deliberated on the compliances submitted by the PP dated  $7^{\text{th}}$  March 2016 to these observations (*i.e.* (a) to (c)) and decided to grant prior environmental clearance for the proposed developmental activity.

Project details and salient features of the proposed developmental activity, as submitted by the proponent, is as under –

1. Total plot area	-	75, 452.00 sq. mts
2. Built-up Area proposed (BUA) i.e. construction are	ea -	49, 357.56 sq. mts.
3. Area of Plot A	-	7163.72 sq.mts
4. Area of Plot B	-	68262 sq.mts
5. Net Area under Development	-	64586.50 sq.mts
6. Area under No Development zone	-	3675.50 sq.mts
7. Parking Proposed:	-	685 nos of vehicles.

- 8. Water requirements
- a) <u>Construction phase:</u> Total 21 cmd [Domestic : 4 cmd and construction : 17 cmd] (Source: PWD + water tankers).
- b) **Operation Phase:** Total **522.35 cmd** [PWD: 330.08cmd + Recycled water:192.27cmd]

(Source: PWD water supply for domestic purpose & treated water from proposed Sewage Treatment Plant (STP) for gardening flushing AC-Cooling and water body.

- 9. Power Supply: Goa Electricity Board.
  - a) Construction Phase: 100 KVA
  - **b) Operation Phase:** 500 KVA

<u>Power Back up:</u> It is proposed to install back-up using DG sets for supply of power when grid power is not available or during emergencies like power failures. Back proposed: 500KVA.

#### 10. Solid waste:

**Construction stage:** During the construction stage, construction waste would be generated which would include debris, concrete, steel and other metals, bricks, pallets, packaging and paper products, railings, door and window casings, fixtures, tiles, furnishings etc. Approx. 4 MT/day of construction waste will be generated. Earthwork will include excavation for foundation and basement.

**Operation stage:** During operation phase, solid waste will be generated @425gm/ capita/ day from residential areas and @225gm/ capita/ day from other areas mentioned in the table. Total solid waste generated will be about 1625.75 kg/ day

Accordingly, the Authority has decided to grant prior environmental clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

- qq. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- rr. *Solar power generation* Every major consumer of conventional power will have to generate and opt for certain percentage of power generation from the non-conventional sources. In this context, Project Proponent (PP) should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage only to enable installation of solar panels as and when made applicable in future. In addition, south-facing walls to be utilized to install solar panels to harness optimum solar energy. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heater system. PP should install, after checking feasibility, solar-plus-hybrid non-conventional source as source of energy.
- ss. PP should adopt roof-top rainwater harvesting / conservation measures to optimally utilize the water availability by constructing sumps for collection of rainwater as per the site-specific location details provided.
- tt. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal and treatment / air and water pollution / waste-water management.
- uu. PP should not disturb the natural drainage and as far as possible and maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment.

- vv. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization / zoning.
- ww.PP should submit half-yearly compliance report(s) in hard as well as soft copy format to the Authority for the period upto project completion.
- xx. This environmental clearance is issued subject to land use verification. Local authority / planning authority should ensure this with respect to Rules, Regulations, Notifications, Government Resolutions, Circulars, etc. issued if any, from time to time. Judgements / Orders issued by Hon'ble High Court, NGT, Supreme Court regarding DCR provisions, environmental issues applicable in this matter should be verified.
- yy. PP should ensure and ascertain that 'civil plans' which were submitted to this Authority during the process of project appraisal be submitted to other line Departments / agencies concerned while seeking NOC / Consents, as applicable. If any discrepancy is found in the plans submitted or details provided may be reported to this Authority. This environmental clearance is issued with respect to the environmental considerations and it does not mean that Goa-SEIAA approved the proposed land.
- zz. PP needs to ensure that no treated water or any waste sewage shall be discharged into any water body. STP of suitable capacity shall be installed considering the quantity / quality of waste water generation.
- aaa. E-waste shall be disposed through Authorised vendor as per E-waste (*Management and Handling*) Rules, 2011.
- bbb. This environmental clearance is issued subject to obtaining NOC from the Forestry & Wildlife angle including clearance from the Standing Committee of the National Board for wildlife, if applicable. This environmental clearance does not necessarily imply that Forestry & Wildlife clearance has been granted to the project, which will be considered separately on merit.
- ccc. The height, construction built up area of proposed construction (*i.e. Total BUA*  $49357.56 \ sq.mts.$ ) shall be in accordance with the existing FSI/FAR norms of the urban local body/Planning authority and it should ensure the same along with survey number before approving layout plan and before according commencement certificate to proposed work, Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.

ddd.All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.

Further, the PP is advised to comply with the following "General Conditions" during construction phase:-

- eeeee. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the Authority within 30 days of starting construction work at site.
- fffff. Permission to draw groundwater, as applicable, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD).
- ggggg. Project proponent shall not make any change in the Surface Layout Plan / Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the Authority.
- hhhhh. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
- iiiii. The diesel generator sets (D.G. set) to be used during construction / after commissioning should be low-sulphur diesel type and should conform to Environment (*Protection*) Rules prescribed for air and noise emission standards as laid down by the GSPCB.
- jjjjj. The installation of the Sewage Treatment Plant (STP) if any should be certified by the GSPCB and a report in this regard should be submitted to the Authority before the STP is commissioned.
- kkkkk. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche and first aid room etc.
- IIII. Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of waste water and solid waste generated during the construction phase should be ensured.
- mmmmm. The solid waste generated should be properly segregated. Dry /inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- nnnnn. Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary

precautions for general safety and health aspects of people, only in approved site with the approval of competent authority.

- 00000. Arrangements shall be made that waste water and storm water do not get mixed.
- ppppp. All the top soil excavated during construction activities should be stored if or use in horticulture/landscape development within the project site.
- qqqqq. Additional soil for levelling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- rrrrr. Green-belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the State Forest / Agriculture Department.
- sssss. Soil and ground water samples will be tasted to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- ttttt. Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured so that they should not leach into ground water.
- uuuuu. Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the GSPCB.
- vvvvv. The diesel requires for operating DG sets shall be stored in underground tanks and if required, Clearance from concerned authority shall be taken.
- wwww. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standard and should be operated during non-peak hrs.
- xxxxx. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level construction phase, so as to conform to the stipulated standard by CPCB/ GSPCB.
- yyyyy. The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquakes, adequacy of fire fighting equipments etc. as per National Building Code (NBC) including measures from lighting.

- zzzzz. Storm water controlled and its re-use as per Central Ground Water Board (CGWB) and Bureau of Indian Standards (BIS) for various applications.
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- bbbbbb. The groundwater level and its quality should be monitored regularly in consultation with ground water authority of the Water Resources Department (WRD), Goa.
- cccccc. The installation of the sewage treatment plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the GSPCB before the project is commissioned for operation. Treated effluent released from STP shall be recycled / refused to the maximum extent possible. Discharge of this unused treated effluent, if any should be discharged in the sewer line. Treatment of 100% grey water through the centralised treatment should be done. Necessary measures should be adopted to mitigate the odour problem from STP.
- ddddd. Use of glass may be reduced upto 40% to reduce electricity consumption and load on air-conditioning. If necessary, use high quality double glass with special reflective coating in windows.
- eeeeee. Roof should meet prescriptive requirement as per energy conservation building code by using appropriate thermal insulation material.
- ffffff. Energy conservation measures like installation of LEDs' for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use of CFLs / TFLs, if any, should be properly collected and disposed off / sent for recycling as per the prevailing guidelines / rules of the regulatory authority to avoid mercury contamination.
- gggggg. Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the environment (protection) Act 1986. The height of stack of DG sets should be equal to the height needed for the combine capacity of all proposed DG sets.
- hhhhhh. Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- iiiiii. Traffic congestions near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalised and no public place should be utilised.

- jjjjjjj. opaque wall should meet prescriptive requirement as per energy conservation board which is proposed to mandatory for all air conditioned spaces while it is aspiration for non- air conditioned spaces by use of appropriate thermal insulation material to fulfil requirement.
- kkkkkk. The shades should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
- lllll. Regular supervision of the above and other measures for monitoring should be in placed all through the construction phase, so as to avoid disturbance to the surroundings.
- mmmmm. Under the provisions of Environment Protection Act 1986, legal action shall be initiated against the PP if it was found that construction of the project has been started without obtaining EC.
- nnnnn. Six monthly compliance reports should be submitted to the MOEF with copy to the Goa-SEIAA and GSPCB.

Further, the PP is advised to comply with the following "General Conditions" during

#### post-construction phase:-

- a. PP shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. The PP to explore possibility of utilising excess treated water in the adjacent area for gardening before discharging into sewer line. No physical occupation of allotment will be given unless all above said environmental infra structure is installed and made functional including water requirement prior certification from appropriate authority shall be obtained.
- b. Wet garbage should be treated by organic waste convertor and treated waste (manure) should be utilise in the existing premises foe gardening. And no wet garbage will be disposed outside the premises. Local authority should ensure compliance to this.
- c. A complete set of all the documents submitted to Goa-SEIAA should be forwarded local authority / GSPCB.
- d. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the Goa-SEIAA.
- e. Separate funds shall be allocated for implementation of environmental protection measures /EMP along with item wise breaks-up. The funds earmarked for the environment protection measures shall not be diverted for other purposes.
- f. A copy of the environmental clearance letter shall be sent by PP to the concerned local body / municipal council / city corporation, as applicable, from whom suggestions /

representation, if any, were received while processing the proposal. The EC letter shall also be put on the company's website by PP.

- g. The PP shall upload the status of the compliance of the stipulated EC conditions, including results of monitoring data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF&CC, the respective Zonal office, CPCB and the GSPCB. The pollutant levels in respect of SPM, RSPM, SO<sub>2</sub> and NO<sub>X</sub> (*ambient levels as well as D.G. stack emissions*) shall be monitored.
- h. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V is to be submitted to the GSPCB as prescribed under the Environment (*Protection*) Rules 1986 (as amended) and subsequently shall also be put on the company's website along with the status of the compliance of the EC conditions and shall also be sent to the respective Regional Office of the MoEF&CC.
- i. The EC is being issued without prejudice to the action initiated in the Environment (*Protection*) Act or any court case pending in the court of law. As such, it does not mean that the PP has not violated any environmental laws in the past and whatever decision under the said Act by the Hon'ble Court will be binding on the PP. Hence, this environmental clearance does not give immunity to the PP in the case complaint is filed against, if any, or action initiated under the said Act.
- j. In case of submission of false document and non-compliance to any of the stipulated conditions, this Authority will revoke or suspend the EC without any intimation and initiate appropriate legal action under the Environment (*Protection*) Act, 1986 (*as amended till date*).
- k. The Goa-SEIAA reserves their right to add any stringent condition or to revoke the environmental clearance, if conditions stipulated above are not implemented to the satisfaction of the Authority or for that matter, for any other administrative reasons.

In addition,

- 4. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani or Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter will be available on the PP website.
- 5. Validity of the Environmental Clearance (EC) accorded shall be for a period of 07 (seven) years from the date of its issue.

6. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully, Sd/-(Srinet Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

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## **GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY**

EIA-Goa State Secretariat,

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438303 Fax. no.: 2438528

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/216* 

Date: 23<sup>rd</sup>March 2016

То,

M/s Shrem Aansav Realty LLP, Tremonte Aansav Group, 106, WDC Enclave, Mabai Hotel Complex, Near Grace Church, Margao, Goa – 403 601

#### Sub.: Proposed Residential cum Commercial project on P. T. Sheet no. 57, Chalta No. 1, Margao, Salcete Taluka, South Goa District : grant of prior environmental clearance - reg.,

Sir,

I am directed to refer to your application (i.e. Form-1, Form-1A) dated 10th September 2015 seeking prior Environmental Clearance (EC) as mandated in the EIA Notification, 2006 (as amended till date) for proposed development of residential-cum-commercial complex in the property bearing P.T. Sheet No. 57, Chalta No. 1 of Margao in Salcete Taluka of South Goa District. Accordingly, the above proposal has been appraised under '8(a) - B2 category': Building and construction project on the basis of the documents enclosed with application by the Goa State Expert Appraisal Committee (Goa-SEAC - hereinafter referred as 'Committee'). Subsequently, the Committee conducted the site-inspection on 29<sup>th</sup> October 2015 and thereafter the Project Proponent (PP) through M/s Aditya Environmental Services, Goa. (NABET/QCIaccredited environmental consultant) made the project-specific presentation during its 54<sup>th</sup> meeting held on 26<sup>th</sup> November 2015. Later, the Committee verified and ascertained compliances to post-presentations observations submitted by the Project Proponent (PP), dated 2<sup>nd</sup> December 2015 and 21<sup>st</sup> January 2016, during its 60<sup>th</sup> meeting held on 3<sup>rd</sup> March 2016 and recommended the proposal for grant of environmental clearance (EC) to this Authority subject to the submission of (a) 'Conversion Sanad' issued by the competent authority and (b) tentative budget estimate to comply with and execute CSR-related activities.

Thereafter, the Authority deliberated on Committee's recommendations vis-a-vis verified the compliances submitted by the PP, dated 7<sup>th</sup> March 2016, in response to (a) and (b) above

during its 29<sup>th</sup> meeting held on 10<sup>th</sup> March 2016 and decided to grant prior environmental clearance for the proposed developmental activity.

Project details and salient features of the proposed developmental activity, as submitted by the proponent, is as under –

1. Total plot area	-	30,256.00 sq.mts
2. <b>F.A.R.</b>	-	45,380.69 sq. mts.
3. Built up Area (without Stilt & Basement)	-	63279.59 sq.mts.
4. Gross Construction area	-	98,674.86 sq.mts.
5. Open area	-	4,020 sq mts.
6. Ground Coverage	-	36.7% (9,840.30 sq.mts)
7. Total Parking	_	886 nos. of vehicles.

8. Water Requirements – (Source- Tankers + Municipal supply + treated water)

#### a) Construction phase: Total 28 cmd.(only tankers)

Construction: - 18 cmd.

Domestic: - 10 cmd.

#### b) Operation Phase: Total 549 cmd.

Fresh water:246 cmd.Treated water:279 cmdSwimming pool:4 cmdGardening:20 cmd.

#### 9. Power Supply: Goa State Electricity Board.

#### a) Construction Phase: 100 KVA.

**b) Operation Phase: 2991KW** + (1DG - 500KVA) for Residential and 1624 KW + (1DG - 1800KVA) for Commercial.

#### 10. Solid waste:

**During construction stage:** construction waste would be generated which would include debris, concrete, steel and other metals, bricks, pallets, packaging and paper products, railings, door and window casings, fixtures, tiles, furnishings etc. Earthwork will include excavation for foundation and basement. Demolition of existing structure would be carried out. A labour camp

for about 75 labourers would be provided with solid waste management facilities. Solid waste will be generated @425gm/ capita/ day i.e. about 3.19 kg waste would be generated per day. This would include wastes from labour camp cooking areas, paper, plastics and other inert wastes. 1.2 Operation stage.

**During operation phase:** solid waste will be generated @425 gm/ capita/ day from residential areas and @250 gm/ capita/ day commercial area. Total Municipal Solid waste = 2000 kg/day Biodegradable: 1000 kg/day (50%) Non-biodegradable: 1000 kg/day (50%).

11. Energy Conservation Measures – Light fixtures will be used with energy saving LED lamps. Solar power for lighting of common areas and Solar thermal systems for Hot water heating. Accordingly, the Authority has decided to grant prior environmental clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

- eee. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- fff. *Solar power generation* Every major consumer of conventional power will have to generate and opt for certain percentage of power generation from the non-conventional sources. In this context, Project Proponent (PP) should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage only to enable installation of solar panels as and when made applicable in future. In addition, south-facing walls to be utilized to install solar panels to harness optimum solar energy. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heater system. PP should install, after checking feasibility, solar-plus-hybrid non-conventional source as source of energy.
- ggg.PP should adopt roof-top rainwater harvesting / conservation measures to optimally utilize the water availability by constructing sumps for collection of rainwater as per the site-specific location details provided.
- hhh.PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal and treatment / air and water pollution / waste-water management.
- iii. PP should not disturb the natural drainage and as far as possible and maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment.

- jjj. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization / zoning.
- kkk.PP should submit half-yearly compliance report(s) in hard as well as soft copy format to the Authority for the period upto project completion.
- III. This environmental clearance is issued subject to land use verification. Local authority / planning authority should ensure this with respect to Rules, Regulations, Notifications, Government Resolutions, Circulars, etc. issued if any, from time to time. Judgements / Orders issued by Hon'ble High Court, NGT, Supreme Court regarding DCR provisions, environmental issues applicable in this matter should be verified.
- mmm. PP should ensure and ascertain that 'civil plans' which were submitted to this Authority during the process of project appraisal be submitted to other line Departments / agencies concerned while seeking NOC / Consents, as applicable. If any discrepancy is found in the plans submitted or details provided may be reported to this Authority. This environmental clearance is issued with respect to the environmental considerations and it does not mean that Goa-SEIAA approved the proposed land.
- nnn. PP needs to ensure that no treated water or any waste sewage shall be discharged into any water body. STP of suitable capacity shall be installed considering the quantity / quality of waste water generation.
- ooo.E-waste shall be disposed through Authorised vendor as per E-waste (*Management and Handling*) Rules, 2011.
- ppp. This environmental clearance is issued subject to obtaining NOC from the Forestry & Wildlife angle including clearance from the Standing Committee of the National Board for wildlife, if applicable. This environmental clearance does not necessarily imply that Forestry & Wildlife clearance has been granted to the project, which will be considered separately on merit.
- qqq. The height, construction built up area of proposed construction (*i.e. Total FAR* 45,380.69 sq.mt) shall be in accordance with the existing FSI/ FAR norms of the urban local body and it should ensure the same along with survey number before approving layout plan and before according commencement certificate to proposed work, Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.
- rrr. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.

Further, the PP is advised to comply with the following "General Conditions" during construction phase:-

- oooooo. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the Authority within 30 days of starting construction work at site.
- ppppp. Permission to draw groundwater, as applicable, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD).
- qqqqqq. Project proponent shall not make any change in the Surface Layout Plan / Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the Authority.
- rrrrr. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
- ssssss. The diesel generator sets (D.G. set) to be used during construction / after commissioning should be low-sulphur diesel type and should conform to Environment (*Protection*) Rules prescribed for air and noise emission standards as laid down by the GSPCB.
- ttttt. The installation of the Sewage Treatment Plant (STP) if any should be certified by the GSPCB and a report in this regard should be submitted to the Authority before the STP is commissioned.
- uuuuu. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche and first aid room etc.
- vvvvv. Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of waste water and solid waste generated during the construction phase should be ensured.
- wwwww. The solid waste generated should be properly segregated. Dry /inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- xxxxx. Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary

precautions for general safety and health aspects of people, only in approved site with the approval of competent authority.

- yyyyyy. Arrangements shall be made that waste water and storm water do not get mixed.
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Further, the PP is advised to comply with the following "General Conditions" during

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- a. PP shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. The PP to explore possibility of utilising excess treated water in the adjacent area for gardening before discharging into sewer line. No physical occupation of allotment will be given unless all above said environmental infra structure is installed and made functional including water requirement prior certification from appropriate authority shall be obtained.
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- c. A complete set of all the documents submitted to Goa-SEIAA should be forwarded local authority / GSPCB.
- d. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the Goa-SEIAA.
- e. Separate funds shall be allocated for implementation of environmental protection measures /EMP along with item wise breaks-up. The funds earmarked for the environment protection measures shall not be diverted for other purposes.
- f. A copy of the environmental clearance letter shall be sent by PP to the concerned local body / municipal council / city corporation, as applicable, from whom suggestions /

representation, if any, were received while processing the proposal. The EC letter shall also be put on the company's website by PP.

- g. The PP shall upload the status of the compliance of the stipulated EC conditions, including results of monitoring data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF&CC, the respective Zonal office, CPCB and the GSPCB. The pollutant levels in respect of SPM, RSPM, SO<sub>2</sub> and NO<sub>X</sub> (*ambient levels as well as D.G. stack emissions*) shall be monitored.
- h. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V is to be submitted to the GSPCB as prescribed under the Environment (*Protection*) Rules 1986 (as amended) and subsequently shall also be put on the company's website along with the status of the compliance of the EC conditions and shall also be sent to the respective Regional Office of the MoEF&CC.
- i. The EC is being issued without prejudice to the action initiated in the Environment (*Protection*) Act or any court case pending in the court of law. As such, it does not mean that the PP has not violated any environmental laws in the past and whatever decision under the said Act by the Hon'ble Court will be binding on the PP. Hence, this environmental clearance does not give immunity to the PP in the case complaint is filed against, if any, or action initiated under the said Act.
- j. In case of submission of false document and non-compliance to any of the stipulated conditions, this Authority will revoke or suspend the EC without any intimation and initiate appropriate legal action under the Environment (*Protection*) Act, 1986 (*as amended till date*).
- k. The Goa-SEIAA reserves their right to add any stringent condition or to revoke the environmental clearance, if conditions stipulated above are not implemented to the satisfaction of the Authority or for that matter, for any other administrative reasons.

### In addition,

- 7. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani or Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter will be available on the PP website.
- 8. Validity of the Environmental Clearance (EC) accorded shall be for a period of 07 (seven) years from the date of its issue.

**9.** Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully, Sd/-(Srinet Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

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## GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

Goa State EIA Secretariat,

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438303 Fax. no.: 2438567 e-mail: goaseac@gmail.com

No: 03/181/2010/STE-DIR/Part-II/EIA-Goa/215

Date: 21st March 2016

To, **The Collector and District Magistrate (South Goa)** South Goa District Collectorate, Matanhy Saldanha Administrative Complex, Margao, Goa.

#### Sub.: Streamlining the process of environmental clearance (EC) for mining of minor minerals – Official Gazette Notifications (02 nos.) published by the Ministry of Environment, Forests and Climate Change (MoEF & CC) – reg.,

### Ref: - O.M. No. F. No. 11013/8/2016-IA-II (M) dated 15/03/2016 issued by the Ministry.

Sir,

With reference to the above subject matter, kindly refer this office letter of even number dated  $15^{\text{th}}$  February 2016 enclosing therein list of Minor Mineral Quarry proposals (*with lease area upto 5 Ha.*) and the status thereof provided in '**Annexure – 3**' for favour of further needful action in response to the <u>Notifications</u> published by the Ministry of Environment, Forests and Climate Change (MoEF &CC) vide Gazette of India – 'Extraordinary' namely – (a) S.O. 141 (E) – PART II, Section 3, Sub-section (ii) dated  $15^{\text{th}}$  January 2016, (b) S.O. 190 (E) – PART II, Section 3, Sub-section (ii) dated  $20^{\text{th}}$  January 2016.

In this context, it informed that a minor-mineral quarry proposal submitted by M/s**Rosario Fernandes** (*refer sr. no. 6 in the said Annexure – 3*) was taken up for re-consideration and was deliberated in length by this Authority during its 29<sup>th</sup> meeting held on 10<sup>th</sup> March 2016. (*i.e. proposal seeking environmental clearance (EC) for Renewal of Basalt-stone quarry leases with two leases –04/basalt/90 and 03/Basalt/07 (15,225 sq.mts.) located in survey no. 72/1 of Santona village in Sanguem Taluka with rate of extraction: 5,000 m<sup>3</sup> per annum*). Accordingly, the Authority has noted that the aforesaid proposal has been screened / appraised by the Goa State Expert Appraisal Committee (Goa-SEAC – hereinafter referred as 'Committee') as per the provisions mandated in the Environment Impact Assessment (EIA) Notification, 2006 (*as*  *amended till date*) and was thereafter recommended to this Authority for grant of environmental clearance (EC) during its 57<sup>th</sup> meeting held on 7<sup>th</sup> January 2016.

Considering the fact that the proposal submitted by **M/s Rosario Fernandes** has been thoroughly screened / appraised as mandated in the EIA Notification, 2006 (*as amended till date*) prior to its recommendation by the Committee, the Authority has decided to re-consider the same and accordingly grant prior environmental clearance (EC) for renewal of basalt-stone quarry proposed in survey no.72/1, Santona village, Sanguem aluka with total extraction capacity of 5,000 m<sup>3</sup> per annum.

However, the minor-mineral quarry lease-holder (*i.e. M/s Rosario Fernandes*) needs to ascertain / verify the **mandatory compliances** to the following -

- 'Goa Mineral Concession (Amendment) Rules, 2012' notified by the Directorate of Mines and Geology (DMG) and published in Official Gazette Series-I, No. 24 dated 17<sup>th</sup> September 2012.
- 2. Submission of '**approved quarrying plan**' by the competent officer as per Sub-rule (7) as well as specific compliance to Sub-rules 7(A) to 7(D) of the above-referred Rules, as applicable.

Further, the lease-holder is required to mandatorily comply with the following 'General' and 'Specific' conditions'-

### **General conditions**

- 1. The lease holder should ascertain on-site demarcation and construction of lease boundary with cement poles / bio-fencing / barbed wire for the proposed leased area in question. As such, the lease holder should ensure that minor mineral quarrying operations are restricted within the prescribed lease boundary.
- 2. The lease holder should ensure construction of approach road / proper access to enable transportation of quarried material from site to desired destination and/or crushing unit, as applicable. Transportation of quarried material shall be done by covering the trucks with tarpaulin so that no spillage of material / dust takes place en route.
- 3. The lease holder should comply with the proposed plan of action / modus operandi for extraction of basalt within the available lease boundary limits in terms of provisions of Mines and Safety Rules / Guidelines, as applicable. In addition, safety gadgets and health-care facilities should be provided to workers vis-a-vis maintain hygiene surrounding the proposed lease boundary.

- 4. The lease holder shall undertake adequate safeguard measures during extraction of basalt stone and ensure that due to this activity, the hydro-geological regime of the surrounding area shall not be affected / altered / polluted. Quarrying operations should be limited to day-hours time (06 a.m. to 06 p.m. only) with specified time reserved for 'blasting'. Regular monitoring of groundwater levels and its physico-chemical quality parameters shall be carried out around the quarry lease area (for minimum two locations of permanent water sources / open well / borewell). If there are no groundwater sources, then nearest perennial surface water sources (*i.e. stream / river / pond / lake / reservoir / irrigational canal*) should be monitored for similar parameters.
- 5. No quarrying be carried out within the safety zone of any bridge and/or embankment as well as within the vicinity of natural / man-made archaeological site(s).
- 6. The lease holder shall implement air pollution control measures / dust minimizing initiatives / noise control measures, wherever applicable, within the lease area as well as establish adequate buffer zone around the lease boundary to minimize such pollution hazards. It should be ensured that the Ambient Air Quality (AAQ) parameters (*to be measures in January, April and November every-year*) as well as Noise parameters conform to the norms prescribed by the Central Pollution Control Board (CPCB) and Noise Pollution (Control) Rules, 2000 respectively are complied with.
- 7. Green belt development shall be carried out in consultation with Forest Department / Zonal Agricultural Office, as applicable.
- **8.** The lease holder shall obtain necessary prior permission (NOC) from the Groundwater Cell of the Water Resources Department (WRD) for drawl of surface / groundwater from within the lease area.
- **9.** Waste water / effluents, if any, shall be properly collected, treated and monitored so as to conform to the standards prescribed by the MoEF / CPCB / Goa-PCB.
- **10.** Environmental clearance (EC) is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent Authority, if applicable.
- 11. The mining officer / in-charge of quarrying operations on-site shall submit six-monthly report in hard and soft copy formats w.r.t. specifying the status of compliance of the stipulated environmental clearance conditions (*i.e. Specific and General conditions*) to the Directorate of Mines and Geology (DMG), Goa, this Authority as well as Goa State Pollution Control Board (GSPCB).
- 12. Any change (*i.e. modification / expansion / alteration*) in lease area / quarrying operations / extraction capacity / modernization / scope of working / environment management plan (EMP) shall require re-appraisal by the District-level Environment Impact Assessment Authority (DEIAA) concerned as per the provisions of the EIA Notification, 2006 (*as amended*).
- **13.** All necessary statutory clearances from relevant Authorities concerned shall be obtained before start of quarrying operations.

- 14. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that lease holder has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the lease holder. Hence, <u>this EC does not give immunity to the lease holder in the case filed against it</u>.
- 15. This environmental clearance (EC) is valid for five years (05) from the date of issue or lease validity, whichever is earlier.
- **16.** The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- **17.** Any appeal against this prior environmental clearance shall lie before the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

#### **Specific condition**

(i) The lease-holder is directed **not to exceed the basalt-stone extraction capacity of 5,000** m<sup>3</sup> per

**annum from the said lease** (*as per the application submitted to this Authority*) and the Directorate of Mines and Geology (DMG) should ensure strict compliance to it. Any modification / alteration / change in scope to this would require fresh appraisal by the District-

level Environment Impact Assessment Authority (DEIAA) concerned.

Kindly acknowledge the receipt of this letter.

Yours faithfully,

Sd/-

(Srinet Kothwale) Member Secretary, Goa-SEIAA and Director / Jt.Secy., (*Environment*)

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## GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

Goa State EIA Secretariat,

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438303 Fax. no.: 2438567 e-mail: goaseac@gmail.com

No: 03/181/2010/STE-DIR/Part-II/EIA-Goa/ 214

Date: 21st March 2016

To,

**The Collector and District Magistrate (North),** North Goa District Collectorate (NGDC) building, Panaji.

Sub.: Streamlining the process of environmental clearance (EC) for mining of minor minerals – Official Gazette Notifications (02 nos.) published by the Ministry of Environment, Forests and Climate Change (MoEF & CC) – reg.,

Ref: - O.M. No. F. No. 11013/8/2016-IA-II (M) dated 15/03/2016 issued by the Ministry.

Sir,

With reference to the above subject matter, kindly refer this office letter of even number dated  $15^{\text{th}}$  February 2016 enclosing therein list of Minor Mineral Quarry proposals (*with lease area upto 5 Ha.*) and the status thereof provided in 'Annexure – 3' for favour of further needful action in response to the <u>Notifications</u> published by the Ministry of Environment, Forests and Climate Change (MoEF &CC) vide Gazette of India – 'Extraordinary' namely – (a) S.O. 141 (E) – PART II, Section 3, Sub-section (ii) dated  $15^{\text{th}}$  January 2016, (b) S.O. 190 (E) – PART II, Section 3, Sub-section (ii) dated  $20^{\text{th}}$  January 2016.

In this context and as per the request for re-consideration submitted by the **M**/s **Satpurush Metal Industries, Mapusa** (*refer sr. no. 3 in the said Annexure – 3*) vide letter dated  $22^{nd}$  February 2016, this is to inform you that the Authority has deliberated on this issue in length (*i.e. proposal seeking environmental clearance (EC) for 'New' basalt-stone quarry proposed in survey no. 66/0 of Allorna village, Pernem taluka with total extraction capacity of 400 m<sup>3</sup> per month*) during its 29<sup>th</sup> meeting held on 10<sup>th</sup> March 2016. Accordingly, the Authority has noted that the aforesaid proposal has been screened / appraised by the Goa State Expert Appraisal Committee (*Goa-SEAC – hereinafter referred as 'Committee'*) as per the provisions mandated in the Environment Impact Assessment (EIA) Notification, 2006 (*as amended till date*) and was thereafter recommended to this Authority for grant of environmental clearance (EC) during its 56<sup>th</sup> meeting held on 17<sup>th</sup> December 2015.

Considering the fact that the proposal submitted by **M/s Satpurush Metal industries**, **Mapusa** has been thoroughly screened / appraised as mandated in the EIA Notification, 2006 (*as amended till date*) prior to its recommendation by the Committee, the Authority has decided to re-consider the request and accordingly grant prior environmental clearance (EC) for a new basalt-stone quarry (*abandoned basalt-stone quarry pit*) proposed in survey no.66/0, Allorna village, Pernem taluka with total extraction capacity of 400 m<sup>3</sup> per month.

However, the minor-mineral quarry lease-holder (*i.e. M/s* Satpurush Metal Industries, *Pernem*) needs to ascertain / verify the <u>mandatory compliances</u> to the following -

- 'Goa Mineral Concession (Amendment) Rules, 2012' notified by the Directorate of Mines and Geology (DMG) and published in Official Gazette Series-I, No. 24 dated 17<sup>th</sup> September 2012.
- 4. Submission of '**approved quarrying plan**' by the competent officer as per Sub-rule (7) as well as specific compliance to Sub-rules 7(A) to 7(D) of the above-referred Rules, as applicable.

Further, the lease-holder is required to mandatorily comply with the following 'General' and 'Specific' conditions'-

#### **General conditions**

- 18. The lease holder should ascertain on-site demarcation and construction of lease boundary with cement poles / bio-fencing / barbed wire for the proposed leased area in question. As such, the lease holder should ensure that minor mineral quarrying operations are restricted within the prescribed lease boundary.
- 19. The lease holder should ensure construction of approach road / proper access to enable transportation of quarried material from site to desired destination and/or crushing unit, as applicable. Transportation of quarried material shall be done by covering the trucks with tarpaulin so that no spillage of material / dust takes place en route.
- 20. The lease holder should comply with the proposed plan of action / modus operandi for extraction of basalt within the available lease boundary limits in terms of provisions of Mines and Safety Rules / Guidelines, as applicable. In addition, safety gadgets and health-care facilities should be provided to workers vis-a-vis maintain hygiene surrounding the proposed lease boundary.
- 21. The lease holder shall undertake adequate safeguard measures during extraction of basalt stone and ensure that due to this activity, the hydro-geological regime of the surrounding area shall not be affected / altered / polluted. Quarrying operations should be limited to **day-hours time** (06 a.m. to 06 p.m. only) with specified time reserved for 'blasting'.

Regular monitoring of groundwater levels and its physico-chemical quality parameters shall be carried out around the quarry lease area (for minimum two locations of permanent water sources / open well / borewell). If there are no groundwater sources, then nearest perennial surface water sources (*i.e. stream / river / pond / lake / reservoir / irrigational canal*) should be monitored for similar parameters.

- 22. No quarrying be carried out within the safety zone of any bridge and/or embankment as well as within the vicinity of natural / man-made archaeological site(s).
- 23. The lease holder shall implement air pollution control measures / dust minimizing initiatives / noise control measures, wherever applicable, within the lease area as well as establish adequate buffer zone around the lease boundary to minimize such pollution hazards. It should be ensured that the Ambient Air Quality (AAQ) parameters (*to be measures in January, April and November every-year*) as well as Noise parameters conform to the norms prescribed by the Central Pollution Control Board (CPCB) and Noise Pollution (Control) Rules, 2000 respectively are complied with.
- 24. Green belt development shall be carried out in consultation with Forest Department / Zonal Agricultural Office, as applicable.
- **25.** The lease holder shall obtain necessary prior permission (NOC) from the Groundwater Cell of the Water Resources Department (WRD) for drawl of surface / groundwater from within the lease area.
- **26.** Waste water / effluents, if any, shall be properly collected, treated and monitored so as to conform to the standards prescribed by the MoEF / CPCB / Goa-PCB.
- **27.** Environmental clearance (EC) is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent Authority, if applicable.
- **28.** The mining officer / in-charge of quarrying operations on-site shall submit six-monthly report in hard and soft copy formats w.r.t. specifying the status of compliance of the stipulated environmental clearance conditions (*i.e. Specific and General conditions*) to the Directorate of Mines and Geology (DMG), Goa, this Authority as well as Goa State Pollution Control Board (GSPCB).
- **29.** Any change (*i.e. modification / expansion / alteration*) in lease area / quarrying operations / extraction capacity / modernization / scope of working / environment management plan (EMP) shall require re-appraisal by the District-level Environment Impact Assessment Authority (DEIAA) concerned as per the provisions of the EIA Notification, 2006 (*as amended*).
- **30.** All necessary statutory clearances from relevant Authorities concerned shall be obtained before start of quarrying operations.
- 31. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that lease holder has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will

# be binding on the lease holder. Hence, <u>this EC does not give immunity to the lease</u> <u>holder in the case filed against it</u>.

- 32. This environmental clearance (EC) is valid for five years (05) from the date of issue or lease validity, whichever is earlier.
- **33.** The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- **34.** Any appeal against this prior environmental clearance shall lie before the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

#### **Specific condition**

(i) The lease-holder is directed not to exceed the basalt-stone extraction capacity of 400 m<sup>3</sup> per month from the said lease (as per the application submitted to this Authority) and the Directorate of Mines and Geology (DMG) should ensure strict compliance to it. Any modification / alteration / change in scope to this would require fresh appraisal by the District-level Environment Impact Assessment Authority (DEIAA) concerned.

Kindly acknowledge the receipt of this letter.

Yours faithfully,

Sd/-

(Srinet Kothwale) Member Secretary, Goa-SEIAA and Director / Jt.Secy., (*Environment*)

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# **GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY**

EIA-Goa State Secretariat,

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567 e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/195* 

Date: 6th January 2016

*To,* **Director,** Directorate of Mines and Geology (DMG), Udyog Bhavan, Panaji, Goa – 403 001

# Sub.: Issuance of prior Environmental Clearance (EC) towards renewal of minor mineral quarry lease (03 nos.) reg.,

Sir,

I am directed to refer to your communications enclosing therein three project proposals / applications seeking prior Environmental Clearance (EC) for 'Renewal' of quarry lease(s) from three minor mineral quarry lease holders (*refer Annexure* – 1). Accordingly, these proposals have been appraised as 'Category-B' under 'category 1(a) - B2 project': Mining of minerals as per the 'Schedule' annexed to the Environment Impact Assessment (EIA) Notification, 2006 (*as amended*) as well as decision taken during the joint meeting held on 24<sup>th</sup> March 2015.

Further, it is informed that the Goa State Expert Appraisal Committee (*Goa-SEAC – hereinafter referred as "Committee*') had conducted the site-inspection of these three leases on 11<sup>th</sup> August 2015. Thereafter, M/s Kurade Consultancy, on behalf of lease holders, made project-specific presentations during its 51<sup>st</sup> Committee meeting held on 15<sup>th</sup> October 2015 and were recommended for grant of environmental clearance. Subsequently, this Authority during its 27<sup>th</sup> meeting held on 10<sup>th</sup> December 2015 has considered Committee's recommendations and decided to grant EC as per provisions of the said Notification. However, your Department needs to ascertain / verify the **mandatory compliances** to the following -

- 'Goa Mineral Concession (Amendment) Rules, 2012' notified by the Directorate of Mines and Geology (DMG) and published in Official Gazette Series-I, No. 24 dated 17<sup>th</sup> September 2012.
- 6. Submission of '**approved quarrying plan**' by the competent officer as per Sub-rule (7) as well as specific compliance to Sub-rules 7(A) to 7(D) of the above-referred Rules, as applicable.
- 7. Office Memorandum (O. M.) issued by the Ministry of Environment, Forest and Climate Change (MoEF & CC) dated 20<sup>th</sup> December 2013 regarding '**High Level Working**

**Group Report on Western Ghats**' *vis-a-vis* compliance to the conditions mentioned therein w.r.t. activities prohibited in the identified Ecologically Sensitive Areas (ESAs').

Further, all three minor mineral quarry lease holders are required to mandatorily comply with

the following 'General' and 'Specific' conditions'-

- 35. The lease holder should ascertain on-site demarcation and construction of lease boundary with cement poles / bio-fencing / barbed wire for the proposed leased area in question. The lease boundary may be subsequently geo-referenced for precise positioning and ground-truth verification. As such, the lease holder should ensure that minor mineral quarrying operations are restricted within the prescribed lease boundary.
- 36. The lease holder should ensure construction of approach road / proper access to enable transportation of quarried material from site to desired destination and/or crushing unit, as applicable. Transportation of quarried material shall be done by covering the trucks with tarpaulin so that no spillage of material / dust takes place en route.
- 37. The lease holder should comply with the proposed plan of action / modus operandi for extraction of basalt / laterite stones within the available lease boundary limits in terms of provisions of Mines and Safety Rules / Guidelines, as applicable. In addition, safety gadgets and health-care facilities should be provided to workers vis-a-vis maintain hygiene surrounding the proposed lease boundary.
- 38. The lease holder shall undertake adequate safeguard measures during extraction of basalt stone and ensure that due to this activity, the hydro-geological regime of the surrounding area shall not be affected / altered / polluted. Quarrying operations should be limited to day-hours time (06 a.m. to 06 p.m.only) with specified time reserved for 'blasting'. Regular monitoring of groundwater levels and its physico-chemical quality parameters shall be carried out around the quarry lease area (for minimum two locations of permanent water sources / open well / borewell). If there are no groundwater sources, then nearest perennial surface water sources (*i.e. stream / river / pond / lake / reservoir / irrigational canal*) should be monitored for similar parameters on quarterly basis and/or seasonally (*i.e. pre-monsoon / monsoon and post-monsoon*).
- 39. No quarrying be carried out within the safety zone of any bridge and/or embankment as well as within the vicinity of natural / man-made archaeological site(s).
- 40. The lease holder shall implement air pollution control measures / dust minimizing initiatives / noise control measures, wherever applicable, within the lease area as well as establish adequate buffer zone around the lease boundary to minimize such pollution hazards. It should be ensured that the Ambient Air Quality (AAQ) parameters (*to be measures in January, April and November every-year*) as well as Noise parameters conform to the norms prescribed by the Central Pollution Control Board (CPCB) and Noise Pollution (Control) Rules, 2000 respectively.
- 41. Green belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with Forest Department / Zonal Agricultural Office, as applicable.

- **42.** The lease holder shall obtain necessary prior permission (NOC) from the Groundwater Cell of the Water Resources Department (WRD) for drawl of surface / groundwater from within the lease area.
- **43.** Waste water / effluents, if any, shall be properly collected, treated and monitored so as to conform to the standards prescribed by the MoEF / CPCB.
- **44.** Environmental clearance (EC) is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent Authority, if applicable.
- **45.** The mining officer / in-charge of quarrying operations on-site shall submit six-monthly report in hard and soft copy formats w.r.t. specifying the status of compliance of the stipulated environmental clearance conditions (*i.e. Specific and General conditions*) to the Directorate of Mines and Geology (DMG), Goa, this Authority as well as Goa State Pollution Control Board (GSPCB).
- **46.** Any change (*i.e. modification / expansion / alteration*) in lease area / quarrying operations / extraction capacity / modernization / scope of working / environment management plan (EMP) shall require re-appraisal by this Authority as per the provisions of the EIA Notification, 2006 (*as amended*).
- **47.** All necessary statutory clearances from relevant Authorities concerned shall be obtained before start of quarrying operations.
- 48. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that lease holder has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the lease holder. Hence, <u>this EC does not give immunity to the lease holder in the case filed against it</u>.
- **49.** The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- **50.** Any appeal against this prior environmental clearance shall lie before the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Accordingly, you are hereby requested to appraise and communicate the decision to individual minor mineral quarry lease holder mentioned herein above.

Yours faithfully, Sd/-(Srinet Kothwale) Director/ex-officio Jt. Secy. (Environment) & Member Secretary, Goa-SEIAA

Encl. Annexure - 1

# ANNEXURE – 1

# List of minor mineral quarry lease holders seeking EC for its lease renewals

Sr. No.	Name of the minor mineral quarry lease	Site-specific location of lease	Lease details and its particulars
	holder		
1	M/s Ivor	Survey no. 05/1	Renewal of <b>Basalt-stone quarry</b>
	Braganza	Moissal village,	lease no. 08/Basalt/10-11
		Dharbandora (earlier	Lease area $- 14,000$ sq.mts.
		Sanguem) Taluka.	Rate of extraction: 8,000 m <sup>3</sup> per
			annum.
2	M/s Earl	Survey no. 05/1,	Renewal of <b>Basalt-stone quarry</b>
	Andrew	Moissal village,	lease no. 07/Basalt/10-11
	Braganza	Dharbandora (earlier	Lease area–27,974 sq.mts.
	_	Sanguem) Taluka.	Rate of extraction: 8,000 m <sup>3</sup> per
			annum.
3	M/s Paulo	Survey no. 14/1	Renewal of Laterite-stone quarry
	Godinho	(10,000 sq.mts.)	lease no. 15/Laterite/07
		Moissal village of	Lease area – 7,400 sq.mts.
		Dharbandora village	Rate of extraction $-8,2000 \text{ m}^3 \text{ per}$
			annum.

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## **GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY**

**EIA-Goa State Secretariat**,

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567 e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/192* 

Date: 31<sup>st</sup> December 2015

*To*, **Director,** Directorate of Mines and Geology (DMG), Udyog Bhavan, Panaji, Goa – 403 001

Sub.: Re-consideration of three minor mineral quarry proposal for issuance of environmental clearance (EC) – reg.

## Ref.: (i) Authority letter no. 03/181/2010/STE-DIR/105 dated 8<sup>th</sup> May 2015

(ii) Your office letter no. 01/247/2009-Mines/3191 dated 27<sup>th</sup> October 2015

Sir,

With reference to the subject matter, this is to inform you that this Authority vide letter referred at (i) above had considered and accordingly granted environmental clearance (EC) as mandated in the EIA Notification, 2006 (*as amended*) to minor mineral quarry proposals seeking renewals of individual leases. Further, vide same letter, the Authority had rejected 'renewal of lease' proposals in respect of (a) **M/s Satyappa Gidappa Dhangalkar** (*lease no. 06/Basalt/10-11*), (b) **M/s Marushka Stone Industry** (*lease no. 01/Basalt/98*) and (c) **M/s Danra Metals** (*lease no. 10/Basalt/10-11*) all located in survey no. 52/0 of Uguem village, Sanguem taluka in view of the fact that Uguem village/area under reference has been categorized under the Ecologically Sensitive Zone of the **Netravali and Bhagwan Mahavir Wild Life Sanctuaries** as per Notifications published in Govt. of India Gazette by the Ministry of Environment & Forests and Climate Change (MoEF & CC) dated 17<sup>th</sup> February 2015 / 23<sup>rd</sup> January 2015 respectively (*refer sr. nos. 40, 41 and 42 in Annexure-1 enclosed with letter referred at (i) above*).

Subsequently, these three project proponents (PPs') vide letters dated. 1<sup>st</sup> June 2015 had requested the Authority to review / re-consider proposals, *enclosing therein lease boundary demarcation superimposed on Google-map vis-a-vis ESZ - 1 km. buffer zone of Netravali and Bhagwan Mahavir Wild Life Sanctuaries*, informing non-applicability of above-referred 'Notifications' to three proposed leases. In response to the same, Goa State Expert Appraisal

Committee (*Goa-SEAC, hereinafter referred as "Committee*') conducted the site-inspection of the three leases on 18<sup>th</sup> August 2015 and subsequently, based on the clarification sought from your Department vide letter referred at (ii) above, during its 53<sup>rd</sup> meeting held on 5<sup>th</sup> November 2015 considered/recommended the request. Subsequently, the Authority during its 27<sup>th</sup> meeting held on 10<sup>th</sup> December 2015 accepted Committee's recommendations and decided to grant environmental clearance (EC) to these leases for a period of five (05) years from the date of this EC letter or upto lease validity, whichever is earlier.

Further, it is reiterated that 'mandatory compliances' and other 'General conditions' as mentioned in Authority's letter referred at (i) above, be strictly adhered to by your Department and the lease holders respectively. The compliance / status be submitted to this Authority for records.

Accordingly, you are hereby requested to appraise and communicate the decision to M/s Satyappa Gidappa Dhangalkar, (b) M/s Marushka Stone Industry and (c) M/s Danra Metals for further needful.

Kindly acknowledge the receipt of this letter.

Yours faithfully, Sd/-(Srinet Kothwale) Director/ex-officio Jt. Secy. (Environment) & Member Secretary, Goa-SEIAA

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## GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438303 Fax. no.: 2438528

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/ 191* 

Date: 23<sup>rd</sup> December 2015

*To,* **M/s Sociedade de Fomento Industrial Pvt. Ltd,** Villa Flores da Silva, Erasmo Carvalho Street, Margao, Goa – 403601.

Sub: Amendment in the prior environmental clearance (EC) issued vide this office letter No. 3-181-2010/STE-DIR/188 dated 16<sup>th</sup> December 2015.

#### Ref.: (a) This office letter No. 3-181-2010/STE-DIR/188 dated 16<sup>th</sup> December 2015. (b) Your letters no. Nil dated 22<sup>nd</sup> December 2015 requesting for amendment.

Sir,

Kindly refer this office letter referred at (a) above. Subsequently, in response to

your communications refereed at (b) above, following amendment may please be noted:

- 1. Subject, may please be read as Proposed "Rail Freight Terminal" for handling of multi-cargo system in the property bearing Survey Nos. 33/1A, 1B, 34/1 to 9, 4/1A, 01/1(*part*), of village Xic-Xelvona and Survey Nos. 34/1 (*part*), 35/2, 35/4, 35/8 and 35/10 of village Assolda, Quepem Taluka, South Goa. grant of environmental clearance reg.,
- At pg. no.1 Para 1. may please be <u>read</u> as "I am directed to refer to your application dated 13<sup>th</sup> June 2014 seeking prior Environmental Clearance (EC) as mandated under the provisions of the EIA Notification, 2006 (*as amended*) for the proposed "Rail Freight Terminal" for handling of multi-cargo system in the property bearing Survey Nos. 33/1A, 1B, 34/1 to 9, 01/1(*part*), 4/1A, of village Xic-Xelvona and Survey Nos. 34/1 (*part*), 35/2, 35/4, 35/8 and 35/10 of village Assolda, Quepem Taluka, South Goa".
- Serial no. (4) on pg.no.2 may please be <u>read</u> as: <u>Breakup of material Handling</u> -Total -5.12 MT/Year. consisting of 1.9 MT/Year of Iron ore, 1.8 MT/Year of coal, 0.4 MT/Year of cement, 0.4 MT/Year of fertilizer, 0.26 MT/Year of containerized cargo, 0.24 MT/Year of RoRo cargo (cargo on trucks on rail) and 0.12 MT/Year of miscellaneous cargoes;

4. In addition, on **pg. no.7 point no.** "**t**", may please be <u>read</u> as "Ambient noise levels should conform to "**prescribed**" standards both during day and night. Incremental pollution load on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level construction phase, so as to conform to the stipulated standard by CPCB/ GSPCB".

Further, it is informed that other information in the said letter dated 16<sup>th</sup> December 2015 remain unchanged.

Kindly acknowledge the receipt of this letter.

Yours faithfully, Sd/-. (Srinet Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

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#### **GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY**

EIA-Goa State Secretariat,

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438303 Fax. no.: 2438528

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/188* 

Date: 16<sup>th</sup> December 2015

То,

M/s Sociedade de Fomento Industrial Pvt. Ltd, Villa Flores da Silva, Erasmo Carvalho Street, Margao, Goa – 403601.

# Sub.: Proposed "Rail Freight Terminal" for handling of multi-cargo system in the property bearing Survey Nos. 33/1A, 1B, 34/1 to 9, 01/1(*part*), 4/1A, of village Xic-Xalvona and Survey Nos. 34/1 (*part*), 35/1to and 35/5 to 7 of village Assolda, Quepem Taluka, South Goa. --- grant of environmental clearance reg.,

Sir,

I am directed to refer to your application dated 13<sup>th</sup> June 2014 seeking prior Environmental Clearance (EC) as mandated under the provisions of the EIA Notification, 2006 (as amended) for the proposed "Rail Freight Terminal" for handling of multi-cargo system in the property bearing Survey Nos. 33/1A, 1B, 34/1 to 9, 01/1(part), 4/1A, of village Xic-Xalvona and Survey Nos. 34/1 (part), 35/1to and 35/5 to 7 of village Assolda, Quepem Taluka, South Goa. Accordingly, the above proposal has been screened and appraised under '8(a) - B2 category': Building and construction project on the basis of the documents enclosed with application viz. (Form-1 and Form-1A) by the Goa State Expert Appraisal Committee (Goa-SEAC - hereinafter referred as 'Committee'). Subsequently, the Goa-SEAC conducted the site-inspection on 23rd September 2014 and sought clarification / additional information on certain observations. The Project Proponent (PP) submitted the compliance report dated 12<sup>th</sup> February 2015 which were perused and deliberated during 31<sup>st</sup> Goa-SEAC meeting held on 19<sup>th</sup> February 2015. Subsequently, M/s Padmaja Aerobilogists Ltd., Mumbai, on behalf of the PP, made the projectspecific presentation during 34<sup>th</sup> Goa-SEAC meeting held on 24<sup>th</sup> March 2015 wherein additional compliance / details were sought. In response to the same, the PP submitted the compliances which was verified / ascertained during 35<sup>th</sup> / 36<sup>th</sup> Goa-SEAC meetings held on 16<sup>th</sup> April 2015 / 21st April 2015 respectively and was recommended to Goa State Environment Impact Assessment Authority (Goa-SEIAA – hereinafter referred as "Authority") for grant of prior environmental clearance (EC).

Subsequently, the Authority, based on the decision taken during its 22<sup>nd</sup> meeting held on 11<sup>th</sup> May 2015, inspected the site on 3<sup>rd</sup> June 2015 and sought additional project/site-specific clarifications. The PP submitted the compliance to these observations dated 25<sup>th</sup> June 2015 and 13<sup>th</sup> August 2015 which were perused / deliberated during 26<sup>th</sup> Goa-SEIAA meeting held on 30<sup>th</sup> October 2015 and it was decided to consider the proposal only after PP complies with / submits the 'Undertaking' regarding the commitment to undertake widening of access road for effective traffic management after obtaining relevant permission / NOC, as applicable, from the authorities concerned. The PP has forwarded an email compliance dated 27<sup>th</sup> November, 2015 informing that State Government has already acquired land required for road widening. Further PP has proposed alternate transport route to avoid congestion.

The Authority has noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed "Rail Freight Terminal" for handling of multi-cargo system in survey nos. as given below:

Location of proposed Activity of M/s Sociedade de Fomento Industrial Pvt. Ltd.					
Sy Nos	Sub Div	Area Sq.mts	Village	Taluka	
33	1A	65350	Xic-Xalvona	Quepem	
33	1B	3050	Xic-Xalvona	Quepem	
34	1to 09	3850	Xic-Xalvona	Quepem	
4	1A	6375	Xic-Xalvona	Quepem	
1	1(part)	15978	Xic-Xalvona	Quepem	
35	4	69400	Assolda	Quepem	
35	8	10900	Assolda	Quepem	
35	10	15050	Assolda	Quepem	
35	2	775	Assolda	Quepem	
34	1(part)	11850	Assolda	Quepem	
TOTAL=2,02,578 Sq.mts.					

Project details and salient features of the proposed developmental activity, as submitted by the proponent, is as under –

1. Total plot area-2, 02,578 sq.mt2. Built-up Area proposed (BUA) i.e. construction area -90,382 sq. mts.3. Configuration of building					
a) 2 nos of covered sheds for iron ore	- 40,790 sq.mts.				
b) 2 nos of covered sheds for Coal	- 38,760 sq.mts.				
c) 1 no of covered sheds for Baggage cargo	-10,350 sq.mts				
d) 1 no. office building	- 326 sq.mts				
e) 1 no. of Canteen	- 84 Sq. mts				
f) 2 nos of Toilets	- 72 Sq.mts				
4. Breakup of material handling	Total – 5.12 MT/Year				
<ul><li>4. Breakup of material handling</li><li>a) Iron ore</li></ul>	<b>Total – 5.12 MT/Year</b> -19 MT/Year				
a) Iron ore	-19 MT/Year				
a) Iron ore b) Coal	-19 MT/Year -18 MT/Year				
a) Iron ore b) Coal c) Cement	-19 MT/Year -18 MT/Year -0.4 MT/Year				
<ul> <li>a) Iron ore</li> <li>b) Coal</li> <li>c) Cement</li> <li>d) Fertilizer</li> </ul>	-19 MT/Year -18 MT/Year -0.4 MT/Year -0.4 MT/Year				

#### 5. Max height of cargo shed

- 25 mts.

6. Parking Area

- 7,500 Sq.mts for truck parking (166 trucks).

## 7. Water requirements –

- a) Construction phase: 60 cbm/day
- b) Operation Phase: 65 cbm/day consisting of

Sprinkling & dust suppression: 30 cbm/day.

Drinking and Sanitation= 25 cbm/day & Gardening: 10cbm/day

(Source: Goa State Water Supply Department & Ground water).

# 8. Power Supply: Goa Electricity Board.

# a) Construction Phase:

i) At railway site: 1080 units/ month from the Government supply and 3600 units /month from the private Diesel Generator set.

ii) At Cargo handling site: 4000 units / month from the Government supply and 500

units per month from the private Diesel Generator set.

- b) **Operation Phase:** 
  - i) At railway site: 8160 units/ month from the Government supply and 1440 units /month from the private Diesel Generator set.
  - ii) At Cargo handling site: 81510units / month from the Government supply and 54290 units per month from the private Diesel Generator set initially and 608502/32031 ultimately.
- 9. Solid waste: From housekeeping in the project area, 25kg/day.
- Energy Conservation Measures LT supply (lighting), Max. Demand 1000KW D.G. Set of capacity 600 KW (Backup). 25 Solar lamps will be installed on Internal Roads and CFL tubes in the working area.

Accordingly, the Authority has decided to grant prior environmental clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

- sss. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- ttt. *Solar power generation* Every major consumer of conventional power will have to generate and opt for certain percentage of power generation from the non-conventional sources. In this context, PP should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage only to enable installation of solar panels as and when made applicable in future.
- uuu. The Project Proponent (PP), considering the project-specific site, should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards minimizing power requirements through national grid. Accordingly, Provision to be made for solar water roof-tops facing towards South.
- vvv.PP should adopt roof-top rainwater harvesting / conservation measures to optimally utilize the water availability by constructing sumps for collection of rainwater.
- www. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal and treatment / air and water pollution / waste-water management.
- xxx. PP should not disturb the natural drainage and as far as possible and maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment.

- yyy.PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization /zoning.
- zzz. PP should submit half-yearly compliance report(s) in hard as well as soft copy format to the Authority for the period upto project completion.
- This environmental clearance is issued subject to land use verification. Local aaaa authority /planning authority should ensure this with respect to Rules, Regulations, Notifications, Government Resolutions, Circulars, issued if etc. any. Judgements/Orders issued by Hon'ble High Court, NGT, Supreme Court regarding DCR provisions, environmental issues applicable in this matter should be verified. PP should submit exactly the same plans appraised by the Committee and Authority concerned. If any discrepancy found in the plans submitted or details provided in the above para may be reported to this Authority. This environmental clearance issued with respect to the environmental consideration and it does not mean that Goa-SEIAA approved the proposed land.
- bbbb. PP needs to ensure that no treated water or any waste sewage shall be discharged into any water body. Appropriate STP capacity shall be installed considering quality of waste water generation.
- cccc. E-waste shall be disposed through Authorised vendor as per E-waste (Management and Handling) Rules, 2011.
- dddd. This environmental clearance is issued subject to obtaining NOC from Forestry & Wildlife angle including clearance from the standing committee of the National Board for wildlife as if applicable & this environmental clearance does not necessarily implies that Forestry & Wildlife clearance granted to the project which will be considered separately on merit.
- eeee. The height, construction built up area of proposed construction shall be in accordance with the existing FSI/FAR norms of the urban local body & it should ensure the same along with survey number before approving layout plan and before according commencement certificate to proposed work, Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.
- ffff. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.

Further, the project proponent is advised to comply with the following "General Conditions" during construction phase:-

- yyyyyyy. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the Authority before start of any construction work at the site.
- zzzzzzz. Permission to draw groundwater, as applicable, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction / operation of the project.
- aaaaaaaa. Project proponent shall not make any change in the Surface Layout Plan / Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the Authority.
- bbbbbbb. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
- ccccccc. The diesel generator sets (D.G. set) to be used during construction / after commissioning should be low-sulphur diesel type and should conform to Environment (*Protection*) Rules prescribed for air and noise emission standards as laid down by the GSPCB.
- ddddddd. The installation of the Sewage Treatment Plant (STP) if any should be certified by the GSPCB and a report in this regard should be submitted to the Authority before the STP is commissioned.
- eeeeeeee. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche and first aid room etc.
- ffffffff. Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be

made for mobile toilets. The safe disposal of waste water and solid waste generated during the construction phase should be ensured.

- gggggggg. The solid waste generated should be properly segregated. Dry /inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- hhhhhhh. Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved site with the approval of competent authority.
- iiiiiiii. Arrangements shall be made that waste water and storm water do not get mixed.
- jjjjjjjj. All the top soil excavated during construction activities should be stored if or use in horticulture/landscape development within the project site.
- kkkkkkk. Additional soil for levelling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- IIIIIII. Green belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the State Forest/Agriculture Department.
- mmmmmmm. Soil and ground water samples will be tasted to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- nnnnnnn. Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured so that they should not leach into ground water.
- oooooooo. Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the GSPCB.

- ppppppp. The diesel requires for operating DG sets shall be stored in underground tanks and if required, Clearance from concerned authority shall be taken.
- qqqqqqq. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standard and should be operated during non-peak hrs.
- rrrrrrr. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level construction phase, so as to conform to the stipulated standard by CPCB/ GSPCB.
- sssssss. The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquakes, adequacy of fire fighting equipments etc. as per National Building Code (NBC) including measures from lighting.
- ttttttt. Storm water controlled and its re use as per CGWB and BIS standard for various applications.
- uuuuuuu. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- vvvvvvvv. The groundwater level and its quality should be monitored regularly in consultation with ground water authority.
- wwwwww. The installation of the sewage treatment plant (STP) should be certified by an independent expert and a report in this regard should be submitted to GSPCB before the project is commissioned for operation. Discharge of this unused treated effluent, if any should be discharged in the sewer line. Treated effluent emanating from STP shall be recycled / refused to the maximum extent possible. Discharge of this unused treated effluent, if any should be discharged in the sewer line. Treated effluent, if any should be discharged in the sewer line. Treatment of 100% grey water by de centralised treatment should be done. Necessary measured should be made to mitigate the odour problem from STP.

- xxxxxxx. Use of glass may be reduced upto 40% to reduce a electricity consumption and load on air conditioning. If necessary use high quality double glass with special reflective coating in windows.
- yyyyyyy. Roof should meet prescriptive requirement as per energy conservation building code by using appropriate thermal insulation material to fulfil requirement.
- zzzzzzz. Energy conservation measures like installation of CFLs/ TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use of CFLs and TFLs should be properly collected and disposed off/ sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heater system. PP should install, after checking feasibility, solar plus hybrid non conventional source as source of energy.
- aaaaaaaaa. Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the environment (protection) Act 1986. The height of stack of DG sets should be equal to the height needed for the combine capacity of all proposed DG sets.
- bbbbbbbb. Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- cccccccc. Traffic congestions near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalised and no public place should be utilised.
- dddddddd. opaque wall should meet prescriptive requirement as per energy conservation board which is proposed to mandatory for all air conditioned spaces while it is aspiration for non- air

conditioned spaces by use of appropriate thermal insulation material to fulfil requirement.

- eeeeeeeee. The shades should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
- fffffffff. Regular supervision of the above and other measures for monitoring should be in placed all through the construction phase, so as to avoid disturbance to the surroundings.
- gggggggg. Under the provisions of Environment Protection Act 1986, legal action shall be initiated against the PP if it was found that construction of the project has been started without obtaining EC.
- hhhhhhhh. Six monthly compliance reports should be submitted to the MOEF with copy to the Goa-SEIAA and GSPCB.

Further, the project proponent is advised to comply with the following "General Conditions" during post-construction phase:-

- xvi. PP shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. The PP to explore possibility of utilising excess treated water in the adjacent area for gardening before discharging into sewer line. No physical occupation of allotment will be given unless all above said environmental infra structure is installed and made functional including water requirement prior certification from appropriate authority shall be obtained.
- Wet garbage should be treated by organic waste convertor and treated waste (manure) should be utilise in the existing premises foe gardening. And no wet garbage will be disposed outside the premises. Local authority should ensure this.
- xviii. A complete set of all the documents submitted to Goa-SEIAA should be forwarded local authority / GSPCB.
- xix. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by Goa-SEIAA.

- xx. Separate funds shall be allocated for implementation of environmental protection measures /EMP along with item wise breaks-up. The funds earmarked for the environment protection measures shall not be diverted for other purposes.
- xxi. A copy of the clearance letter shall be sent by PP to the concerned local body, if any, from whom suggestions/representation, if any, were received while processing the proposal. The EC letter shall also be put on the company website by PP.
- xxii. The PP shall upload the status of the compliance of the stipulated EC conditions, including results of monitoring data on their website and shall update the same periodically. It shall simultaneously be sent to the regional office of MoEF, the respective Zonal office CPCB and the GSPCB. The criteria pollutant levels namely SPM, RSPM, SO<sub>2</sub> and NO<sub>X</sub> (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- xxiii. The environmental statement for each financial year 31<sup>st</sup> march in Form V as is mandated to be submitted by the PP to the GSPCB as prescribed under the Environment (Protection) Rules 1986 as amended subsequently shall also be put on the website of the company along with the status of the compliance of the EC conditions and shall also be sent to the respective regional office of the MoEF.
- xxiv. The EC is being issued without prejudice to the action initiated in the EP act or any court case pending in the court of law and it does not mean that PP has no violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble Court will be binding on the PP hence this clearance does not immunity to the PP in the case filed against him, if any or action initiated under EP act.
- xxv. In case of submission of false document and non- compliance of stipulated conditions, this Authority will revoke or suspend the EC without any intimation and initiate appropriate legal action under EP Act 1986.
- xxvi. The Goa-SEIAA reserves their right to act any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Authority or for that matter, for any other administrative reason.

- 10. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani or Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter will be available on the PP website.
- 11. The Environmental Clearance is being issued without prejudice to the legal interventions / court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court / National Green Tribunal (NGT) will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- **12.** The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- 13. Validity of the Environmental Clearance (EC) accorded shall be for a period of 07 (seven) years from the date of its issue.

14. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

> Yours faithfully, Sd/-. (Srinet Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

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# GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

 3<sup>rd</sup>
 Floor, Dempo Towers, Patto, Panaji, Goa – 403 001

 Phone nos.: 2438528
 Fax. no.: 2438567

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/184* 

Date: 14<sup>th</sup> December 2015

To, **The Collector& District Magistrate (North),** North Goa District, Collectorate Building, Panaji -Goa

# Sub.: Addendum to the Pre-feasibility report submitted by Collectorate, North Goa to the Goa Environment Impact Assessment Committee – reg.,

#### Ref.:

- (a) Environmental Clearance bearing no. 03/181/2010/STE-DIR/159 dated 1<sup>st</sup> October 2015.
- (b) Your letter no. 39/8/2013-MAG/DC/SAND-EXT/5039 dated 16<sup>th</sup> October 2015.
- (c) This office letter no. 03/181/2010/STE-DIR/Part-II/EIA-Goa/171 dated 3<sup>rd</sup> November 2015.
- (d) Your reply letter no. 39/8/2013—MAG/DC/SAND-EXT/9175 dated. 12<sup>th</sup> November 2015.

#### Madam,

In continuation to the **Environmental Clearance** dated 01/10/2015 referred to sr. no. 1 above and your letter dated 16/10/2015 and 12/11/2015 regarding request to grant the Environmental Clearance for additional stretch / cluster i.e. Pernem-Taluka (Tiracol River). Accordingly, the said proposal was discussed and deliberated during 26<sup>th</sup> and 27<sup>th</sup> Goa-SEIAA (*hereinafter referred as 'Authority'*) meetings held on 30<sup>th</sup> October 2015 and 10<sup>th</sup> December 2015 respectively in terms of EIA Notification 2006 (as amended), guidelines issued by the MoEF.

Based on the decision taken during the said meetings, the Authority has decided to consider the said request, as submitted by your office, with a 'Specific Condition' that sand extraction within the proposed stretch / cluster in the Terekhol estuary (*refer Table below*) be restricted exclusively within the Goa State territorial boundary limits and be monitored on regular basis by your office in joint collaboration with the Directorate of Mines and Geology (DMG), O/o Captain of Ports (CoP), Goa and other authorities. Thus, the detailed report/status so generated in respect of the said stretch / cluster (*i.e. no. of leases permitted, quantity of sand extraction allowed per lease per day, no. of canoes registered, etc.*,) be submitted to this Authority on "**monthly**" basis.

Sr. No.	Taluka	Cluste r	Area (in sq.m mts)	Estimated total minable reserves (in m <sup>3</sup> )	Latitude	Longitude	SOI Toposheet no. (on 1:25,000 scale)	River
1	Pernem	TC - 3	1,00,000	4,00,000	73 <sup>0</sup> 42' 49.87''	15 <sup>0</sup> 43 28.98"	48E/10/4	Tiracol

In addition, all other 'General and Specific conditions' referred to in a letter (a) above be strictly complied. Further, it is reiterated that interim / final 'Order' pronounced by Hon'ble Supreme Court / High Court / National Green Tribunal, from time to time, w.r.t. the 'sand extraction' be mandatorily binding on the Competent Authority / lease holder. As such, this environmental clearance does not give any immunity against the same.

> Yours faithfully, *Sd/-*. (Srinet Kothwale) Director/Ex-officio Jt. Secy. (Environment) & Member Secretary, Goa-SEIAA

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## GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438303 Fax. no.: 2438528

e-mail: goaseac@gmail.com

No: 3 - 181 - 2010/STE-DIR/180

*Date:* 9<sup>th</sup> December 2015

Τо,

# **M/s Hindustan Petroleum Corporation Limited (HPCL).** Goa LPG Regional Office, LPG Bottling Plant, Plot No. 150, Kundaim Industrial Estate, Ponda, Goa.

## Sub: Proposed expansion of LPG-mounded Storage facility (3x200MT) in plot no. 150, Kundaim Industrial Estate, Kundaim, Ponda, Goa. ----Issue of Environmental Clearance reg;

Sir,

I am directed to refer to your project proposal / application dated 31<sup>st</sup> December 2014 seeking prior Environmental Clearance (EC) for the proposed expansion activity as mandated under the EIA Notification, 2006 (*as amended till date*). Accordingly, the above proposal has been screened and appraised as 'category 6 : Service Sector and sub-category (b) : Isolated storage & handling of hazardous chemicals (*As per threshold planning quantity indicated in column 3 of schedule 2 & 3 of MSIHC Rules 1989 amended 2000*)' on the basis of the documents enclosed with the application / submitted thereafter, if any. Subsequently, Goa State Expert Appraisal Committee (*Goa-SEAC – hereinafter referred as "Committee*') conducted the site-inspection on 12<sup>th</sup> February 2015 and thereafter Project Proponent (PP) submitted the compliance to inspection-specific observations on 24<sup>th</sup> June 2015. Subsequently, project-specific presentation was made by (*M/s EQMS India Private Ltd, New Delhi, NABET/QCI-accredited environmental consultant*), on behalf of the PP during 41<sup>st</sup> Committee meeting held on 07<sup>th</sup> July 2015, wherein PP was requested to submit additional project/site-specific clarifications. Later, PP submitted compliance to post-presentation observations on 8<sup>th</sup> October 2015 which was perused / ascertained

by the Committee during its 52<sup>nd</sup> meeting held on 20<sup>th</sup> October 2015 and has recommended the proposal to the Goa-SEIAA (*hereinafter referred as "Authority*'). Subsequently, the Authority during its 26<sup>th</sup> meeting held on 30<sup>th</sup> October 2015 has considered the proposal with the following observations.

The Authority has noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed expansion of LPG-mounded storage facility having capacity of 600 MT (*i.e. 3 bullets of 200 MT each*). in plot no. 150, Kundaim Industrial Estate, Ponda, Goa. The said unit is located within the notified industrial area and expansion proposed is restricted within the area earmarked to M/s HPCL, Kundai. Project details and salient features of the proposed expansion activity, as submitted by the PP, is as under –

- 1. Total plot Area 98,600 sq. Mts.
- 2. Green Belt area 34,200 sq. mts.
- 3. Existing LPG storage 3x150 MT =(450MT) above ground bullets
- 4. Proposed LPG storage 3x200 MT= (600 MT) LPG-mounded bullets.
- 5. Total Water Requirement 20 KLD (Source: Bore Well and IDC water)
- 6. Total Power Requirement: 250 KVA (*Source: Goa State Electricity Board*) For power back-up: No additional D.G. set as existing 3 DG sets of 380KVA, 265 KVA and 75 KVA will suffice additional load.

In view of the above and as recommended by the Committee, the Authority has considered the aforementioned expansion proposal and decided to grant prior Environmental Clearance (EC) under the provisions of the Environment Impact Assessment (EIA) Notification, 2006 (*as amended*) subject to compliance to the following **"General Conditions"** -

- a. PP should prioritize the issues related to health in complying with the matters related to a) transfer, storage and handling of hazardous chemical, (b) safe / scientific disposal of chemical, if any.
- b. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development.
- c. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed expansion activity.

- d. PP should submit half-yearly compliance report(s) in hard as well as soft copy format to the Authority for the period upto project completion.
- e. PP to ensure no treated water or any waste sewage shall be discharged into any water body.

Further, the project proponent is advised to comply with the following "General Conditions" during construction phase of proposed expansion :-

- i. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the Authority before start of any construction activity on sit.
- ii. Permission to draw groundwater, as applicable, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction / operation of the project.
- iii. Project proponent shall not make any change in the Surface Layout Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the Authority.
- iv. The diesel generator sets (D.G. set) to be used during construction / after commissioning, if any, should be low-sulphur diesel type and should conform to Environment (*Protection*) Rules prescribed for air and noise emission standards as laid down by the GSPCB.
- v. The safe disposal of waste water and solid waste generated during the construction phase should be ensured. Any hazardous waste generated during construction phase should be disposed-off as per applicable rules and norms with necessary approvals of the GSPCB.
- vi. Disposal of earthwork / muck / top-soil during construction phase should not create any adverse effect on the neighbouring plots within Kundaim Industrial Estate and/or local population residing within the immediate periphery of the unit.
- vii. Provision shall be made that waste water and storm water do not get mixed.
- viii. All the top soil excavated during construction activities should be stored if or use in horticulture/landscape development within the project site.
- ix. Green belt development shall be carried out including selection of locally available plant species and/or in consultation with the State Forest/Agriculture Department.
- x. Soil and ground water samples will be tasted to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.

- xi. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standard and should be operated during non-peak hrs.
- xii. Ambient noise levels should conform to industrial standards within the industrial estate both during day and night. Incremental pollution load on the ambient air and noise quality should be monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level construction phase, so as to conform to the stipulated standard by CPCB/ GSPCB.
- xiii. The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquakes, adequacy of fire fighting equipments etc.
- xiv. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xv. The ground water level and its quality should be monitored regularly in consultation with ground water authority. Further, permission to draw ground water, if any, shall be obtained from the Ground water Cell (*i.e. Water Resources Department*).
- xvi. Six monthly compliance report should be submitted to the Regional Office of the MoEF&CC, Bangalore with copy to the Authority and GSPCB.
- xvii. The PP should forward a copy of the letter to the concerned local body (*i.e. Kundaim village panchayat*) as well as upload the same on the Company's website.

Further, the project proponent is advised to comply with the following "General Conditions" for post-construction phase :-

- a. The PP shall upload the status of the compliance of the stipulated EC conditions, including results of monitoring data on their website and shall update the same periodically. It shall simultaneously be sent to the regional office of MoEF&CC the respective Zonal office CPCB and the GSPCB.
- b. The EC is being issued without prejudice to any court case pending in the court of law, if any and it does not mean that PP has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble Court will be binding on the PP. Hence, this clearance does not give immunity to the PP in the case filed against him, if any or action initiated under EP act.

- c. In case of submission of false documents and non- compliance of stipulated conditions, this Authority will revoke or suspend the EC without any intimation and initiate appropriate legal action under Environment (*Protection*) Act, 1986.
- d. The Authority reserves their right to impose any stringent conditions, if conditions stipulated are not implemented to the satisfaction of the Authority or for that matter, for any other administrative reason.

In addition, the PP is required to comply with the following "Specific Conditions".

- a) Provision to control and manage unconfined vapour-cloud explosion for offsite emergency, fire containing materials and for safety gadgets.
- b) No vehicle should be allowed without spark arrestors.
- c) Output capacity of the water monitor and its throw sample should be maintained. The monitor should be able to rotate  $360^{\circ}$ .
- d) All operations should be remote-controlled for effective time-management.
- e) During the period of Off-site emergency management for unconfined vapour cloud explosion, the PP should contact local radio station (AIR / FM) for general alert.
- 1. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani or Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter will be available on the PP website.
- 2. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

# 3. Validity of the Environmental Clearance (EC) accorded shall be for a period of 07 (seven) years from the date of its issue.

4. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully, Sd/-. (Srinet Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA \*\*\*\*\*\*\*

# GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

<sup>3rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001Phone nos.: 2438303Fax. no.: 2438528

e-mail: goaseac@gmail.com

No: 3 - 181 - 2010/STE-DIR/176

*Date:* 26<sup>th</sup> November 2015

*To,* **M/s Merck (India) Ltd. Plot No. 11/1, Marvasodo, Usgaon, Ponda, Goa.** 

#### Sub.: Proposed expansion in manufacturing capacity of the existing enhancement of bulk drug product in plot No. 11/1, Marvasodo, Usgaon, Ponda, Goa. reg.,

Sir,

I am directed to refer to your application dated 29<sup>th</sup> November 2014 seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 5(F) B1- (*as per the Schedule annexed to the said notification*) on the basis of the documents enclosed with application viz. Form-1, Prefeasibility report and EIA report. Subsequently, Goa-State Expert Appraisal Committee (Goa-SEAC) conducted the siteinspection on 19<sup>th</sup> March 2015 and was followed by project-specific presentation by the Project Proponent (PP) along with NABET/QCI-accredited environmental consultant during its 41<sup>st</sup> Goa-SEAC meeting held on 07<sup>th</sup> July 2015, the aforementioned proposal was recommended to Goa-SEIAA with certain project /site-specific observations. Further, Goa-SEIAA during its 26<sup>th</sup> meeting held on 30<sup>th</sup> October 2015, has considered the said proposal with the following observations.

1. Goa-SEIAA noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed enhancement of bulk drug product in plot No. 11/1, Marvasodo,

Usgaon, Ponda, Goa. Project details and salient features of the proposed developmental activity, as submitted by the proponent, is as under –

1.Total Area -1,49,576 sq. mts.

- 2. Total Build up Area: 34226.00 Sq.mts
- 3. Open Area: 21372.50 sq mts.
- 4. Green Belt area: 1, 00,000.00 sq mts. (66% of Plot Area)

# 5. Total Product Capacity: - API: 1716.4 MT/A

- (a) Existing: API: 636.4 MT/A
- (b) Proposed: API: 1080 MT/A

# 6. Total Water Requirement: - 973 CMD

- (a) Existing: 711CMD(b) Proposed: -262 CMDSource: Bore Well and PWD.
- 7. Total Power Requirement: 1966.82 KVA
- (a) Existing 1416.82 KVA
- (b) Proposed: 550 KVA to be sourced from Goa State Electricity Board For power back up: 4 DGs of 500KVA and 1 DG of 1000 KVA.

In view of the above and based on compliances to project specific observations, Goa-SEIAA, has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006 (as amended) subject to compliance to the following **"General Conditions"**:-

- a. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- b. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal and treatment / air and water pollution / waste-water management.

- c. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment.
- d. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity visà-vis its landuse categorization / zoning.
- e. PP should submit half-yearly compliance report(s) in hard as well as soft copy format to the Authority for the period upto project completion.
- f. This environmental clearance is issued subject to restricting of total Built up Area **34226 sq.mts.**
- g. This environmental clearance is issued subject to land use verification. Local authority /planning authority should ensure this with respect to Rules, Regulations, Notifications, Government Resolutions, Circulars, etc. issued if any. Judgements/orders issued by Hon'ble High Court, Hon'ble NGT, Hon'ble Supreme Court regarding DCR provisions, environmental issues applicable in this matter should be verified. PP should submit exactly the same plans appraised by the concern Goa-SEAC and Goa-SEIAA. If any discrepancy found in the plans submitted or details provided in the above para may be reported to this Authority. This environmental clearance issued with respect to the environmental consideration and it does not mean that Goa-SEIAA approved the proposed land.
- h. PP to ensure no treated water or any waste sewage shall be discharged into any water body.
- i. E-waste shall be disposed through Authorised vendor as per E-waste (Management and Handling) Rules, 2011.
- j. Occupation certificate shall be issued to the project only after ensuring availability of drinking water and connectivity of the sewer line to the project site.

- k. ETP capacity shall be increased appropriately considering waste water generation.
- 1. This environmental clearance is issued subject to obtaining NOC from Forestry & Wildlife angle including clearance from the standing committee of the National Board for wildlife as if applicable & this environmental clearance does not necessarily implies that Forestry & Wildlife clearance granted to the project which will be considered separately on merit.
- m. PP has to abide by all the conditions stipulated by Goa-SEAC & Goa-SEIAA.
- n. The height, construction built up area of proposed construction shall be in accordance with the existing FSI/FAR norms of the urban local body & it should ensure the same along with survey number before approving layout plan and before according commencement certificate to proposed work, Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.
- o. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.

1. Further, the project proponent is advised to comply with the following **"General Conditions" for construction phase**:-

- i. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the Authority before start of any construction work at the site.
- ii. Permission to draw groundwater, as applicable, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction / operation of the project.
- iii. Project proponent shall not make any change in the Surface Layout Plan / Civil Plan submitted to the Authority without its prior permission. **In case of any change(s) in the scope of the project**

# and/or otherwise, the project would require a fresh appraisal by the Authority.

- iv. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
- v. The diesel generator sets (D.G. set) to be used during construction / after commissioning should be low-sulphur diesel type and should conform to Environment (*Protection*) Rules prescribed for air and noise emission standards as laid down by the GSPCB.
- vi. The installation of the Effluent Treatment Plant (ETP) should be certified by the GSPCB and a report in this regard should be submitted to the Authority before the ETP is commissioned.
- vii. Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of waste water and solid waste generated during the construction phase should be ensured.
- viii. The solid waste generated should be properly connected and segregated. Dry /inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- ix. Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved site with the approval of competent authority.
- x. Arrangements shall be made that waste water and storm water do not get mixed.
- xi. All the top soil excavated during construction activities should be stored if or use in horticulture/landscape development within the project site.
- xii. Additional soil for levelling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.

- xiii. Green belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the Forest/Agriculture Department.
- xiv. Soil and ground water samples will be tasted to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- xv. Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured so that they should not leach into ground water.
- xvi. Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the GSPCB.
- xvii. The diesel requires for operating DG sets shall be stored in underground tanks and if required, Clearance from concerned authority shall be taken.
- xviii. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission std and should be operated during non-peak hrs.
- xix. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level construction phase, so as to conform to the stipulated standard by CPCB/ GSPCB.
- xx. The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquakes, adequacy of fire fighting equipments etc. as per National Building Code including measures from lighting.

- xxi. Storm water controlled and its re use as per CGWB and BIS standard for various applications.
- xxii. Water demand during construction should be reduced by use of premixed concrete, curing agents and other best practices referred.
- xxiii. The ground water level and its quality should be monitored regularly in consultation with ground water authority.
- xxiv. The installation of the Effluent Treatment Plant (ETP) should be certified by an independent expert and a report in this regard should be submitted to GSPCB before the project is commissioned for operation. Discharge of this unused treated effluent, if any should be discharged in the sewer line. treated effluent emanating from ETP shall be recycled / refused to the maximum extent possible. Discharge of this unused treated effluent, if any should be discharged in the sewer line, if any should be discharged in the sewer line. Treatment of 100% grey water by de centralised treatment should be done. Necessary measured should be made to mitigate the odour problem from ETP.
- xxv. Permission to draw ground water and construction of basement if any shall be obtained from the competent authority prior to construction / operation of the project.
- xxvi. Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.
- xxvii. Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.
- xxviii. Use of glass may be reduced upto 40% to reduce a electricity consumption and load on air conditioning. If necessary use high quality double glass with special reflective coating in windows.
- xxix. Roof should meet prescriptive requirement as per energy conservation building code by using appropriate thermal insulation material to fulfil requirement.

- xxx. Energy conservation measures like installation of CFLs/ TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use of CFLs and TFLs should be properly collected and disposed off/ sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heater system. PP should install, after checking feasibility, solar plus hybrid non conventional source as source of energy.
- xxxi. Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the environment (protection) Act 1986. The height of stack of DG sets should be equal to the height needed for the combine capacity of all proposed DG sets.
- xxxii. Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- xxxiii. Traffic congestions near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalised and no public place should be utilised.
- xxxiv. opaque wall should meet prescriptive requirement as per energy conservation board which is proposed to mandatory for all air conditioned spaces while it is aspiration for non- air conditioned spaces by use of appropriate thermal insulation material to fulfil requirement.
- xxxv. The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
- xxxvi. Regular supervision of the above and other measures for monitoring should be in placed all through the construction phase, so as to avoid disturbance to the surroundings.

- xxxvii.Under the provisions of environment protection act 1986, legal action shall be initiated against the PP if it was found that construction of the project has been started without obtaining EC.
- xxxviii. Six monthly compliance report should be submitted to the MOEF with copy to the Goa-SEIAA and GSPCB.
- Further, the project proponent is advised to comply with the following "General Conditions" for post-construction phase:
  - i. PP shall ensure completion of ETP, MSW disposal facility, green belt development prior to occupation of the buildings. The PP to explore possibility of utilising excess treated water in the adjacent area for gardening before discharging into sewer line. No physical occupation of allotment will be given unless all above said environmental infra structure is installed and made functional including water requirement prior certification from appropriate authority shall be obtained.
  - Wet garbage should be treated by organic waste convertor and treated waste (manure) should be utilise in the existing premises foe gardening. And no wet garbage will be disposed outside the premises. Local authority should ensure this.
  - iii. Local body should ensure that no occupation certification is issued prior to operation of ETP/MSW site etc. with due permission of GSPCB.
  - iv. A complete set of all the documents submitted to Goa-SEIAA should be forwarded local authority and GSPCB.
  - v. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by Goa-SEIAA.
  - vi. Separate funds shall be allocated for implementation of environmental protection measures /EMP along with item wise breaks-up. These costs shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for

other purposes and year wise expenditure should reported to the GSPCB and Authority.

- vii. A copy of the clearance letter shall be sent by PP to the concerned local body, if any, from whom suggestions/representation, if any, were received while processing the proposal. The EC letter shall also be put on the company website by PP.
- viii. The PP shall upload the status of the compliance of the stipulated EC conditions, including results of monitoring data on their website and shall update the same periodically. It shall simultaneously be sent to the regional office of MoEF, the respective Zonal office CPCB and the GSPCB. The criteria pollutant levels namely SPM, RSPM, SO<sub>2</sub> and NO<sub>X</sub> (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- ix. The environmental statement for each financial year 31<sup>st</sup> march in Form V as is mandated to be submitted by the PP to the GSPCB as prescribed under the Environment (Protection) Rules 1986 as amended subsequently shall also be put on the website of the company along with the status of the compliance of the EC conditions and shall also be sent to the respective regional office of the MoEF.
- x. The EC is being issued without prejudice to the action initiated in the EP act or any court case pending in the court of law and it does not mean that PP has no violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble Court will be binding on the PP hence this clearance does not immunity to the PP in the case filed against him, if any or action initiated under EP act.
- xi. In case of submission of false document and non- compliance of stipulated conditions, this Authority will revoke or suspend the EC

without any intimation and initiate appropriate legal action under EP Act 1986.

- xii. The Goa-SEIAA reserves their right to act any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Authority or for that matter, for any other administrative reason.
- 3. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani or Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter will be available on the PP website.
- 4. The Environmental Clearance is being issued without prejudice to the legal interventions / court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court / National Green Tribunal (NGT) will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- 5. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- 6. Validity of the Environmental Clearance (EC) accorded shall be for a period of 07 (seven) years from the date of its issue.
- 7. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully,

*Sd/-*.

(Srinet Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

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# **GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY**

EIA-Goa State Secretariat,

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438303 Fax. no.: 2438528

e-mail: goaseac@gmail.com

*No:* 3 – 181 – 2010/STE-DIR/175

*Date: 26<sup>th</sup>* November 2015

Тo,

M/s Loonkar Developers Pvt. Ltd, 219, Commerce House, 140 Nagindas Master Road, Fort, Mumbai - 400023

Sub:-Residential-Project 'Remus Away' proposed to be constructed in the property bearing survey no. 93/2 of Bambolim village in Tiswadi taluka of North Goa District –

#### reg.,

Ref: -Environmental Clearance bearing no. 3–181–2010/STE-DIR/105 dated 22/03/2013 issued to M/s Pascoal Trindade.

Sir,

I am directed to refer to your initial communication dated  $21^{st}$  May 2015 seeking amendment to the environmental clearance (EC) issued to M/s Pascoal Trindade vide clearance letter no. 3–181–2010/STE-DIR/105 dated 22/03/2013 and subsequently, application (*enclosing therein Form 1 and Form 1A*) dated 6<sup>th</sup> June 2015, *received in this office on 7<sup>th</sup> July 2015*, seeking fresh EC for the revised project proposal at the same site as mandated in the EIA Notification, 2006 (*as amended till date*).

Subsequently, Goa State Expert Appraisal Committee (*Goa-SEAC – hereinafter referred as 'Committee*) conducted the site-inspection on 09<sup>th</sup> June 2015 and subsequently, the proposed developmental activity vis-a-vis environmental clearance (EC) issued to (M/s Pascoal Trindade) dated 22/03/2013 was discussed during 40<sup>th</sup> Goa-SEAC meeting held on 2<sup>nd</sup> July 2015. Based on the discussion and detailed deliberation, the Committee decided to appraise the proposal "afresh" considering the fact that total Built-up Area (BUA) has been revised from **26,313.69 sq.mts** (*as proposed earlier by M/s Pascoal Trindade*) to **48,528.80 sq.mts.** as proposed in the revised proposal and the Project Proponent (PP) was invited to make the project-specific presentation.

Later, the PP made the project-specific presentation (*through M/s ENVIRO Analysts and Engineers Pvt. Ltd., Mumbai – a NABET-accredited environmental consultant*) during  $42^{nd}$  Goa-SEAC meeting held on  $14^{th}$  July 2015 wherein certain clarification / additional information on project/site-specific observations was sought. Subsequently, the Goa-SEAC during post-presentation discussion/follow-up in  $43^{rd}$  meeting held on  $28^{th}$  July 2015 and after ascertaining / verifying the compliance report submitted by the PP dated.  $16^{th}$  July 2015, decided to recommend the proposal to the Goa State Environment Impact Assessment Authority (*Goa-SEIAA – hereinafter referred as 'Authority'*) to grant EC with a condition that PP should prioritise local population while providing employment opportunities during the lifecycle of the project. Further, the Authority during its  $26^{th}$  meeting held on  $30^{th}$  October 2015 and after perusal of Committee recommendations, has considered the said proposal for grant of EC with the following observations.

1. The Authority has noted that the aforementioned proposal is seeking environmental clearance (EC), as per the provisions of the EIA Notification, 2006; for proposed residential project "**Remus Away**" in property bearing survey no. 93/2 of Bambolim village, Tiswadi taluka of North Goa having 101 residential units (*56 - apartment units, 33 - villa units and 12 sky villa units*), 1-club house and 1-service block consisting of 64-Service Apartments and 9-shops.

Project details and salient features of the proposed developmental activity, as submitted by the PP, is as under –

<ul> <li>11. Total Plot Area</li> <li>12. Total Built-up area (BUA) proposed</li> <li>13. Recreational open Space</li> <li>14. ESL and</li> </ul>		35,600.00 sq.mts. <b>48,528.80 sq.mts.</b> 5,347.85 sq.mts. 20, 000 10 sq.mts.		
<ul><li>14. FSI area</li><li>15. Ground Coverage</li></ul>		20, 999.10 sq.mts. 9,219.32 sq.mt		
16. Parking required		281 nos.		
17. Total Occupancy:		799 nos. (including villa, apartment and		
service				
		apartment)		
18. Water Requirement - Total water requirement - 239 KLD				
Domestic water @ 90 lpcd : 57.4 KLD				
Flushing water @ 45 lpcd : 16.4 KLD				
19. Power Requirements – (a) Construction Phase: 100KW.				
(b) Operation	Pha	se: 3749.67 KW		

20. Waste Management: Provision of two dust bin system for source segregation shall be implemented for the better management. Awareness campaign also be implemented to create awareness and encourage residents / users for the waste management initiatives.

#### In brief waste management is indicated below:-

*Bio degradable waste (359 kg/day):* will be utilized as manure through OWC *Non-biodegradable waste (240 kg/day)*: will be collected by recyclers. *Dried sewage sludge:* 13 kg/day will be utilized as manure.

**2**. In view of the above, the Authority has decided to accord environmental clearance (EC) to the said project under the provision of EIA Notification, 2006; (*as amended*) subject to compliance to the following "General Conditions" for pre-construction phase:-

- a. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- b. Provision to be made for solar water roof-tops facing towards South.
- c. The Project Proponent (PP), considering the project-specific site, should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards minimizing power requirements through national grid.
- d. PP should adopt roof-top rainwater harvesting / conservation measures to optimally utilize the water availability by constructing sumps for collection of rainwater. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers.
- e. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal and treatment / air and water pollution / waste-water management.
- f. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment.
- g. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization /zoning.
- h. PP should submit half-yearly compliance report(s) in hard as well as soft copy format to the Authority for the period upto project completion.
- i. This environmental clearance is issued subject to restricting of total built up area **48,528.80 sq.mt.**

- This environmental clearance is issued subject to land use verification. Local authority j. /planning authority should ensure this with respect to Rules, Regulations, Government Resolutions, Circulars, Notifications, etc. issued if any. Judgements/orders issued by Hon'ble High Court, Hon'ble NGT, Hon'ble Supreme Court regarding DCR provisions, environmental issues applicable in this matter should be verified. PP should submit exactly the same plans appraised by the concern Goa-SEAC and Goa-SEIAA. If any discrepancy found in the plans submitted or details provided in the above para may be reported to this Authority. This environmental clearance issued with respect to the environmental consideration and it does not mean that Goa-SEIAA approved the proposed land.
- k. PP to ensure no treated water or any waste sewage shall be discharged into any water body.
- 1. E-waste shall be disposed through Authorised vendor as per E-waste (Management and Handling) Rules, 2011.
- m. Occupation certificate shall be issued to the project only after ensuring availability of drinking water and connectivity of the sewer line to the project site.
- n. STP capacity shall be increased appropriately considering waste water generation.
- o. This environmental clearance is issued subject to obtaining NOC from Forestry & Wildlife angle including clearance from the standing committee of the National Board for wildlife as if applicable & this environmental clearance does not necessarily implies that Forestry & Wildlife clearance granted to the project which will be considered separately on merit.
- p. PP has to abide by all the conditions stipulated by Goa-SEAC & Goa-SEIAA.
- q. The height, construction built up area of proposed construction shall be in accordance with the existing FSI/FAR norms of the urban local body & it should ensure the same along with survey number before approving layout plan and before according commencement certificate to proposed work, Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.

- r. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- 3. Further, the project proponent is advised to comply with the following "General Conditions"

#### for construction phase:-

- i. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the Authority before start of any construction work at the site.
- ii. Permission to draw groundwater, as applicable, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction / operation of the project.
- Project proponent shall not make any change in the Surface Layout Plan / Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the Authority.
- iv. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
- v. The diesel generator sets (D.G. set) to be used during construction / after commissioning should be low-sulphur diesel type and should conform to Environment (*Protection*) Rules prescribed for air and noise emission standards as laid down by the GSPCB.
- vi. The installation of the Sewage Treatment Plant (STP) should be certified by the GSPCB and a report in this regard should be submitted to the Authority before the STP is commissioned.
- vii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche and first aid room etc.
- viii. Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. the safe disposal of waste water and solid waste generated during the construction phase should be ensured.
- ix. The solid waste generated should be properly connected and segregated. dry /inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- x. Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for

general safety and health aspects of people, only in approved site with the approval of competent authority.

- xi. Arrangements shall be made that waste water and storm water do not get mixed.
- xii. All the top soil excavated during construction activities should be stored if or use in horticulture/landscape development within the project site.
- xiii. Additional soil for levelling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- xiv. Green belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the Forest/Agriculture Department.
- xv. Soil and ground water samples will be tasted to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- xvi. Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured so that they should not leach into ground water.
- xvii. Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the GSPCB.
- xviii. The diesel requires for operating DG sets shall be stored in underground tanks and if required, Clearance from concerned authority shall be taken.
- xix. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission std and should be operated during non-peak hrs.
- xx. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level construction phase, so as to conform to the stipulated standard by CPCB/ GSPCB.

- xxi. The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquakes, adequacy of fire fighting equipments etc. as per National Building Code including measures from lighting.
- xxii. Storm water controlled and its re use as per CGWB and BIS standard for various applications.
- xxiii. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xxiv. The ground water level and its quality should be monitored regularly in consultation with ground water authority.
- xxv. The installation of the sewage treatment plant (STP) should be certified by an independent expert and a report in this regard should be submitted to GSPCB before the project is commissioned for operation. discharge of this unused treated effluent, if any should be discharged in the sewer line. treated effluent emanating from STP shall be recycled / refused to the maximum extent possible. Discharge of this unused treated effluent, if any should be discharged in the sewer line. Treatment of 100% grey water by de centralised treatment should be done. Necessary measured should be made to mitigate the odour problem from STP.
- xxvi. Permission to draw ground water and construction of basement if any shall be obtained from the competent authority prior to construction / operation of the project.
- xxvii. Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.
- xxviii. Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.
- xxix. Use of glass may be reduced upto 40% to reduce a electricity consumption and load on air conditioning. If necessary use high quality double glass with special reflective coating in windows.
- xxx. Roof should meet prescriptive requirement as per energy conservation building code by using appropriate thermal insulation material to fulfil requirement.

- xxxi. Energy conservation measures like installation of CFLs/ TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use of CFLs and TFLs should be properly collected and disposed off/ sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heater system. PP should install, after checking feasibility, solar plus hybrid non conventional source as source of energy.
- xxxii. Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the environment (protection) Act 1986. The height of stack of DG sets should be equal to the height needed for the combine capacity of all proposed DG sets.
- xxxiii. Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- xxxiv. Traffic congestions near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalised and no public place should be utilised.
- xxxv. opaque wall should meet prescriptive requirement as per energy conservation board which is proposed to mandatory for all air conditioned spaces while it is aspiration for non- air conditioned spaces by use of appropriate thermal insulation material to fulfil requirement.
- xxxvi. The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
- xxxvii. Regular supervision of the above and other measures for monitoring should be in placed all through the construction phase, so as to avoid disturbance to the surroundings.
- xxxviii. Under the provisions of environment protection act 1986, legal action shall be initiated against the PP if it was found that construction of the project has been started without obtaining EC.
- xxxix. Six monthly compliance report should be submitted to the MOEF with copy to the Goa-SEIAA and GSPCB.

4. Further, the project proponent is advised to comply with the following "General Conditions" for post-construction phase:-

- i. PP shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. The PP to explore possibility of utilising excess treated water in the adjacent area for gardening before discharging into sewer line. No physical occupation of allotment will be given unless all above said environmental infra structure is installed and made functional including water requirement prior certification from appropriate authority shall be obtained.
- Wet garbage should be treated by organic waste convertor and treated waste (manure) should be utilise in the existing premises foe gardening. And no wet garbage will be disposed outside the premises. Local authority should ensure this.
- iii. Local body should ensure that no occupation certification is issued prior to operation of STP/MSW site etc. with due permission of GSPCB.
- iv. A complete set of all the documents submitted to Goa-SEIAA should be forwarded local authority and GSPCB.
- v. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by Goa-SEIAA.
- vi. Separate funds shall be allocated for implementation of environmental protection measures /EMP along with item wise breaks-up. These costs shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year wise expenditure should reported to the GSPCB and Authority.
- vii. A copy of the clearance letter shall be sent by PP to the concerned local body, if any, from whom suggestions/representation, if any, were received while processing the proposal. The EC letter shall also be put on the company website by PP.
- viii. The PP shall upload the status of the compliance of the stipulated EC conditions, including results of monitoring data on their website and shall update the same periodically. It shall simultaneously be sent to the regional office of MoEF, the respective Zonal office CPCB and the GSPCB. The

criteria pollutant levels namely SPM, RSPM,  $SO_2$  and  $NO_X$  (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

- ix. The environmental statement for each financial year 31<sup>st</sup> march in Form V as is mandated to be submitted by the PP to the GSPCB as prescribed under the Environment (Protection) Rules 1986 as amended subsequently shall also be put on the website of the company along with the status of the compliance of the EC conditions and shall also be sent to the respective regional office of the MoEF.
- x. The EC is being issued without prejudice to the action initiated in the EP act or any court case pending in the court of law and it does not mean that PP has no violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble Court will be binding on the PP hence this clearance does not immunity to the PP in the case filed against him, if any or action initiated under EP act.
- xi. In case of submission of false document and non- compliance of stipulated conditions, this Authority will revoke or suspend the EC without any intimation and initiate appropriate legal action under EP Act 1986.
- xii. The Goa-SEIAA reserves their right to act any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Authority or for that matter, for any other administrative reason.
- 5. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani or Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter will be available on the PP website.
- 15. The Environmental Clearance is being issued without prejudice to the legal interventions / court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court / National Green Tribunal (NGT) will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.

**16.** The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

# 17. Validity of the Environmental Clearance (EC) accorded shall be for a period of 07 (seven) years from the date of its issue.

**18.** Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully, Sd/-. (Srinet Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

## GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

No: 3-181-2010/STE-DIR/159

Date: 01 /10/2015

To, **The Collector& District Magistrate,** North Goa District, Collectorate Building, Panaji -Goa

# Sub.: Extraction of Sand in rivers/ estuaries at North Goa District by manual methods by traditional Communities – Environmental Clearance reg.

Sir,

This has reference to your application bearing no. 39/8/2013-MAG/DC/SAND EXT/2613 dated 12/06/2015 seeking prior environmental clearance for extraction of sand in rivers/ estuaries by manual methods by traditional Communities at various stretches of rivers / estuaries in North Goa District. The proposal is for obtaining environmental clearance (EC) for sand extraction from 14 stretches of 2,00,000 Sq.mts each i.e.8 stretches from Mandovi estuary, 02 stretches from Terekhol estuary and 04 stretches from Chapora estuary with total extraction capacity of 1,68,00,000 M<sup>3</sup> per annum (i.e. @ 60,000 M<sup>3</sup>/year per 10,000 M<sup>3</sup>).

Subsequently, the Goa State Expert Appraisal Committee (hereinafter referred to as 'the Committee', in short) has conducted site-inspections of each and every stretch on 16<sup>th</sup> / 20<sup>th</sup> July and 10<sup>th</sup> September 2015 along with the representatives from stakeholder Departments of the State Government viz. Directorate of Mines and Geology (DMG), Captain of Ports (CoP), Water Resources Department, North Goa Collectorate, etc. The Committee during its site-visits interacted with local stakeholders as well, for ground truthing. During the process of project appraisal, the Committee perused – (i) Office Memorandum (O.M.) no. J-13012/12/2013-IA-II (I) dated. 24<sup>th</sup> December 2013 notified/published by the Ministry of Environment, Forests and Climate Change (MoEF & CC) and noted that the proposal is categorized under Category-B-2 (*i.e. to be appraised based on Form-1, pre-feasibility report with relevant documents / details*) and (ii) Office Memorandum (O.M.) no. 11-83/2005/-IA-III (Vol.III) dated. 8<sup>th</sup> November 2011 notified/published by the Ministry of Environment s / details) and (ii) office Memorandum (O.M.) no. 11-83/2005/-IA-III (Vol.III) dated. 8<sup>th</sup> November 2011 notified/published by the Ministry of Environment & Forests (MoEF) on the subject matter of removal of sand in the Coastal Regulation Zone area of rivers / estuaries by manual methods by traditional communities. In addition, the Committee also perused (i) The EIA Notification

2006, as amended and (ii) The Goa Minor Mineral Concession (Amendment) Rules, 2012 published by the State Government vide Gazette Notification (Extraordinary) series 1, no. 24 dated 17<sup>th</sup> September 2012 and (iii) 'Order' of the National Green Tribunal (NGT), Principal Bench, New Delhi pronounced on 5<sup>th</sup> August 2013 in a matter of Original Application no. 171 of 2013 (*National Green Tribunal Bar Association V/s Ministry of Environment & Forests & Ors.*,). Judgement dated 13/01/2015 passed by the Hon'ble National Green Tribunal (NGT), Principal Bench, New Delhi in the Original Application (OA) No. 123 of 2014 (in the matter of Himmat Singh Shekhawat V/s State of Rajasthan & ors) and Judgement dated 29/05/2014 passed by the Hon'ble National Green Tribunal (NGT) (Western Zone) Bench, Pune in the Application No. 34(THC)/2013(WZ) in the matter of *AWAAZ Foundation V/s State of Maharashtra* & ors and (iv) a Model Document on 'Impacts and Methodology of systematic and Scientific mining of the river-bed material' published by the Geological Survey of India (GSI) and (v) 'Order' dated 27/02/2012 of Hon'ble Supreme Court in I.A No. 12-13 of 2011 in SLP (C) No.19628-19629 in the matter of Deepak Kumar etc V/s State of Haryana and ors.

Prior and during the technical presentation by the PP, the Committee sought to examine in details all the available documents in substantiation of the baseline environmental character of the proposed sites, provided by the PP for the purpose of environmental impact appraisal of the proposed activity.

Subsequently and after detailed deliberations vis-à-vis compliance submitted by the PP, and appraisal based on available data and ground-truthing, the Committee, during its 48<sup>th</sup> Meeting, held on 14<sup>h</sup> September 2015, decided to recommend for grant of EC for sand extraction as specified in the submitted proposal. (*refer table below*)

The Goa State Environment Impact Assessment Authority (hereinafter referred to as 'the Authority', in short) on detailed perusal and in agreement with the Committee's recommendations and after referring to draft 'Sustainable Sand Mining – Management Guidelines' published by the Ministry of Environment, Forests and Climate Change (MoEF & CC) in September 2015, has decided to grant prior environmental clearance (EC), as mandated in the EIA Notification, 2006 (*as amended till date*) and in terms of the directions contained in the Judgement of Hon'ble Supreme Court and National Green Tribunal for extraction of sand by manual traditional methods at following 14 stretches / clusters identified / proposed by the North Goa District Collector (NGDC), Panaji-Goa.

Proposed site-specific locations for traditional method of manual sand extraction (*estuarine clusters / stretches*) in North Goa.

Sr. no	Taluka (North/ South)	Cluste r	Area in sqmts	Estimate d Total minable reserve (cubic meters)	Latitude	Longitude	S.O.I Toposhee t No.(s)on 1:25,000 scale	River
1	Bicholi m/Tisw	MC-1	200000	1,20,00,00	15 <sup>°</sup> 32' 39.99"	73 <sup>0</sup> 56' 30.14"	48E/14/6	Mandovi

	adi							
2	Bicholi m/Tisw adi	MC-2	200000	1,20,00,00	15 <sup>0</sup> 32' 42.82"	73 <sup>0</sup> 57' 22.93"	48E/14/6	Mandovi
3	Bicholi m/Pond a	MC-3	200000	1,20,00,00	15 <sup>0</sup> 32' 6.77"	73 <sup>0</sup> 57' 59.17"	48E/14/6	Mandovi
4	Bicholi m/Pond a	MC-4	200000	1,20,00,00	15 <sup>0</sup> 31'27.19	73 <sup>0</sup> 58' 27.00"	48E/14/6	Mandovi
5	Bicholi m/Pond a	MC-5	200000	1,20,00,00	15 <sup>0</sup> 31' 6.90"	73 <sup>0</sup> 59'18.86"	48E/14/6	Mandovi
6	Bicholi m/Pond a	MC-6	200000	1,20,00,00	15 <sup>0</sup> 30' 5.09''	73 <sup>0</sup> 59' 59.45"	48E/14/6	Mandovi
7	Bicholi m/Pond a	MC-7	200000	1,20,00,00	15 <sup>0</sup> 29' 47.95"	74 <sup>0</sup> 01' 0.50''	48I/3/1	Mandovi
8	Bicholi m/Pond a	MC-8	200000	1,20,00,00	15 <sup>0</sup> 28' 47.60''	74 <sup>0</sup> 01' 33.76"	48I/3/1	Mandovi
9	Pernem	TC-1	200000	1,20,00,00	15 <sup>0</sup> 44' 8.41"	73 <sup>0</sup> 44'41.74"	48E/14/1	Tiracol
10	Pernem	TC-2	200000	1,20,00,00	15 <sup>0</sup> 43' 32.12"	73 <sup>°</sup> 47' 7.79"	48E/14/1	Tiracol
11	Bardez/ Pernem	CC-1	200000	1,20,00,00	15 <sup>°</sup> 39' 9.77"	73 <sup>0</sup> 47' 0.50"	48E/14/2	Chapora
12	Bardez/ Pernem	CC-2	200000	1,20,00,00	15 <sup>0</sup> 39' 5.45"	73 <sup>0</sup> 49'48.52"	48E/14/2	Chapora
13	Bardez/ Pernem	CC-3	200000	1,20,00,00	15 <sup>0</sup> 39' 10.98"	73 <sup>0</sup> 50' 26.92"	48E/14/2	Chapora
14	Bardez/ Pernem	CC-4	200000	1,20,00,00	15 <sup>0</sup> 40' 48.64"	73 <sup>0</sup> 52'30.51"	48/E/14/4	Chapora
	l clusters: 4 nos.		Total Lease Area: 28,00,000 sq mts.	Total Extrac	ction Capacity	16,80,00,00. M	<sup>13</sup> per annum.	

Further, the Authority has decided to stipulate the conditions (*i.e. General and Specific*), as compliance to be mandated by Project Proponent <u>not only</u> during the sand-extraction activities <u>but also</u> during pre and post issuance of leases to prospective sand extractors. The details of these conditions are as under:

#### A. General conditions

- 1. The Project Proponent, while granting a lease / licences or permits for 'sand extraction', should ensure that sand extraction is strictly restricted within the prescribed lease boundary / cluster only. Accordingly, lease area should be properly surveyed and mapped with the help of GPS to assign geo-coordinates and accordingly display the same appropriately on the landward side of the proposed cluster / lease so as to avoid unwarranted / unscientific and illegal extraction. Thus, the extraction of sand should be done only in area / stretches identified as indicated in table above.
- 2. The PP should erect a 'Display Board" on both river banks along either side of the proposed lease/cluster. This board should display name and contact details of nodal person concerned to enable timely redressal of sand-extraction related complaints received from general public.
- 3. The lease holder should adhere to only traditional method of manual extraction using wooden or FRP-boat without the use of any mechanical equipments, excavator, shovel, heavy-machinery, pump, dredgers, etc. No blasting shall be resorted in river/estuaries.
- 4. The EC holder / Permit/licence holder shall keep a correct account of quantity of mineral exported, dispatched from the site, mode of transport, registration number of vehicle, person-in-charge of vehicle and mine plan, details of Lessee / permit holder etc.
- 5. The lease/ licence/ permit holder should ensure proper access to enable transportation of extracted material from the lease to desired stacking at the site or elsewhere. Transportation of extracted material shall be done by covering the trucks with tarpaulin so that no spillage of material / dust pollution takes place on route. Vehicles only with fitness and PUC Certificate should be used.
- 6. The lease / licence / permit shall not create any impediments at the site of any extraction / stacking by way of erection of barricades, to enable any competent State Authority to inspect such sites for the purpose of effective monitoring and enforcement.
- 7. Number of vessels deployed in sand extraction / transport in the vicinity of an Island/ Protected Area, if any, be regulated to avoid disturbance to the residents and migratory bird fauna.

- 8. Number of vessels deployed in sand extraction / transport in the vicinity of river banks be regulated to avoid damage to coconut/palm fringes, as and where they exist in the riparian habitat along the river banks.
- 9. Safety gadgets and health-care facilities should be provided to workers engaged in the extraction, on and off-board vis-a-vis maintenance of hygiene surrounding the proposed lease boundary along the banks of river/estuary.
- 10. It shall be ensured that restoration of riparian and in-stream habitats, restoration of river-geometry causing degradation on upstream and downstream be taken care of by the lease / permit / licence holder at his own cost. Various lease holders operating in a given cluster / stretch may evolve appropriate mechanism for mitigation of likely impact caused by sand extraction.
- 11. Due care be taken to avoid discharge of fuel / engine oil either in the river water or banks sediments during any phase of sand extraction / transportation. Any accidental discharge of a significant scale must be immediately reported to the concerned State Agency for remediation.
- 12. Any change (*i.e. modification / expansion / alteration*) in proposed clusters / traditional method of extraction / extraction capacity / scope of working / environment management plan (EMP) shall require re-appraisal by this Authority as per the provisions of the EIA Notification, 2006 (*as amended*).
- 13. Considering the probability of ecological impacts due to sand extraction of riverine ecosystem the Authority mandates that the Goa State Biodiversity Board (GSBB) periodically monitors riverine and riparian biodiversity on a sampling mode.
- 14. This environmental clearance (EC) does not absolve the PP / lease holder to obtain other statutory and administrative clearances / NoCs'/ Permissions, as applicable, from other statutory and administrative authorities concerned.
- 15. An appropriate mechanism is evolved to ensure an assured back-flow of share of revenue generated, to a revenue village; in whose jurisdiction sand extraction is carried out.
- 16. This prior Environmental Clearance (EC) is valid for a period of five years (05), or lease validity whichever is later.

#### **B.** Specific Conditions

- "Patrolling-cum-Flying Squad" a complaint / monitoring mechanism, comprising
  of senior-level representatives from stakeholder departments and authorities to be
  constituted for effective implementation and monitoring of stipulated 'General' and
  'Specific' conditions vis-a-vis redressal of complaints, preferably at district-level. A
  dedicated helpline number may be provided for effective redressal of complaints. The
  said squad / committee shall enforce the conditions of this clearance and be authorised to
  file FIR / criminal case in case of violations and also to stop the illegal sand extraction
  and to seize equipments, vehicles etc used in illegal sand extraction.
- 2. Capping of sand extraction *(i.e. permissible quantity of sand/ pebble extraction per year per cluster/stretch)* from these designated stretches / clusters be established in technical consultation with the Directorate of Mines and Geology (DMG), being a Nodal Department dealing with mineral resources.
- 3. There shall be voluntary moratorium on worked-out leases/stretches for a desired period in consultation with the Directorate of Mines and Geology (DMG) for effective sand replenishment of the extracted mineral.
- 4. The depth of the sand excavation within the designated cluster in estuarine regions should be restricted to a maximum depth of 3 mts. While, for dry river-beds, the depth of excavation should not exceed 2 mts.
- The lease holder shall undertake adequate safeguard measures during sand extraction and such activities should be limited to timings between 06.00 a.m. to 06.00 p.m. only. No sand extraction and allied activities are allowed during monsoon season (1<sup>st</sup> June to 30<sup>th</sup> September).
- 6. No removal/extraction be allowed/carried out within (a) the buffer zone of 25 mts. (at-least) from both the banks within the proposed riverine / estuarine cluster to control and avoid river-bank erosion, (b) safety zone (*i.e. 300 mts. upstream and downstream*) of any bridge or any cross-drainage structures, (c) No sand-extraction related activities be allowed within the peripheral limits of 50 mts. surrounding the island area within the estuarine region.
- 7. It shall be ensured that sand-extraction does not disturb the turbidity, velocity and flowpattern of the river/estuary to the extent possible. Further, sand-extraction be avoided along the concave-portion of the meandering river/estuary to prevent bank erosion.

- 8. PP should ensure that riverine/estuarine bottom is always higher than the bed-depth of nearby water bodies (*i.e. well / lake / pond, etc.*,) so that the river/estuary is always a recharge source.
- 9. Further, the Authority mandates that above conditions be mandatorily transferred and be reflected in the "Agreement" between the State Nodal Agency (*i.e. the District Collectorate concerned or Directorate of Mines & Geology, as the case may be*) and the prospective Leasee / licence holder/permit holder and be legally binding on the latter.
- 10. The authority may alter / modify the conditions or stipulate any further condition in order to protect the local ecology and environment.
- 11. The directions given by the Hon'ble Supreme Court vide order dated 27/2/2012 in Deepak Kumar case [SLP(c) Nos. 19628-19629 of 2009], various orders passed by the Hon'ble National Green Tribunal and guidelines issued by the Ministry of Environment, Forests and Climate Change, Government of India time and again in the matter shall be strictly followed.
- 12. Any appeal against this prior environmental clearance shall be with the National Green Tribunal within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.

Yours faithfully, *Sd./-*(Srinet Kothwale) **Director/Ex-officio Jt. Secy. (Environment) & Member Secretary, Goa-SEIAA** 

## **GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY**

EIA-Goa State Secretariat,

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

*No:* 3 – 181 – 2010/STE-DIR/158

Date: 01/10/2015

*To*, **The Collector& District Magistrate,** South Goa, District, Mathany Saldanha Administration Complex, Margao, Goa.

# Sub.: Extraction of Sand / Pebble in rivers/ estuaries at South Goa District by manual methods by traditional Communities – Environmental Clearance reg.

Sir,

This has reference to your application bearing no. 39/40/2010/Sand Mining/ MAG/2793 dated 03/03/2015 seeking prior environmental clearance for extraction of sand / pebble in rivers/ estuaries by manual methods by traditional Communities at various stretches of rivers / estauries in South Goa District. The proposal is for obtaining environmental clearance (EC) for sand/pebble extraction from total 12 stretches (i.e. 8-riverine stretches + 4-estuarine stretches) covering 78,481.57 Sq.mts of lease area with total extraction capacity of 1, 20,000 m<sup>3</sup> per annum.

Subsequently, the Goa State Expert Appraisal Committee (hereinafter referred to as 'the Committee', in short) has conducted site-inspections of each and every stretch on 19<sup>th</sup> / 20<sup>th</sup> / 29<sup>th</sup> May and 9<sup>th</sup> June 2015 along with the representatives from stakeholder Departments of the State Government viz. Directorate of Mines and Geology (DMG), Captain of Ports (CoP), Water Resources Department, South Goa Collectorate, etc. The Committee during its site-visits interacted with local stakeholders as well, for ground truthing. During the process of project appraisal, the Committee perused – (i) Office Memorandum (O.M.) no. J-13012/12/2013-IA-II (I) dated. 24<sup>th</sup> December 2013 notified/published by the Ministry of Environment, Forests and Climate Change (MoEF & CC) and noted that the proposal is categorized under Category-B-2 (*i.e. to be appraised based on Form-1, pre-feasibility report with relevant documents / details*) and (ii) Office Memorandum (O.M.) no. 11-83/2005/-IA-III (Vol.III) dated. 8<sup>th</sup> November 2011 notified/published by the Ministry of Environments / details) and (ii) Office Memorandum (O.M.) no. 11-83/2005/-IA-III (Vol.III) dated. 8<sup>th</sup> November 2011 notified/published by the Ministry of Environment & Forests (MoEF) on the subject matter of removal of sand in the Coastal Regulation Zone area of rivers / estuaries by manual methods by traditional communities. In addition, the Committee also perused (i) The EIA Notification

**2006, as amended** and (ii) The Goa Minor Mineral Concession (Amendment) Rules, 2012 published by the State Government vide Gazette Notification (Extraordinary) series 1, no. 24 dated 17<sup>th</sup> September 2012 and (iii) 'Order' of the National Green Tribunal (NGT), Principal Bench, New Delhi pronounced on 5<sup>th</sup> August 2013 in a matter of Original Application no. 171 of 2013 (*National Green Tribunal Bar Association V/s Ministry of Environment & Forests & Ors.*,). Judgement dated 13/01/2015 passed by the Hon'ble National Green Tribunal (NGT), Principal Bench, New Delhi in the Original Application (OA) No. 123 of 2014 (in the matter of Himmat Singh Shekhawat V/s State of Rajasthan & ors) and Judgement dated 29/05/2014 passed by the Hon'ble National Green Tribunal (NGT) (Western Zone) Bench, Pune in the Application No. 34(THC)/2013(WZ) in the matter of *AWAAZ Foundation V/s State of Maharashtra* & ors and (iv) a Model Document on 'Impacts and Methodology of systematic and Scientific mining of the river-bed material' published by the Geological Survey of India (GSI) and (v) 'Order' dated 27/02/2012 of Hon'ble Supreme Court in I.A No. 12-13 of 2011 in SLP (C) No.19628-19629 in the matter of Deepak Kumar etc V/s State of Haryana and ors.

Prior and during the technical presentation by the PP, the Committee sought to examine in details all the available documents in substantiation of the baseline environmental character of the proposed sites, provided by the PP for the purpose of environmental impact appraisal of the proposed activity.

Subsequently and after detailed deliberations vis-à-vis compliance submitted by the PP, and appraisal based on available data and ground-truthing, the Committee, during its 47<sup>th</sup> Meeting, held on 10<sup>th</sup> September 2015, decided to recommend for grant of EC for sand extraction as specified in the submitted proposal except two site-specific locations / clusters proposed within (i) <u>Khandepar river at Piliem in Dharbandora Taluka</u> on account of its immediate proximity to the laterite-quarry which may cause river-bank instability on account of stone removal from terrestrial end and proposed in-stream sand/gravel removal from river-bed and (ii) <u>Khushavati / Gulathi river at Sirvoi in Quepem Taluka</u> on account of site inaccessibility from the nearest road to enable desired transportation of the extracted material. (*Refer Table. A & B below*).

The Goa State Environment Impact Assessment Authority (hereinafter referred to as 'the Authority', in short) on detailed perusal and in agreement with the Committee's recommendations and after referring to draft 'Sustainable Sand Mining – Management Guidelines' published by the Ministry of Environment, Forests and Climate Change (MoEF &

CC) in September 2015, has decided to grant prior environmental clearance (EC), as mandated in the EIA Notification, 2006 (*as amended till date*) and in terms of the directions contained in the Judgement of Hon'ble Supreme Court and National Green Tribunal for extraction of sand / pebble by manual traditional methods at following 10 stretches / clusters identified / proposed by the South Goa District Collector (SGDC), Margao, Goa.

Sr.	Taluka	Village	Sy	Area in	Estimated	Latitude	Longitude	S.O.I.	River
No		C	nos	sq. mts.	Total	(from)	(to)	Toposheet	
				-	minable			no. (s) on	
					reserve			1:25,000	
								scale	
	Dharbandora	Collem	21	8202.88	$10,000 \text{ m}^3$	15 20'46.11"	74 14'07.10"	48I/3/SE	Dudhsagar
1									
2	Dharbandora	Sigao	70	5598.17	$10,000 \text{ m}^3$	15 20'16.69"	74 13'17.84"	48I/3/SE	Dudhsagar
			&						
			97						
3	Dharbandora	Aglote	56	8735.46	10,000 m <sup>3</sup>	15 24'50.50"	74 11'16.36"	48I/3/NE	Ragada
4	Sanguem	Rivona	20	4668.74	$10,000 \text{ m}^3$	15 10'50.89"	74 06'13.98"	48I/4/NW	Kushavati
	8		&		,				
			14						
5	Sanguem	Uguem	63	5737.76	$10,000 \text{ m}^3$	15 13'33.70"	74 12'22.82"	48I/4/NE	Ugvem
6	Sanguem	Sanguem	81	6205.98	$10,000 \text{ m}^3$	15 13'35.00"	74 09'49.17"	48I/4/NE	Sangem
Tot	al clusters –	Total Le	ease A	rea-	Total extraction capacity – 60,000 m <sup>3</sup> per annum				
06 r	108.	36,775.6	6 sq.n	nts.			-		

# A. Proposed site-specific locations for traditional method of manual sand extraction (*riverine stretches*)

# **B.** Proposed site-specific locations for traditional method of manual sand extraction *(estuarine stretches)*

Sr.	Taluka	Village	Sy	Area in	Estimated	Latitude	Longitude	S.O.I.	River
No			nos	sq. mts.	Total	(from)	(to)	Toposheet	
					minable			no. (s) on	
					reserve			1:25,000	
								scale	
1.	Quepem	Xelvona	62	10341.64	$10,000 \text{ m}^3$	15 16'33.20"	74 04'44.99"	48I/3/SW	Zuari
					$10,000 \text{ m}^3$				
2.	Salcete	Talaulim	244	2861.53		15 13'54.04"	73 57'17.20"	48E/16/NE	Sal
					$10,000 \text{ m}^3$				
3.	Salcete	Macazana	60	4387.22		15 17'44.16"	74 03'01.29"	48I/3/SW	Zuari
					$10,000 \text{ m}^3$				
4.	Salcete	Loutulim	497	10933.15		15 20'49.84"	74 00'18.00"	48I/3/SW	Zuari
	Total Lease								
To	tal clusters –		Area	-					
	04 nos.		28, 5	23.54	Total extrac	tion capacity – 4	10,000 m <sup>3</sup> per an	inum	

sq.mts.
---------

Further, <u>Authority has rejected</u> the following two stretches / clusters proposed / identified by SGDC for the purpose of sand/rubble extraction from the riverine portion.

- (i) **Khandepar river at Piliem in Dharbandora Taluka** on account of its immediate proximity to the laterite-quarry which may cause river-bank instability on account of stone removal from terrestrial end and proposed in-stream sand/gravel removal from river-bed and
- (ii) Khushavati / Gulathi river at Sirvoi in Quepem Taluka on account of site inaccessibility from the nearest road to enable desired transportation of the extracted material.

Further, the Authority has decided to stipulate the conditions (*i.e. General and Specific*), compliance to be mandated by Project Proponent not <u>only</u> during the sand-extraction activities <u>but also</u> during pre and post issuance of leases to prospective sand extractors. The details of these conditions are as under:

#### C. General conditions

- 17. The Project Proponent, while granting a lease / licences or permits for 'sand/pebble extraction', should ensure that sand/pebble extraction is strictly restricted within the prescribed lease boundary / cluster only. Accordingly, lease area should be properly surveyed and mapped with the help of GPS to assign geo-coordinates and accordingly display the same appropriately on the landward side of the proposed cluster / lease so as to avoid unwarranted / unscientific and illegal extraction. Thus, the extraction of sand / pebble should be done only in area / stretches identified as indicated above in table (A) & (B).
- 18. The PP should erect a 'Display Board" along both river banks on either side of the proposed lease/cluster. This board should display name and contact details of nodal person concerned to enable timely redressal of sand-extraction related complaints received from general public.
- 19. The lease holder should adhere to only traditional method of manual extraction using wooden or FRP-boat without the use of any mechanical equipments, excavator, shovel, heavy-machinery, pump, dredgers, etc. No blasting shall be resorted in river/estuaries.

- 20. The EC holder / PP/ Permit/license holder shall keep a correct account of quantity of mineral extracted, dispatched from the site, mode of transport, registration number of vehicle, person-in-charge of vehicle and mine plan, details of Lessee / permit holder etc.
- 21. The lease/ licence/ permit/license holder should ensure proper access to enable transportation of extracted material from the lease to desired stacking at the site or elsewhere. Transportation of extracted material shall be done by covering the trucks with tarpaulin so that no spillage of material / dust pollution takes place en route. Vehicles only with fitness and PUC Certificate should be used.
- 22. The lease / licence / permit shall not create any impediments at the site of any extraction / stacking by way of erection of barricades, to enable any competent State Authority to inspect such sites for the purpose of effective monitoring and enforcement.
- 23. Number of vessels deployed in sand extraction / transport in the vicinity of an Island/ Protected Area, if any, be regulated to avoid disturbance to the residents and migratory bird fauna.
- 24. Number of vessels deployed in sand extraction / transport in the vicinity of river banks be regulated to avoid damage to coconut/palm fringes, as and where they exist in the riparian habitat along the river banks.
- 25. Safety gadgets and health-care facilities should be provided to workers engaged in the extraction, on and off-board vis-a-vis maintenance of hygiene surrounding the proposed lease boundary along the banks of river/estuary.
- 26. It shall be ensured that restoration of riparian and in-stream habitats, restoration of river-geometry causing degradation on upstream and downstream be taken care of by the lease / permit / licence holder at his own cost. Various lease holders operating in a given cluster / stretch may evolve appropriate mechanism for mitigation of likely impact caused by sand extraction.
- 27. Due care be taken to avoid discharge of fuel / engine oil either in the river water or banks sediments during any phase of sand extraction / transportation. Any accidental discharge of a significant scale must be immediately reported to the concerned State Agency for remediation.

- 28. Any change (*i.e. modification / expansion / alteration*) in proposed clusters / traditional method of extraction / extraction capacity / scope of working / environment management plan (EMP) shall require re-appraisal by this Authority as per the provisions of the EIA Notification, 2006 (*as amended*).
- 29. Considering the probability of ecological impacts due to sand/gravel extraction of riverine ecosystem the Authority mandates that the Goa State Biodiversity Board (GSBB) periodically monitors riverine and riparian biodiversity on a sampling mode.
- 30. This environmental clearance (EC) does not absolve the PP / lease holder to obtain other statutory and administrative clearances / NoCs'/ Permissions, as applicable, from other statutory and administrative authorities concerned.
- 31. An appropriate mechanism be evolved to ensure an assured back-flow of share of revenue generated, to a revenue village; in whose jurisdiction sand extraction is carried out.
- 32. This prior Environmental Clearance (EC) is valid for a period of five years (05), or lease validity whichever is later.

#### **D.** Specific Conditions

- 13. "Patrolling-cum-Flying Squad" a complaint / monitoring mechanism, comprising of senior-level representatives from stakeholder departments and authorities to be constituted for effective implementation and monitoring of stipulated 'General' and 'Specific' conditions vis-a-vis redressal of complaints, preferably at district-level. A dedicated helpline number may be provided for effective redressal of complaints. The said squad / committee shall enforce the conditions of this clearance and be authorised to file FIR / criminal case in case of violations and also to stop the illegal sand extraction and to seize equipments, vehicles etc used in illegal sand extraction.
- 14. Capping of sand / pebble extraction *(i.e. permissible quantity of sand/ pebble extraction per year per cluster/stretch)* from these designated stretches / clusters be established in technical consultation with the Directorate of Mines and Geology (DMG), being a Nodal Department dealing with mineral resources.
- 15. There shall be voluntary moratorium on worked-out leases/ stretches for a desired period in consultation with the Directorate of Mines and Geology (DMG) for effective sand replenishment of the extracted mineral.

- 16. The depth of the sand/pebble excavation within the designated cluster in estuarine regions should be restricted to a maximum depth of 3 mts. While, for dry river-beds, the depth of excavation should not exceed 2 mts.
- 17. The lease holder shall undertake adequate safeguard measures during sand/ pebble extraction and such activities should be limited to timings between 06.00 a.m. to 06.00 p.m. only. No sand/ pebble extraction and allied activities are allowed during monsoon season (1<sup>st</sup> June to 30<sup>th</sup> September).
- 18. No removal/extraction be allowed/carried out within (a) the buffer zone of 25 mts. (at-least) from both the banks within the proposed riverine / estuarine cluster to control and avoid river-bank erosion, (b) safety zone (*i.e. 300 mts. upstream and downstream*) of any bridge or any cross-drainage structures, (c) No sand-extraction related activities be allowed within the peripheral limits of 50 mts. surrounding the island area within the estuarine region.
- 19. It shall be ensured that sand-extraction does not disturb the turbidity, velocity and flowpattern of the river/estuary to the extent possible. Further, sand-extraction be avoided along the concave-portion of the meandering river/estuary to prevent bank erosion.
- 20. PP should ensure that riverine/estuarine bottom is always higher than the bed-depth of nearby water bodies (*i.e. well / lake / pond, etc.*,) so that the river/estuary is always a recharge source.
- 21. Further, the Authority mandates that above conditions be mandatorily transferred and be reflected in the "Agreement" between the State Nodal Agency (*i.e. the District Collectorate concerned or Directorate of Mines & Geology, as the case may be*) and the prospective Leasee / licence holder/permit holder and be legally binding on the latter.
- 22. The authority may alter / modify the conditions or stipulate any further condition in order to protect the local ecology and environment.
- 23. The directions given by the Hon'ble Supreme Court vide order dated 27/2/2012 in Deepak Kumar case [SLP(c) Nos. 19628-19629 of 2009], various orders passed by the Hon'ble National Green Tribunal and guidelines issued by the Ministry of Environment, Forests and Climate Change, Government of India time and again in the matter shall be strictly followed.

24. Any appeal against this prior environmental clearance shall be with the National Green Tribunal within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.

Yours faithfully, *Sd./-*(Srinet Kothwale) **Director/Ex-officio Jt. Secy. (Environment) & Member Secretary, Goa-SEIAA** 

## GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

3rd Floor, Dempo Towers, Patto, Panaji, Goa - 403 001Phone nos.: 2438303Fax. no.: 2438528

e-mail: goaseac@gmail.com

No: 3 - 181 - 2010/STE-DIR/ Part-II/EIA-Goa/142

Date: 6th August 2015

То,

## M/s Anand Chandra Bose,

# 801, 8<sup>th</sup> Floor, Anand Square, Block-B, Near Sanjeevani Hospital, Baina, vasco-da-Gama.

# Sub.: Amendment in the prior environmental clearance (EC) issued for proposed construction of residential complex in Survey no. 215/1 of Sancoale village, Mormugao taluka. - reg.,

#### Ref. : (a) This office letter No. 3-181-2010/STE-DIR/51 dated 15<sup>th</sup> September 2014 (b) Your letters no. Nil dated 7<sup>th</sup>, 8<sup>th</sup> July and 6<sup>th</sup> August 2015 requesting for amendment.

Sir,

Kindly refer this office letter of even number referred at (a) above. Subsequently,

in response to your communications refereed at (b) above, following may please be

noted

- Para 2 may please be read as "Goa-SEIAA noted that the proposal is for proposed construction of a Residential complex – 640 flats - Basements + 8 floors: (studio apartments – 48, 1-BHK – 120 and 2-BHK- 472) in Survey No. 215/1 of Sancoale village, Mormugao taluka".
- 6. Para 2(4) may please be <u>read</u> as "Total proposed BUA 85,912.54 sq.mts."
- 7. In addition, following may be <u>added</u> after Para 2(3),

"3(a) Additional non-FSI proposed (*i.e. basement car parking*) = 7,752.32 sq.mts."

Further, it is informed that other information in the said letter dated 15<sup>th</sup> September 2014 remain unchanged.

Yours faithfully, Sd. /-(Srinet Kothwale) Member Secretary, Goa-SEIAA

## GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

**EIA-Goa State Secretariat,** 

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR*/108

Date: 22<sup>nd</sup> May 2015

То,

**Director,** Directorate of Mines and Geology (DMG), Udyog Bhavan, Panaji, Goa – 403 001

#### Sub.: Issuance of environmental clearance (EC) for minor mineral quarry leases of M/s Christopher Furtado – in survey no. 13/2 (part) of Cordem village (*total lease area* – 2.5 *Ha.*,), Quepem taluka, South Goa district : mining project in category 1(a) of the Schedule of the EIA Notification, 2006 (as amended) – reg.,

Sir,

With reference to the above subject matter vis-a-vis your letter dated  $28^{\text{th}}$  May 2014 and subsequent re-submission, during March 2015, enclosing therein application form (*Form-1*), prefeasibility report, EMP by **M/s Christopher Furtado, Cordem** seeking prior environmental clearance (EC) for renewal of one Basalt-stone quarry lease (A) - 12/Basalt/09 (*Lease area - 5,000 sq.mts.*) which is in contiguous with other two new basalt-stone quarry leases ((B) lease area - 5,000 sq.mts.) which is in contiguous with other two new basalt-stone quarry leases ((B) lease area - 5,000 sq.mts and (C) lease area - 15,000 sq.mts.) having gross total production capacity – 24,500 m<sup>3</sup> per annum, in survey no. 13/2 (part) of Cordem village (*total lease area – 2.5 Ha.*,), Quepem taluka, South Goa district, this is to inform you that the said **proposal has been appraised as 'Category-B' and screened as 'category 1(a) – B2 project' : Mining of minerals** as per the 'Schedule' annexed to the Environment Impact Assessment (EIA) Notification, 2006 (*as amended till date*) as the lease area is less than 50 Ha. Accordingly, the project activity does not require Public Consultation as per para 7(i) III - Stage (3) (e) of the said Notification.

Further and subsequent to the project-specific presentation made by the NABET/QCIaccredited environmental consultant – M/s J. M. Infranet Pvt. Ltd., Rajasthan on behalf of the Project Proponent (PP) during the  $36^{th}$  Goa State Expert Appraisal Committee (*Goa-SEAC* – *hereinafter referred as 'Committee'*) meeting held on  $21^{st}$  April 2015, the proposal was recommended to the Goa State Environment Impact Assessment Authority (*Goa-SEIAA* – *hereinafter referred as "Authority*") for grant of prior environmental clearance (EC). Thereafter, the Authority, during its 22<sup>nd</sup> meeting held on 11<sup>th</sup> May 2015, considered Committee's recommendations and decided to **grant prior EC with the mandatory compliances** to the following to be verified and ascertained by the Directorate of Mines and Geology (DMG), Goa.

- 'Goa Mineral Concession (Amendment) Rules, 2012' notified by the Directorate of Mines and Geology (DMG) and published in Official Gazette Series-I, No. 24 dated 17<sup>th</sup> September 2012.
- 9. Submission of '**approved quarrying plan**' by the competent officer as per Sub-rule (7) as well as specific compliance to Sub-rules 7(A) to 7(D) of the above-referred Rules, as applicable.
- 10. Office Memorandum (O. M.) issued by the Ministry of Environment, Forest and Climate Change (MoEF & CC) dated 20<sup>th</sup> December 2013 regarding 'High Level Working Group Report on Western Ghats' *vis-a-vis* compliance to the conditions mentioned therein w.r.t. activities prohibited in the identified Ecologically Sensitive Areas (ESAs').
- 11. Notification S. O. 733 (E) dated 10<sup>th</sup> March 2014 issued by the erstwhile Ministry of Environment and Forests (MoEF) and published in the Gazette of India Extraordinary, No. 624, Part-II, Section 3, Sub-section (ii) dated 10<sup>th</sup> March 2014 specifying the list of villages categorized as Ecologically Sensitive Areas (ESAs') in the State of Goa (i.e. 1,461 sq.kms.) *vis-a-vis* list of projects and activities prohibited / regulated therein.
- 12. Various notifications dated 25<sup>th</sup> January 2015 / 17<sup>th</sup> February 2015 / 24<sup>th</sup> February 2015 / 25<sup>th</sup> February 2015 issued by the Ministry of Environment, Forests and Climate Change (*MoEF&CC*) specifying the extent of Eco-Sensitive Zone ESZ (*i.e. buffer zone*) surrounding Wildlife Sanctuaries and National Park(s) within the State of Goa as well as details of projects and activities prohibited / regulated therein.

Further, the project proponent is required to comply with the following 'General conditions':-

- 51. The lease holder should ascertain on-site demarcation and construction of lease boundary with cement poles / bio-fencing / barbed wire for the proposed leases in question. The lease boundary may be subsequently geo-referenced for precise positioning and ground-truth verification. As such, the lease holder should ensure that minor mineral quarrying operations are restricted within the prescribed lease boundary and further ensure that no natural water course (*seasonal or perennial*) gets obstructed / diverted / reclaimed due to quarry-related operations.
- 52. Top soil from the proposed lease area shall be stacked separately and shall be utilized for plantation, as applicable. Overburden or other rejects shall be backfilled into the worked-out pit as far as possible with a view to restore the land to its original topography or desired alternate use.

- 53. The lease holder should ensure construction of approach road / proper access to enable transportation of quarried material from site to desired destination and/or crushing unit, as applicable. Transportation of quarried material shall be done by covering the trucks with tarpaulin so that no spillage of material / dust takes place en route.
- 54. The lease holder should comply with the proposed plan of action for extraction of basalt / laterite stones within the available lease boundary limits in terms of provisions of Mines and Safety Rules / Guidelines, as applicable. In addition, safety gadgets and health-care facilities should be provided to workers vis-a-vis maintain hygiene surrounding the proposed lease boundary.
- 55. The lease holder shall obtain the 'Consent' and / or 'Authorization', as applicable, from the Goa State Pollution Control Board (GSPCB) as per the relevant provisions of the Air / Water Acts and Hazardous Waste (*Management, Handling and Transboundary Movement*) Rules, 2008 as amended.
- 56. The lease holder shall undertake adequate safeguard measures during extraction of basalt stone and ensure that due to this activity, the hydro-geological regime of the surrounding area shall not be affected / altered / polluted. Only controlled blasting / wet drilling shall be practiced with all necessary / preventive care and accordingly, quarrying operations should be limited to **day-hours time** (06 a.m. to 06 p.m. only) with specified time reserved for 'blasting' as well as secured 'storage facility' for explosive magazine. Regular monitoring of groundwater levels and its physico-chemical quality parameters shall be carried out around the quarry lease area (for minimum two locations of permanent water sources / open well / borewell). If there are no groundwater sources, then nearest perennial surface water sources (i.e. stream / river / pond / lake / reservoir / irrigational canal) should be monitored for similar parameters on quarterly basis and/or seasonally (i.e. pre-monsoon / monsoon and post-monsoon).
- 57. No quarrying be carried out within the safety zone of any bridge and/or embankment as well as within the vicinity of natural / man-made archaeological / heritage site(s).
- 58. The lease holder shall implement air pollution control measures / dust minimizing initiatives / noise control measures, wherever applicable, within the lease area as well as approach road and establish adequate buffer zone around the lease boundary to minimize dust pollution. It should be ensured that the Ambient Air Quality (AAQ) parameters as well as Noise be monitored at site and at the nearest human settlement (*at least twice during pre-monsoon and post-monsoon periods separately*) and comply with the norms prescribed by the Central Pollution Control Board (CPCB) and Noise Pollution (Control) Rules, 2000 respectively at all times.
- 59. Half-yearly compliance report on the conditions stipulated hereinabove shall be submitted to this Authority / DMG on 1<sup>st</sup> June and 1<sup>st</sup> December of each calendar year.
- 60. Green belt development shall be carried out as per CPCB guidelines including selection of local plant species and in consultation with Forest Department / Zonal Agricultural Office (ZAO), as applicable.

- **61.** The lease holder shall obtain necessary prior permission (NOC) from the Groundwater Cell of the Water Resources Department (WRD), as applicable, for drawl of surface / groundwater from within the lease area.
- **62.** Catch drains, garland drains shall be constructed around the excavated area, reject dumps, to prevent silts and sediments flowing into any low-lying area including agricultural fields, water body, etc.,
- **63.** Environmental clearance (EC) is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent Authority, if applicable.
- **64.** The mining officer / in-charge of quarrying operations on-site shall submit six-monthly report in hard and soft copy formats w.r.t. specifying the status of compliance of the stipulated environmental clearance conditions (*i.e. Specific and General conditions*) to the Directorate of Mines and Geology (DMG), Goa, this Authority as well as Goa State Pollution Control Board (GSPCB).
- **65.** Any change (*i.e. modification / expansion / alteration*) in survey no. / lease area / quarrying operations / extraction capacity / modernization / scope of working / environment management plan (EMP) shall require re-appraisal by this Authority as per the provisions of the EIA Notification, 2006 (*as amended till date*).
- **66.** The environmental clearance has been granted as per the provisions of the EIA Notification, 2006 (as amended) accordingly, the lease holder shall ensure compliance to any other provisions of relevant Rules, Regulations, Notifications, Government Resolutions, Circulars issued / published by State / Central Government from time vis-a-vis Judgements / Orders of Hon'ble Courts and NGT, etc.,
- 67. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that lease holder has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the lease holder. Hence, <u>this EC does not give immunity to the lease holder in the case filed against it</u>.
- **68.** The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- **69.** Any appeal against this prior environmental clearance shall lie before the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

In addition, M/s Christopher Furtado needs to mandatorily comply with the following 'Specific conditions' –

a. The proposed extraction capacity of basalt stones from the said quarry leases (*i.e. from all three leases taken together of 2.5 Ha.*) shall not exceed **24,500 m<sup>3</sup> per annum**.

b. As referred to in the Environment Management Plan (EMP), dust suppression measures (*i.e. water sprinklers*) to be undertaken regularly at specific interval during the daytime / quarry-operations.

Yours faithfully,

Sd./-

(Srinet Kothwale) Director/ex-officio Jt. Secy. (Environment) & Member Secretary, Goa-SEIAA

## **GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY**

EIA-Goa State Secretariat,

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567 e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/105* 

Date: 8<sup>th</sup> May 2015

*To*, **Director,** Directorate of Mines and Geology (DMG), Udyog Bhavan, Panaji, Goa – 403 001

# Sub.: Issuance of prior Environmental Clearance (EC) towards renewal of minor mineral quarry lease reg.,

Sir,

I am directed to refer to your communications enclosing therein project proposals / applications seeking prior Environmental Clearance (EC) for **'Renewal'** of Minor Mineral Quarry Lease(s), for areas upto 50 hectares, from the following lease holders (*refer column-2 in Annexure -1*). Accordingly, these proposals have been appraised as **'Category-B'** under **'category 1(a) – B2 project': Mining of minerals** as per the 'Schedule' annexed to the Environment Impact Assessment (EIA) Notification, 2006 (*as amended till date*) and such .mining lease area (< 50 Ha.) does not require Public Consultation as per Para 7(i) III - Stage (3) (e) of the said Notification.

Subsequently, the matter was appraised and deliberated during the joint meeting of the Goa-SEAC and the Goa-SEIAA held on 24<sup>th</sup> March 2015 and it was decided to consider 'proposals seeking Environmental Clearance (EC) for renewals only' of the existing minor mineral quarry lease(s) in force and registered with the Directorate of Mines and Geology (DMG), Goa vis-a-vis forwarded to this Authority. Accordingly, the Authority has granted / rejected such proposals, as the case may be, (refer Annexure – 1 for details) with the mandatory compliances to the following to be verified by the Directorate of Mines and Geology (DMG), Goa.

 'Goa Mineral Concession (Amendment) Rules, 2012' notified by the Directorate of Mines and Geology (DMG) and published in Official Gazette Series-I, No. 24 dated 17<sup>th</sup> September 2012.

- 14. Submission of '**approved quarrying plan**' by the competent officer as per Sub-rule (7) as well as specific compliance to Sub-rules 7(A) to 7(D) of the above-referred Rules, as applicable.
- 15. Office Memorandum (O. M.) issued by the Ministry of Environment, Forest and Climate Change (MoEF & CC) dated 20<sup>th</sup> December 2013 regarding 'High Level Working Group Report on Western Ghats' *vis-a-vis* compliance to the conditions mentioned therein w.r.t. activities prohibited in the identified Ecologically Sensitive Areas (ESAs').
- 16. Notification S. O. 733 (E) dated 10<sup>th</sup> March 2014 issued by the erstwhile Ministry of Environment and Forests (MoEF) and published in the Gazette of India Extraordinary, No. 624, Part-II, Section 3, Sub-section (ii) dated 10<sup>th</sup> March 2014 specifying the list of villages categorized as Ecologically Sensitive Areas (ESAs') in the State of Goa (i.e. 1,461 sq.kms.) vis-a-vis list of projects and activities prohibited / regulated therein.
- 17. Notification S. O. 221 (E) dated 23<sup>rd</sup> January 2015 issued by the Ministry of Environment, Forests and Climate Change (*MoEF&CC*) and published in the Gazette of India Extraordinary, No. 155, Part-II, Section 3, Sub-section (ii) dated 23<sup>rd</sup> January 2015 specifying the extent of Eco-Sensitive Zone ESZ (*i.e. buffer zone*) of 1 kms. of land or a water body whichever is nearer to the boundary of the Bhagvan Mahavir Wildlife Sanctuary and National Park within the State of Goa *vis-a-vis* list of <u>sixteen villages</u> falling partially within ESZ boundary as well as details of projects and activities prohibited / regulated therein.
- 18. Notification S. O. 615 (E) dated 25<sup>th</sup> January 2015 issued by the Ministry of Environment, Forests and Climate Change (*MoEF&CC*) and published in the Gazette of India Extraordinary, No. 445, Part-II, Section 3, Sub-section (ii) dated 25<sup>th</sup> January 2015 specifying the extent of Eco-Sensitive Zone ESZ (*i.e. buffer zone*) of 1 kms. of land or a water body whichever is nearer to the boundary of the Bondla Wildlife Sanctuary within the State of Goa vis-a-vis list of <u>six villages</u> falling partially within such ESZ boundary as well as details of projects and activities prohibited / regulated therein.
- 19. Notification S. O. 608 (E) dated 24<sup>th</sup> February 2015 issued by the Ministry of Environment, Forests and Climate Change (*MoEF&CC*) and published in the Gazette of India Extraordinary, No. 438, Part-II, Section 3, Sub-section (ii) dated 24<sup>th</sup> February 2015 specifying the extent of Eco-Sensitive Zone ESZ (*i.e. buffer zone*) of 1 kms. of land or a water body whichever is nearer to the boundary of the Cotigao Wildlife Sanctuary within the State of Goa vis-a-vis list of three villages falling partially within ESZ boundary as well as details of projects and activities prohibited / regulated therein.
- 20. Notification S. O. 607 (E) dated 24<sup>th</sup> February 2015 issued by the Ministry of Environment, Forests and Climate Change (*MoEF&CC*) and published in the Gazette of India Extraordinary, No. 437, Part-II, Section 3, Sub-section (ii) dated 24<sup>th</sup> February 2015 specifying the extent of Eco-Sensitive Zone ESZ (*i.e. buffer zone*) upto the river bank abutting the sanctuary of the three sides of Dr. Salim Ali Bird Sanctuary and to the extent of 100 mts. on the eastern side towards <u>Chorao village</u> in the State of Goa *vis-a-vis* Chorao village (*partially*) falling within ESZ boundary as well as details of projects and activities prohibited / regulated therein.

- 21. Notification S. O. 616 (E) dated 25<sup>th</sup> February 2015 issued by the Ministry of Environment, Forests and Climate Change (*MoEF&CC*) and published in the Gazette of India Extraordinary, No. 446, Part-II, Section 3, Sub-section (ii) dated 25<sup>th</sup> February 2015 specifying the extent of Eco-Sensitive Zone ESZ (*i.e. buffer zone*) of 1 kms. of land or a water body whichever is nearer to the boundary of the Madei Wildlife Sanctuary within the State of Goa vis-a-vis list of <u>Rivem village</u> (01 no.) falling completely and list of <u>thirty-five villages</u> falling partially within ESZ boundary as well as details of projects and activities prohibited / regulated therein.
- 22. Notification S. O. 555 (E) dated 17<sup>th</sup> February 2015 issued by the Ministry of Environment, Forests and Climate Change (*MoEF&CC*) and published in the Gazette of India Extraordinary, No. 395, Part-II, Section 3, Sub-section (ii) dated 17<sup>th</sup> February 2015 specifying the extent of Eco-Sensitive Zone ESZ (*i.e. buffer zone*) of 1 kms. of land or a water body whichever is nearer to the boundary of the Netravali Wildlife Sanctuary within the State of Goa *vis-a-vis* list of <u>sixteen villages</u> falling partially within ESZ boundary as well as details of projects and activities prohibited / regulated therein.

Further, the individual project proponent (i.e. minor mineral quarry lease holder) which have

been considered for grant of prior EC is required to mandatorily comply with the following 'General conditions' as well as 'Specific conditions' referred in <u>column 4 of Annexure-1</u>:-

- 70. The lease holder should ascertain on-site demarcation and construction of lease boundary with cement poles / bio-fencing / barbed wire for the proposed leased area in question. The lease boundary may be subsequently geo-referenced for precise positioning and ground-truth verification. As such, the lease holder should ensure that minor mineral quarrying operations are restricted within the prescribed lease boundary.
- 71. The lease holder should ensure construction of approach road / proper access to enable transportation of quarried material from site to desired destination and/or crushing unit, as applicable. Transportation of quarried material shall be done by covering the trucks with tarpaulin so that no spillage of material / dust takes place en route.
- 72. The lease holder should comply with the proposed plan of action / modus operandi for extraction of basalt / laterite stones within the available lease boundary limits in terms of provisions of Mines and Safety Rules / Guidelines, as applicable. In addition, safety gadgets and health-care facilities should be provided to workers vis-a-vis maintain hygiene surrounding the proposed lease boundary.
- 73. The lease holder shall undertake adequate safeguard measures during extraction of basalt stone and ensure that due to this activity, the hydro-geological regime of the surrounding area shall not be affected / altered / polluted. Quarrying operations should be limited to **day-hours time** (06 a.m. to 06 p.m. only) with specified time reserved for 'blasting'. Regular monitoring of groundwater levels and its physico-chemical quality parameters shall be carried out around the quarry lease area (for minimum two locations of permanent water sources / open well / borewell). If there are no groundwater sources, then nearest perennial surface water sources (*i.e. stream / river / pond / lake / reservoir /*

*irrigational canal*) should be monitored for similar parameters on quarterly basis and/or seasonally (*i.e. pre-monsoon / monsoon and post-monsoon*).

- 74. No quarrying be carried out within the safety zone of any bridge and/or embankment as well as within the vicinity of natural / man-made archaeological site(s).
- 75. The lease holder shall implement air pollution control measures / dust minimizing initiatives / noise control measures, wherever applicable, within the lease area as well as establish adequate buffer zone around the lease boundary to minimize such pollution hazards. It should be ensured that the Ambient Air Quality (AAQ) parameters (*to be measures in January, April and November every-year*) as well as Noise parameters conform to the norms prescribed by the Central Pollution Control Board (CPCB) and Noise Pollution (Control) Rules, 2000 respectively.
- 76. Green belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with Forest Department / Zonal Agricultural Office, as applicable.
- 77. The lease holder shall obtain necessary prior permission (NOC) from the Groundwater Cell of the Water Resources Department (WRD) for drawl of surface / groundwater from within the lease area.
- **78.** Waste water / effluents, if any, shall be properly collected, treated and monitored so as to conform to the standards prescribed by the MoEF / CPCB.
- **79.** Environmental clearance (EC) is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent Authority, if applicable.
- **80.** The mining officer / in-charge of quarrying operations on-site shall submit six-monthly report in hard and soft copy formats w.r.t. specifying the status of compliance of the stipulated environmental clearance conditions (*i.e. Specific and General conditions*) to the Directorate of Mines and Geology (DMG), Goa, this Authority as well as Goa State Pollution Control Board (GSPCB).
- **81.** Any change (*i.e. modification / expansion / alteration*) in lease area / quarrying operations / extraction capacity / modernization / scope of working / environment management plan (EMP) shall require re-appraisal by this Authority as per the provisions of the EIA Notification, 2006 (*as amended till date*).
- **82.** All necessary statutory clearances from relevant Authorities concerned shall be obtained before start of quarrying operations.
- 83. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that lease holder has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the lease holder. Hence, <u>this EC does not give immunity to the lease holder in the case filed against it</u>.

- **84.** The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- **85.** Any appeal against this prior environmental clearance shall lie before the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Accordingly, you are hereby requested to appraise and communicate the decision to individual minor mineral quarry lease holder mentioned herein above.

Yours faithfully,

Sd. /-

(Srinet Kothwale) Director/ex-officio Jt. Secy. (Environment) & Member Secretary, Goa-SEIAA

## ANNEXURE – 1

List of Minor mineral quarry proposals, *seeking prior EC for renewal of the existing lease(s)*, recommended / rejected for grant of EC as mandated in the EIA Notification, 2006 (*as amended*) with mandatory compliance to 'General' and 'Specific' conditions.

Sr. No.	Name of the Minor Mineral Quarry Lease Holder	Existing Lease Number (as submitted by the lease holder at the time its submission of proposal / application)	Site-specific location of the quarry lease	Specific Condition (mandatory compliance required)
1	M/s Pramod Madhukar Kamat	Survey No. 36/1 of Allorna village, Pernem taluka.	Renewal of Basalt- stone quarry 01/Basalt/11 Lease area - 9,320 sq.mts. Production capacity – 10,000 tones/annum	Compliance to the Notification regarding HLWG on Western Ghats classifying ESA's
2	M/s Prashant Madhukar Kamat	Survey No. 32/2 & 3 of Allorna village, Pernem taluka	Renewal of Basalt- stone quarry 03/Basalt/03 Lease area - 10,650 sq.mts. Production capacity - 80,000 tones/annum	dated 10 <sup>th</sup> March 2014 and Notifications specifying ESZs' surrounding the Wild Life/Bird Sanctuaries in Goa
3	M/s Prashant Madhukar Kamat	Survey No. 37/0 of Allorna village, Pernem taluka.	Renewal of Basalt- stone quarry 02/Basalt/06 Lease area - 15,200 sq.mts. Production capacity - 80,000 tones/annum	by the MoEF & CC in January / February 2015 are <u>not applicable</u> . Accordingly, the prior EC is granted to these
4	M/s Ritesh Stone Crusher	Survey No. 29/1 of Conquerim village, Sattari taluka.	Renewal of Basalt- stone quarry 02/Basalt/87 Lease area – 5.Ha Production capacity – 36,000 m <sup>3</sup> /year	leases for a period of five years.

Contd,/- 2

~	M/~ C:1	Surray No. 1(2/1 - 6		Dhauhandarr - 'll'
5	M/s Sunil	Survey No. 162/1 of	Renewal of Laterite-	<b>Dharbandora village</b> is
	Khanolkar	Dharbandora village,	stone quarry	categorized as ESA as
		Sanguem taluka.	04/Lat/11	per HLWG on Western
			Lease area - 5,824	Ghats as notified in the
			sq.mts.	Notification dated 10 <sup>th</sup>
			<b>Production</b> capacity –	March 2014.
			8,200 m <sup>3</sup> /year	Subsequently, village has
				been categorized as
				falling under the ESZ
				( <i>i.e. buffer zone</i> ) of the
				Bondla Wild Life
				Sanctuary as per
				Notification dated 25 <sup>th</sup>
				January 2015 and
				published in Govt. of
				India Gazette by the
				MoEF & CC dated 25 <sup>th</sup>
				February 2015.
				Accordingly, as per
				<b>'Table</b> ' annexed to said
				Notification, <b>existing</b>
				quarrying activity is
				prohibited with effect
				from 25 <sup>th</sup> February
				2015.
				2013.
				Accordingly, this
				proposal is rejected.
6	M/a Mahan	Survey No. 309 of	Renewal of Basalt-stone	Compliance to the
6		2		-
	Sheldekar	Xeldem village,	quarry	Notification regarding HLWG on Western Ghats
		Quepem.	16/Basalt/88	
			Lease area – 2700 sq.mts	classifying ESA's dated
			Production capacity – $2 < 60 = -3$	10 <sup>th</sup> March 2014 and
			$3,600 \text{ m}^{3}/\text{year}$	Notifications specifying
				ESZs' surrounding the
				Wild Life/Bird
				Sanctuaries in Goa by the
				MoEF & CC in January /
				5
				February 2015 are <u>not</u> <u>applicable</u> .

	Accordingly, the prior EC is granted to these leases for a period of five years.

7	M/s Suchita	Survey No. 16/2 of	Renewal of Laterite-
	Kosambe	Moisal village, Sanguem taluka.	stone quarry 03/Lat/10-11 Lease area – 7400
			Sq.mts Production capacity – 8,200 m <sup>3</sup> /year
8	M/s Pujari Traders	Survey No. 68/2 (plot-B) of Pirna village, Bardez taluka.	Renewal of Laterite- stone quarry 28/Lat/09 Lease area – 5714 Sq.mts Production capacity – 4,600 m <sup>3</sup> /year

9	M/s Gajanan	Survey No. 32/9(P)	Renewal of Basalt-	
	Zarapkar	of Ibrampur village,	stone quarry	
		Pernem taluka.	09/Basalt/92	
			Lease area – 4.55 Ha	
			Production capacity -	
			2,000 m <sup>3</sup> /year	Compliance to the
10	M/s Shaik Suhel	Survey No. 5/0 of	Renewal of Laterite-	Notification
		Cotarlim village,	stone quarry	regarding HLWG on
		Sanguem taluka.	05/Lat/11	Western Ghats
			Lease area - 3,959	classifying ESA's
			sq.mts.	dated 10 <sup>th</sup> March
			Production capacity –	2014 and
			3,600 m <sup>3</sup> /year	Notifications
11	M/s Nilesh S. P.	Survey No. 128 of	Renewal of Laterite-	specifying ESZs'
	Borkar	Borim village in	stone quarry	surrounding the Wild
		Ponda taluka.	17/Lat-Rub/08	Life/Bird Sanctuaries

		1		
			Lease area - 5,000	in Goa by the MoEF
			sq.mts.	& CC in January /
			Production capacity –	February 2015 are
			4,500 m <sup>3</sup> /year	<u>not applicable</u> .
12	M/s Vinayak Shet	Survey No. 42/2 of Chimble village, Tiswadi taluka.	Renewal of Basalt- stone quarry 09/Basalt-Murrum/93 Lease area - 25,856 sq.mts. Production capacity –	Accordingly, the prior EC is granted to these leases for a period of five years.
			330 m <sup>3</sup> /month	
13	M/s Prashant	Survey No. 63/3 of	Renewal of Basalt-	
	Dessai	Advoi village,	stone quarry	
		Sattari taluka.	07/Basalt/08	
			Lease area – 3.8 Ha	
			Production capacity -	
			22,800 m <sup>3</sup> /year	
14	M/s. Gervasio	Survey No. 213/1(P)	Renewal of Basalt-	
	Fernandes & Sons	of Morombi-o-	stone quarry	
		Grande village,	04/Basalt/87	
		Chimbel, Tiswadi	Lease area – 4 Ha	
		taluka.	Production capacity -	
			$500 \text{ m}^3/\text{month}$	
15	M/s. Buildwell	Survey No. 213/1(P)	Renewal of Basalt-	
	Corporation	of Morombi-o-	stone quarry	
		Grande village,	03/Basalt/87	
		Chimbel, Tiswadi	Lease area – 4 Ha	
		taluka.	Production capacity -	
			9,600 m <sup>3</sup> /year	

16	M/s Prasad Rama	Survey No. 105/1	Renewal of Basalt-	Compliance to the
	Naik Dessai	of Barcem village,	stone quarry	Notification regarding
		Quepem taluka.	02/Basalt/12	HLWG on Western
			Lease area – 7,000	Ghats classifying
			Sq.mts	ESA's dated 10 <sup>th</sup>
			Production capacity -	March 2014 and
			30 m <sup>3</sup> /day	Notifications

17	M/s Satyandra Fal Dessai	Survey No. 102/0 of Barcem village, Quepem taluka.	Renewal of Basalt- stone quarry 13/Basalt/09 Lease area – 10,000 Sq.mts Production capacity - 18,000 m <sup>3</sup> /year	specifying ESZs' surrounding the Wild Life/Bird Sanctuaries in Goa by the MoEF & CC in January / February 2015 are <u>not</u> <u>applicable</u> .
				Accordingly, the prior EC is granted to these leases for a period of five years.
18	M/s Vishwasrao J. Rane	Survey No. 15/2 of Ansolem village, Sattari taluka.	Renewal of Basalt- stone quarry 06/basalt/94 Lease area – 4,800 sq.mts. Production capacity - 12,000 m <sup>3</sup> /year	Ansolem village is categorized as ESA as per HLWG on Western Ghats as per Notification dated 10 <sup>th</sup> March 2014 issued by the MoEF. Accordingly, as per the Clause 2(vii) and (5) of the O.M. dated 20 <sup>th</sup> December 2013, the EC is granted and valid for a period of five years or upto the period of lease validity, whichever is earlier.

19	M/s Vishwasrao J. Rane	Survey No. 22/1 of Dabem village, Sattari taluka.	Renewal of Basalt- stone quarry 05/basalt/94 Lease area – 0.4800 Ha Production capacity - 12,000 m <sup>3</sup> /year	Compliance to the Notification regarding HLWG on Western Ghats classifying ESA's dated 10 <sup>th</sup>
20	M/s Raju G. Naik	Survey No. 839/1 of Shiroda village, Ponda taluka.	Renewal of Laterite- stone quarry 20/Lat./08 Lease area - 40,000	March 2014 and Notifications specifying ESZs' surrounding the Wild

			sq.mts.	Life/Bird Sanctuaries
			Production capacity –	in Goa by the MoEF &
			12,500 m <sup>3</sup> /year	CC in January /
21	M/s Shyam Naik	Survey No. 121/1	Renewal of Laterite-	February 2015 are <u>not</u>
		of Poriem village,	stone quarry	<u>applicable</u> .
		Sattari	30/Lat./10	
			Lease area - 5,000	Accordingly, the
			sq.mts.	prior EC is granted
			Production capacity –	to these leases for a
			4,125 m <sup>3</sup> /year	period of five years.

22	M/s Ramkrishna	Survey No. 24/1 of	Renewal of Laterite-	Mollem village is
	Gaonkar	Mollem village,	stone quarry	categorized as ESA as
		Dharbandora	01/Lat./11	per HLWG on
			Lease area - 15,000	Western Ghats as
			sq.mts.	notified in the
			Production capacity –	Notification dated 10 <sup>th</sup>
			$12,500 \text{ m}^3/\text{year}$	March 2014.
			,	Subsequently, it has
				been categorized as
				falling under the ESZ
				( <i>i.e. buffer zone</i> ) of
				the <b>Bhagwan</b>
				Mahavir Wild Life
				Sanctuary as per
				Notification dated 23 <sup>rd</sup>
				January 2015 and
				published in Govt. of
				India Gazette by the
				MoEF & CC dated
				23 <sup>rd</sup> January 2015.
				Accordingly, as per
				'Table' annexed to
				said Notification, the
				existing quarrying
				activity is prohibited
				with effect from 23 <sup>rd</sup>
				January 2015.
				Accordingly, this
				proposal is rejected.

23	M/s Stones	Survey No. 681(P)* and S. No. 684/1, 2 & 3 and 646/6** of	Renewal of Basalt- stone quarry * 01/Basalt/88	
		Latambarcem village,	Lease area - 9,220	
		Bicholim	sq.mts.	
			Production capacity -	Compliance to the
			72,000 m <sup>3</sup> /year ** 07/Basalt/98	Notification regarding HLWG on Western
			** 07/Basait/98 Lease area - 40,000	Ghats classifying
				ESA's dated 10 <sup>th</sup>
			sq.mts. Production capacity -	March 2014 and
			$4,000 \text{ m}^3/\text{month}$	Notifications
24	M/s Joe	Survey No. 274/1 of	Renewal of Basalt-	specifying ESZs'
24	D'costa	Salvey No. 274/1 of Sao Jose De Areal,	stone quarry	surrounding the Wild
	Deosta	Salcete taluka.	02/Basalt/10-11	Life/Bird Sanctuaries
		Suleete tuluku.	Lease area - 5,000	in Goa by the MoEF
			sq.mts.	& CC in January /
25	M/s Rosario	Survey No. 274/1 of	Renewal of Basalt-	February 2015 are <u>not</u>
	Noronha	Sao Jose De Areal,	stone quarry	<u>applicable</u> .
		Salcete taluka.	03/Basalt/10-11	Accordingly the
			Lease area – 7,000	Accordingly, the prior EC is granted
			sq.mts.	to these leases for a
26	M/s Kelly	Survey No. 274/1 of	Renewal of Basalt-	period of five years.
	Cheryl	Sao Jose De Areal,	stone quarry	period of five years.
	Fernandes	Salcete taluka.	09/Basalt/10-11	
			Lease area - 5,000	
			sq.mts.	
27	M/s Perris	Survey No. 230/3 of	Renewal of Basalt-	
	D'Costa	Sao Jose De Areal	stone quarry	
		village, Salcete	01/Basalt/10-11	
		taluka.	Lease area - 5,000	
			sq.mts.	

28	M/s Rosario	Survey No. 64 of	Renewal of Basalt-stone	
	Noronha	Barcem village,	quarry	
		Quepem taluka.	04/Basalt/10-11	
			Lease area - 7,000	
			sq.mts.	
			Production capacity –	
			8,000 m <sup>3</sup> /year	
29	M/s John	Survey No. 274/1 of	Renewal of Basalt-stone	
	Carvalho	Sao Jose De Areal,	quarry	Compliance to the
		Salcete taluka.	05/Basalt/10-11	Notification regarding
			Lease area - 5,000	HLWG on Western
			sq.mts.	Ghats classifying
30	M/s Shrish	Survey No. 62/1 of	Renewal of Basalt-stone	ESA's dated $10^{\text{th}}$
	Kamat	Paroda village in	quarry	March 2014 and
		Salcete taluka.	02/Basalt/11	Notifications
			Lease area - 28,000	specifying ESZs'
			sq.mts.	
			Production capacity –	surrounding the Wild Life/Bird Sanctuaries
			6,000 m <sup>3</sup> /year	
31	M/s. S. Kumar	Survey No.	Renewal of Basalt-stone	in Goa by the MoEF
	Metals	32/4,5,6,7 & 9 of	quarry	& CC in January /
		Alorna village,	09/Basalt/98	February 2015 are <u>not</u>
		Pernem taluka.	Lease area - 50,000	<u>applicable</u> .
			sq.mts.	Accordingly, the
			Production capacity –	prior EC is granted
			$150 \text{ m}^3/\text{day}$	to these leases for a
32	M/s. Shalini	Survey No. 67/1 of	Renewal of Basalt-stone	period of five years.
	Metals	Ibrampur village,	quarry	Portou or nive years.
		Pernem taluka.	03/Basalt/95	
			Lease area - 2,600 mts.	
			Production capacity – 18	
			m <sup>3</sup> /day	
33	M/s Amar	Survey No. 515 of	Renewal of Basalt-stone	
	Phadte	Alorna village,	quarry	
		Pernem taluka.	09/Basalt/08	
			Lease area - 7,300	
			sq.mts.	
			Production capacity -	
			$15,000 \text{ m}^3/\text{year}$	
34	M/s Madhu	Survey No. 41/12 of	<b>Renewal</b> of Basalt-stone	
	Phadte	Alorna village,	quarry	
	- muuto	Pernem.	15/Basalt/09-10	
			Lease area – 9300	
			Sq.mts	
			Production capacity -	
			$15,000 \text{ m}^3/\text{year}$	

35	M/s Ajit Ajay	Survey No. 223/1-A	Renewal of Laterite-	Loliem village is
	Santaram	of Loliem village,	stone quarry	categorized as ESA
	Loliyekar	Canacona taluka.	01/Lat./12	as per HLWG on
			Lease area - 7,500	Western Ghats as per
			sq.mts.	the Notification dated
			Production capacity –	10 <sup>th</sup> March 2014
			3,072 m <sup>3</sup> /year	issued by the MoEF.
				Accordingly, as per
				the Clause 2(vii) and
				(5) of the O.M. dated
				20 <sup>th</sup> December 2013,
				the EC is granted
				and valid for a
				period of five years
				or upto the period of
				lease validity,
				whichever is earlier.
36	M/s Namrata	Survey No. 93/7 of	Renewal of Basalt-stone	
	Kolekar	Morpilla village,	quarry	Compliance to the
		Quepem taluka.	08/Basalt/89	Compliance to the Notification
			Lease area - 4,200	
			sq.mts.	regarding HLWG on Western Ghats
			Production capacity –	classifying ESA's
			9,000 m <sup>3</sup> /year	dated 10 <sup>th</sup> March
37	M/s Damu	Survey No. 124/1 of	Renewal of Lateritic	2014 and
	Naik	Loutolim village,	Morrum quarry	Notifications
		Salcete taluka.	01/Morrum/08	specifying ESZs'
			Lease area - 7,350	surrounding the Wild
			sq.mts.	Life/Bird Sanctuaries
			Production capacity –	in Goa by the MoEF
			6,250 m <sup>3</sup> /month	& CC in January /
38	M/s Uday	Survey No. 40/0 of	Renewal of Basalt-stone	February 2015 are
	Salgaonkar	Ibrampur village,	quarry	not applicable.
		Pernem taluka.	04/Basalt/03	
			Lease area - 34,000	Accordingly, the
			sq.mts.	prior EC is granted
			Production capacity -	to these leases for a
			15,000 m <sup>3</sup> /year	period of five years.

39	M/s. Kamat	Survey No	o. 721/5 of	Renewal of Basalt-stone	
	Metal	Latambar	cem	quarry	
	Industries	village,	Bicholim	02/Basalt/95	
		taluka.		Lease area - 10,000	
				sq.mts.	
				Production capacity –	
				22,500 m <sup>3</sup> /year	

40	M/s Satyappa	Survey No. 52/0 of	Renewal of Basalt-	Uguem village is
	Gidappa	Uguem village,	stone quarry	categorized as ESA as
	Dhangalkar.	Sanguem taluka.	06/Basalt/10-11	per HLWG on Western
			Lease area - 5,000	Ghats as notified in the
			sq.mts.	Notification dated 10 <sup>th</sup>
			Production capacity -	March 2014.
			18000 m <sup>3</sup> /year	Subsequently, it has
41	M/s Marushka	Survey No. 52/0 of	Renewal of Basalt-	been categorized as
	Stone Industry,	Uguem village,	stone quarry	falling under the ESZ
		Sanguem Taluka.	01/Basalt/98	( <i>i.e. buffer zone</i> ) of the
			Lease area - 5,000	Netravali and
			sq.mts.	Bhagwan Mahavir
			Production capacity -	Wild Life Sanctuaries
			18,400 m <sup>3</sup> /year	as per Notifications
				dated 17 <sup>th</sup> February
42	M/s Danra Metal	Survey No. 52/0 of Uguem village, Sanguem taluka.	Renewal of Basalt- stone quarry 10/Basalt/10-11 Lease area - 6,000 sq.mts. Production capacity - 18,400 m <sup>3</sup> /year	2015 / 23 <sup>rd</sup> January 2015 and published in Govt. of India Gazette by the MoEF & CC dated 17 <sup>th</sup> February 2015 / 23 <sup>rd</sup> January 2015 respectively. Accordingly, as per <b>'Table'</b> annexed to Notifications, the <b>existing quarrying</b> <b>activity is prohibited</b> with effect from 17 <sup>th</sup> February 2015 / 23 <sup>rd</sup> January 2015.

		Accordingly, these proposals are rejected.

· · -				
43	M/s Desai	Survey No. $11/1(P)$	Renewal of Basalt-	
	Metal Works	of Pilliem village,	stone quarry	
		Sanguem Taluka.	08/Basalt/91	
			Lease area - 18,700	
			sq.mts.	
			Production capacity -54	
			m <sup>3</sup> /day	Compliance to the
44	M/s	Survey No. 119(P)	Renewal of Basalt-	Notification regarding
	Priyadarshani	of Vantem village,	stone quarry	HLWG on Western
	Hi Tech	Sattari Taluka.	05/basalt/2007	Ghats classifying
	Associates.		Lease area - 5,000	ESA's dated 10 <sup>th</sup> March
			sq.mts.	2014 and Notifications
			Production capacity -	
			7,500 m <sup>3</sup> /year	specifying ESZs'
45	M/s Somdatt	Survey No. 176/1	Renewal of Laterite-	surrounding the Wild Life/Bird Sanctuaries in
	G. Deshmukh	of Canacona	stone quarry	
		Municipal area.	19/Laterite/08	Goa by the MoEF &
			Lease area - 4,000	CC in January /
			sq.mts.	February 2015 are <u>not</u>
			Production capacity -	<u>applicable</u> .
			3,600 m <sup>3</sup> /year	Accordingly, the prior
46	M/s Zuari	Survey Nos. 288,	Renewal of Basalt-	EC is granted to these
	Industries,	289 & 294 of	stone quarry	leases for a period of
		Loutolim Village,	06/Basalt/88	five years.
		Salcete Taluka.	Lease area – 4.925 Ha.	U
		Lease expiry – 21 <sup>st</sup>	Production capacity –	
		June 2018	$120 \text{ m}^3/\text{day}$	
47	M/s Raj Metal	Survey No. 9/2 of	Renewal of Basalt-	
	Quarry,	Sal village,	stone quarry	
		Bicholim Taluka.	04/Basalt/06	
			Lease area - 48,200	
			sq.mts.	
			Production capacity -	
			$4,500 \text{ m}^{3}/\text{year}$	
L			, ,	

48	M/s Leena	Survey No. 50 of	Renewal of Basalt-	
	Prasana Prabhu	Borim village,	stone quarry	
	Dessai.	Ponda taluka.	06/Basalt/2000	
		(Total plot –	Lease area - 22,800	
		67,800 sq.mts.)	sq.mts.	
			Rate of extraction to	
			increase form 500	
			$m^3$ /month to 1,500	
			m <sup>3</sup> /month	

49	M/s Manuel Da Costa.	Proposed in Survey No. 71/1(P) and 77/1(Part) of Santona village, Sanguem taluka.	Renewal of Basalt- stone quarry 04/Basalt/89 Rate of extraction to increase from 48,000 m <sup>3</sup> /year to 72,000 m <sup>3</sup> /year	Compliance to the Notification regarding HLWG on Western Ghats classifying ESA's dated 10 <sup>th</sup> March 2014 and Notifications specifying ESZs' surrounding the Wild Life/Bird Sanctuaries in Goa by the MoEF & CC in January / February 2015 are <u>not applicable</u> . Accordingly, the prior EC is granted to these leases for a period of five years.
50	M/s Manuel Da Costa.	Survey No. 71/1(P) and 77/1(Part) of Santona village, Sanguem taluka.	Renewal of Basalt- stone quarry lease 05/Basalt/89 Rate of extraction to increase from 48,000 m <sup>3</sup> /year to 72,000 m <sup>3</sup> /year.	

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### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

**EIA-Goa State Secretariat,** 

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567 e-mail: goaseac@gmail.com

e-man. goaseac(a)gma

*No: 3 – 181 – 2010/STE-DIR/97* 

Date: 30<sup>th</sup> March 2015

*To,* **Director,** Directorate of Mines and Geology (DMG), Udyog Bhavan, Panaji, Goa – 403 001

## Sub.: Issuance of prior Environmental Clearance (EC) towards renewal of minor mineral quarry lease of M/s Samrat Industries, Gudi, Paroda, Salcete – reg.,

Sir,

With reference to the above subject matter vis-a-vis your letter dated  $27^{\text{th}}$  May 2013 and subsequent re-submission, dated  $24^{\text{th}}$  October 2014, enclosing therein application form (*Form-1*), pre-feasibility report, EMP and mining policy by M/s Samrat Industries, Gudi-Paroda seeking prior environmental clearance (EC) for renewal of its minor mineral quarry bearing lease no.04/Basalt/97R (*lease area – 1 Ha.*) located in survey no. 23/1(P) of Rumbrem village, Sanguem Taluka, South Goa district, this is to inform you that the said proposal has been appraised as '**Category-B'** and **screened as 'category 1(a) – B2 project' : Mining of minerals** as per the 'Schedule' annexed to the Environment Impact Assessment (EIA) Notification, 2006 (*as amended till date*).

Further and subsequent to the project-specific presentation made by the NABET/QCIaccredited environmental consultant – M/s Bhagavathi Ana Labs Pvt. Ltd., Hyderabad on behalf of the Project Proponent (PP) during the 29<sup>th</sup> Goa State Expert Appraisal Committee (*Goa-SEAC* – *hereinafter referred as 'Committee'*) meeting held on 20<sup>th</sup> January 2015, the proposal was recommended to the Goa State Environment Impact Assessment Authority (*Goa-SEIAA* – *hereinafter referred as "Authority"*) for grant of prior environmental clearance (EC) with certain 'Specific Conditions' to be complied by the PP prior to initiate any on-site quarry-related operations. Thereafter, the Authority, during its 21<sup>st</sup> meeting held on 26<sup>th</sup> February 2015, considered Committee's recommendations and decided to **grant prior EC with the mandatory compliances** to the following to be mandatorily verified by the Directorate of Mines and Geology (DMG), Goa.

- 23. 'Goa Mineral Concession (Amendment) Rules, 2012' notified by the Directorate of Mines and Geology (DMG) and published in Official Gazette Series-I, No. 24 dated 17<sup>th</sup> September 2012.
- 24. Submission of '**approved quarrying plan**' by the competent officer as per Sub-rule (7) as well as specific compliance to Sub-rules 7(A) to 7(D) of the above-referred Rules, as applicable.
- 25. Office Memorandum (O. M.) issued by the Ministry of Environment, Forest and Climate Change (MoEF & CC) dated 20<sup>th</sup> December 2013 regarding '**High Level Working Group Report on Western Ghats**' *vis-a-vis* compliance to the conditions mentioned therein w.r.t. activities prohibited in the identified Ecologically Sensitive Areas (ESAs').
- 26. Notification S. O. 733 (E) dated 10<sup>th</sup> March 2014 issued by the erstwhile Ministry of Environment and Forests (MoEF) and published in the Gazette of India Extraordinary, No. 624, Part-II, Section 3, Sub-section (ii) dated 10<sup>th</sup> March 2014 specifying the list of villages categorized as Ecologically Sensitive Areas (ESAs') in the State of Goa (i.e. 1,461 sq.kms.) vis-a-vis list of projects and activities prohibited / regulated therein.
- 27. Notification S. O. 221 (E) dated 23<sup>rd</sup> January 2015 issued by the Ministry of Environment, Forests and Climate Change (*MoEF&CC*) and published in the Gazette of India Extraordinary, No. 155, Part-II, Section 3, Sub-section (ii) dated 23<sup>rd</sup> January 2015 specifying the extent of Eco-Sensitive Zone ESZ (*i.e. buffer zone*) of 1 kms. of land or a water body whichever is nearer to the boundary of the Bhagvan Mahavir Wildlife Sanctuary and National Park within the State of Goa vis-a-vis list of sixteen villages falling partially within ESZ boundary as well as details of projects and activities prohibited / regulated therein.
- 28. Notification S. O. 615 (E) dated 25<sup>th</sup> January 2015 issued by the Ministry of Environment, Forests and Climate Change (*MoEF&CC*) and published in the Gazette of India Extraordinary, No. 445, Part-II, Section 3, Sub-section (ii) dated 25<sup>th</sup> January 2015 specifying the extent of Eco-Sensitive Zone ESZ (*i.e. buffer zone*) of 1 kms. of land or a water body whichever is nearer to the boundary of the Bondla Wildlife Sanctuary within the State of Goa vis-a-vis list of six villages falling partially within such ESZ boundary as well as details of projects and activities prohibited / regulated therein.
- 29. Notification S. O. 608 (E) dated 24<sup>th</sup> February 2015 issued by the Ministry of Environment, Forests and Climate Change (*MoEF&CC*) and published in the Gazette of India Extraordinary, No. 438, Part-II, Section 3, Sub-section (ii) dated 24<sup>th</sup> February 2015 specifying the extent of Eco-Sensitive Zone ESZ (*i.e. buffer zone*) of 1 kms. of land or a water body whichever is nearer to the boundary of the Cotigao Wildlife Sanctuary within the State of Goa vis-a-vis list of <u>three villages</u> falling partially within ESZ boundary as well as details of projects and activities prohibited / regulated therein.
- 30. Notification S. O. 607 (E) dated 24<sup>th</sup> February 2015 issued by the Ministry of Environment, Forests and Climate Change (*MoEF&CC*) and published in the Gazette of India Extraordinary, No. 437, Part-II, Section 3, Sub-section (ii) dated 24<sup>th</sup> February 2015 specifying the extent of Eco-Sensitive Zone ESZ (*i.e. buffer zone*) upto the

river bank abutting the sanctuary of the three sides of Dr. Salim Ali Bird Sanctuary and to the extent of 100 mts. on the eastern side towards <u>Chorao village</u> in the State of Goa *vis-a-vis* Chorao village (*partially*) falling within ESZ boundary as well as details of projects and activities prohibited / regulated therein.

- 31. Notification S. O. 616 (E) dated 25<sup>th</sup> February 2015 issued by the Ministry of Environment, Forests and Climate Change (*MoEF&CC*) and published in the Gazette of India Extraordinary, No. 446, Part-II, Section 3, Sub-section (ii) dated 25<sup>th</sup> February 2015 specifying the extent of Eco-Sensitive Zone ESZ (*i.e. buffer zone*) of 1 kms. of land or a water body whichever is nearer to the boundary of the Madei Wildlife Sanctuary within the State of Goa vis-a-vis list of <u>Rivem village</u> (01 no.) falling completely and list of <u>thirty-five villages</u> falling partially within ESZ boundary as well as details of projects and activities prohibited / regulated therein.
- 32. Notification S. O. 555 (E) dated 17<sup>th</sup> February 2015 issued by the Ministry of Environment, Forests and Climate Change (*MoEF&CC*) and published in the Gazette of India Extraordinary, No. 395, Part-II, Section 3, Sub-section (ii) dated 17<sup>th</sup> February 2015 specifying the extent of Eco-Sensitive Zone ESZ (*i.e. buffer zone*) of 1 kms. of land or a water body whichever is nearer to the boundary of the Netravali Wildlife Sanctuary within the State of Goa *vis-a-vis* list of <u>sixteen villages</u> falling partially within ESZ boundary as well as details of projects and activities prohibited / regulated therein.

Further, the project proponent (*i.e. minor mineral quarry lease holder*) is required to mandatorily comply with the following 'General conditions':-

- 86. The lease holder should ascertain on-site demarcation and construction of lease boundary with cement poles / bio-fencing / barbed wire for the proposed leased area in question. The lease boundary may be subsequently geo-referenced for precise positioning and ground-truth verification. As such, the lease holder should ensure that minor mineral quarrying operations are restricted within the prescribed lease boundary.
- 87. The lease holder should ensure construction of approach road / proper access to enable transportation of quarried material from site to desired destination and/or crushing unit, as applicable. Transportation of quarried material shall be done by covering the trucks with tarpaulin so that no spillage of material / dust takes place en route.
- 88. The lease holder should comply with the proposed plan of action / modus operandi for extraction of basalt / laterite stones within the available lease boundary limits in terms of provisions of Mines and Safety Rules / Guidelines, as applicable. In addition, safety gadgets and health-care facilities should be provided to workers vis-a-vis maintain hygiene surrounding the proposed lease boundary.
- 89. The lease holder shall undertake adequate safeguard measures during extraction of basalt stone and ensure that due to this activity, the hydro-geological regime of the surrounding area shall not be affected / altered / polluted. Quarrying operations should be limited to **day-hours time** (06 a.m. to 06 p.m.only) with specified time reserved for 'blasting'. Regular monitoring of groundwater levels and its physico-chemical quality parameters

shall be carried out around the quarry lease area (for minimum two locations of permanent water sources / open well / borewell). If there are no groundwater sources, then nearest perennial surface water sources (*i.e. stream / river / pond / lake / reservoir / irrigational canal*) should be monitored for similar parameters on quarterly basis and/or seasonally (*i.e. pre-monsoon / monsoon and post-monsoon*).

- 90. No quarrying be carried out within the safety zone of any bridge and/or embankment as well as within the vicinity of natural / man-made archaeological site(s).
- 91. The lease holder shall implement air pollution control measures / dust minimizing initiatives / noise control measures, wherever applicable, within the lease area as well as establish adequate buffer zone around the lease boundary to minimize such pollution hazards. It should be ensured that the Ambient Air Quality (AAQ) parameters (*to be measures in January, April and November every-year*) as well as Noise parameters conform to the norms prescribed by the Central Pollution Control Board (CPCB) and Noise Pollution (Control) Rules, 2000 respectively.
- 92. Green belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with Forest Department / Zonal Agricultural Office, as applicable.
- **93.** The lease holder shall obtain necessary prior permission (NOC) from the Groundwater Cell of the Water Resources Department (WRD) for drawl of surface / groundwater from within the lease area.
- **94.** Waste water / effluents, if any, shall be properly collected, treated and monitored so as to conform to the standards prescribed by the MoEF / CPCB.
- **95.** Environmental clearance (EC) is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent Authority, if applicable.
- **96.** The mining officer / in-charge of quarrying operations on-site shall submit six-monthly report in hard and soft copy formats w.r.t. specifying the status of compliance of the stipulated environmental clearance conditions (*i.e. Specific and General conditions*) to the Directorate of Mines and Geology (DMG), Goa, this Authority as well as Goa State Pollution Control Board (GSPCB).
- **97.** Any change (*i.e. modification / expansion / alteration*) in lease area / quarrying operations / extraction capacity / modernization / scope of working / environment management plan (EMP) shall require re-appraisal by this Authority as per the provisions of the EIA Notification, 2006 (*as amended till date*).
- **98.** All necessary statutory clearances from relevant Authorities concerned shall be obtained before start of quarrying operations.
- 99. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that lease holder has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will

## be binding on the lease holder. Hence, <u>this EC does not give immunity to the lease</u> <u>holder in the case filed against it</u>.

- **100.** The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- **101.** Any appeal against this prior environmental clearance shall lie before the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

In addition, M/s Samrat Industries need to comply with the following 'Specific conditions' -

- c. As per the (a) Clause no. (5) of the Office Memorandum (O.M.) dated 20<sup>th</sup> December 2013 and (b) Clause (3) of the Notification dated 10<sup>th</sup> March 2014 issued by the Ministry of Environment and Forests (MoEF), the Rumbrem village is falling within the Ecologically Sensitive Area (ESA) of the Western Ghats in Goa, as such, the present EC is valid only for five years from the date of its issuance or lease validity in respect of lease no.04/Basalt/97R whichever is earlier. Further, the quarrying activity should be phased out / discontinued thereafter.
- d. As referred to in the Environment Management Plan (EMP), dust suppression measures (*i.e. water sprinklers*) to be undertaken regularly at specific interval during the daytime / quarry-operations.
- e. Submission of 'Form 1/16' or any other relevant approved / authorized document(s) suggesting the status of approach access from the main road to the quarry lease.

Yours faithfully,

Sd./-

(Srinet Kothwale) Director/ex-officio Jt. Secy. (Environment) & Member Secretary, Goa-SEIAA

\*\*\*\*\*\*

### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

3<sup>rd</sup> Floor, Dempo Towers,

Phone nos.: 0832-2438303 Fax. no.: 0832-2438567

e-mail: goaseac@gmail.com

*No:* 3 – 181 – 2010/STE-DIR/91

Date: 3<sup>rd</sup> March 2015

То,

### The Director,

Department of Science and Technology (DST), Opposite Saligao Seminary, Saligao, Bardez, Goa – 403 512

### Sub.: Establishment of Solid Waste Management Facility (SWMF) at Calangute/ Saligao, Bardez Taluka, North Goa - Issuance of the Prior Environmental Clearance (EC) – Reg.

Ref.: (a) This office letter no. 3 – 181 – 2010 / STE / DIR / 64 dated 4<sup>th</sup> November 2014.
(b) Your letter no. 3-209-2015/STE-DIR/Part16B / SWMC / 46 dated 12<sup>th</sup> February 2015

Sir,

Whereas the Department of Science and Technology (DST), Goa having approached this Authority (i.e. Goa-SEIAA), seeking prior environmental clearance (EC) for establishment of a Solid Waste Management Facility (SWMF) at Calangute/Saligao, Bardez Taluka, North Goa district, Goa. The matter, at the relevant time, was considered by the Goa State Expert Appraisal Committee (Goa-SEAC) and pursuant to the site visit and recommendations, this Authority had considered to accord prior Environmental Clearance (EC) to the project under the provisions of the Environmental Impact Assessment (EIA) Notification, 2006 under peculiar circumstances inasmuch as the entire area was found to be completely degraded and required immediate remediation measures as stated in preliminary status report of M/s National Environmental Engineering and Research Institute (NEERI), Nagpur which was also placed before the Goa-SEAC and this Authority, pursuant to which the prior Environmental Clearance (EC) was granted with 'Specific Conditions' to Project Proponent (PP) and to compile / submit a rapid site specific Environmental Impact Assessment (EIA) report to this Authority not later than 15<sup>th</sup> February 2015 so as to suggest further long term measures. It was further stipulated that on receipt and perusal a rapid site-specific EIA report, the conditions stipulated in the EC would be reviewed and accordingly modified for mandatory compliance by PP towards long-term management / post-EC monitoring of the site together with several other General Conditions.

And whereas a final Environmental Impact Assessment (EIA) Report has been prepared by M/s NEERI, Nagpur and submitted before the Goa-SEAC as well as this Authority. Whereas this Authority, during its 21<sup>st</sup> meeting held on 26<sup>th</sup> February 2015, has perused the entire report prepared by M/s NEERI, Nagpur including site specific conditions and all other relevant and material factors including ascertaining the feasibility of alternate site which has been requested by Comunidade of Saligao and not found suitable for MSW management for setting up of a CSWMF as per Annexure-1 to the Environmental Impact Assessment report.

It is of material importance to also consider the fact that there has been indiscriminate dumping of MSW since past more than 20 years, which has affected the area considerably, degrading the same.

In this regard the Environmental Impact Assessment (EIA) report prepared by M/s NEERI, Nagpur mentions the following:-

- a. There will be a health and lifestyle improvement due to scientific disposal of municipal solid waste, which otherwise is being dumped unscientifically creating unhygienic conditions and vector for various diseases which could spread in the surrounding residential areas.
- b. The Health Officer, Department of Health Services, Government of Goa has issued directions under Section 40 of the Goa Public Health Act to ensure that the work for setting up of Solid Waste Management Facility is taken up at top priority at first instance to ensure that existing waste at site is immediately treated and remediated to improve the health and hygiene and the quality of ground water in the said area.
- c. It is also informed that the site bearing Survey No. 47/1, Village Calangute has been identified as a garbage management site in the Regional Plan notified in the year 2021 by the Government of Goa.
- d. EIA Report further states a holistic approach has been followed while planning the integrated Municipal Solid Waste treatment facility in North Goa and the proposed facility will be a state of art modern facility based on mechanical-biological treatments process with proper segregation and bio-methanation technology and the said technology selected is as per the requirement of MSW Rules, 2000 and in accordance with the guidelines of the Central Pollution Control Board.
- e. The report also states that it is prudent to establish a solid waste management facility on a land/site which is degraded due to dumping of waste or immediately adjacent to the said site rather than selecting a green field site for establishment of the same.

- f. It is informed that the Communidade of Saligao had suggested an alternate site. Accordingly, joint site-inspection conducted by officials of the Department of Science and Technology, Town and Country Planning Department, Directorate of Land Survey and Records and representatives of the Communidade of Saligao has indicated that the alternate site being a green site was not suitable for setting-up of a Solid Waste Management Facility.
- g. EIA Report mentions that there is a presence of volatile organic carbons near the existing dump sites clearly substantiating the existence of uncontrolled petrifaction of mixed municipal solid waste at the site.
- h. The report also mentions that the Salmona Spring water is contaminated with coliforms when compared to other surface and ground water sample. The Bacteriological contamination observed in the Salmona Spring and open wells, situated downstream to the existing dump site clearly indicates the negative impact of existing dump sites on water environment this is attributed to the surface run off from the dump site over the areas.
- i. EIA Report predicts the following positive impacts on the Site and the surrounding due to the establishment of the said proposed Solid Waste Management Facility
  - 1. Salmona Spring water quality will improve due to the proper scientific management of the solid waste and also the treatment of the existing old dumped un-segregated solid waste at the site.
  - 2. The quality of the soil which is presently degraded will be restored upon remediation/treatment and disposal of the existing waste dumped at the site.
  - 3. Upon commissioning of the said facility there will be improvement on the esthetics of the said area.
  - 4. Report also does not predict any significant negative impact due to the establishment of the said facility.
- j. The PP has made the provision to treat the combined wastewater in a separate effluent treatment plant (ETP) equipped with reverse osmosis (RO) system to ensure efficient recycle of water within the proposed CMSWMF. Wastewaters generated from non-plant use washing and other processes are treated at ETP and shall be used in floor washing, dust suppression, if required and development of green belt. These will ensure to be a zero discharge model and it will improve the water quality of the 'Salmona Spring' which is contaminated due to the leachate seepage from the existing MSW dumpsite.

- k. The existing dumpsite is being used for unscientific dumping of mixed MSW by nearby Panchayats for last 20 years and is severely contaminated, thereby posing serious risk to air, soil, surface water, and groundwater resources in and around the existing site.
- As per the joint inspection report by the Department of Science and Technology (DST), Town and Country Planning (TCP) Department, Directorate of Land Survey and Records (DSLR) and Communidadae of Saligao, the proposed alternate site was not found suitable /feasible for the MSW management.

After considering the matter from all necessary and relevant angles and after perusal of the Environmental Impact Assessment (EIA) report prepared by M/s NEERI, Nagpur and upon examination of the entire matter afresh, and after perusing the recommendations of the Goa-SEAC, this Authority has decided to accord a environmental clearance (EC) to the said project in accordance with the provisions of the Environmental Impact Assessment (EIA) Notification 2006, subject to compliance of the following 'General Conditions'.

- 1. The PP should comply with all the measures towards environment management as envisaged and documents in the Tender Document (*i.e. Concept Note and the Request for Proposal (RFP)*.
- 2. PP should comply with the terms and conditions as stipulated by the Goa State Pollution Control Board (GSPCB) while issuing Consent to Establish under the Air and Water Acts as well as Authorization issued under the Municipal Solid Waste (*Management and Handling*) Rules, 2000.
- 3. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- 4. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. In any case, no varieties of *acacia* be used either as avenue plantations or as live-fencing.
- 5. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the Authority for the period upto project completion so as to enable project monitoring during the construction phase.

- 6. In the event of a modification / alteration / expansion in the project profile or change in the implementing agency / executing agency, a fresh reference shall be made to this Authority / Regional Office of the Ministry of Environment, Forests and Climate Change (*MoEF&CC*), as applicable.
- 7. Project proponent shall advertise at least in two local newspapers widely circulated in the region, one of which shall be in the Konkani or Marathi language within seven days of the receipt of this letter, informing that the project has been accorded prior Environmental Clearance (EC).
- 8. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other reasons such as submission of false and misleading information, etc.,
- 9. Validity of the Environmental Clearance (EC) accorded shall be for a period of **05 (five)** years from the date of issue of this letter.
- 10. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

In addition, following 'project-specific conditions' need to be complied with by the PP:

- a. The PP shall make arrangement for periodic assessment of the landfill quality as the ground water changes over the period of time, so the long-term plan for site specific hydro-geological assessment should be submitted in coordination with the M/s NEERI, Nagpur. In order to keep track of groundwater quality over a long period of time, hydro-geological assessment, setup details, time frame for its periodic assessment should also be submitted. Further, the requisite clearance / NOC from the Ground Water Cell of the State Water Resources Department (WRD) shall be obtained and furnished, as applicable.
- b. The PP shall get the site conditions / physico-chemical parameters (*i.e. pH, microbial contamination, metal content, etc.*,) monitored during all the stages of construction activity *vis-à-vis* post-construction operational phase with specific reference to 'Salmona spring' at regular intervals.

- c. The tripartite concessionaire agreement for effective implementation of EMP (*refer EIA report: Section* 5, *pg. no.5*) for implementation should be submitted to the authority before commencing the plant operation.
- d. Appropriately authenticated documents accessed from the statutory agencies concerned for preparation of biodiversity inventories shall be submitted.
- e. All compliance documents shall be appropriately authenticated and signed by the concerned consultant / statutory agencies and complied.

Yours faithfully,

*Sd/-*(Srinet Kothwale) **Member Secretary, Goa-SEIAA** 

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### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY EIA-Goa State Secretariat,

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438303 Fax. no.: 2438528 e-mail: goaseac@gmail.com

*No:* 3 – 181 – 2010/STE-DIR/90

*Date:* 26<sup>th</sup> February 2015

*To,* **M/s Raheja Universal (Pvt.) Ltd,** 294, C. S. T. Road, Near Mumbai University, Off Bandra – Kurla Complex, Santacruz (East), Mumbai – 400 098

## Sub.: Proposed construction of a residential project in CTS No. 64/1-A and 67/1 in village Carmona, Salcete Taluka, South Goa district – reg.,

Sir,

I am directed to refer to your application dated 21st August 2014 and subsequently revised documents dated 17th September 2014 seeking prior Environmental Clearance (EC) for the above project proposal as mandated under the provisions of the EIA Notification, 2006 (as amended till date). Accordingly, the above proposal has been screened and appraised under Category 8 (a) - Building and construction projects (as per the 'Schedule' annexed to the said notification) on the basis of the documents enclosed with application (viz. Form-1 and Form-1A) by the Goa State Expert Appraisal Committee (Goa-SEAC – hereinafter referred as 'Committee'). Subsequently, Committee conducted the site-inspection on 23rd September 2014 followed by project-specific presentation by the NABET/QCI-accredited environmental consultant (i.e. M/s Enviro Analysts and Engineers Pvt. Ltd., Mumbai) on behalf of the Project Proponent (PP) during its 27th meeting held on 20th November 2014. Later, based on post-presentation discussions vis-à-vis verification of project/site-specific observations submitted by the PP during 28th Committee meeting held on 4th December 2014, the aforementioned proposal was recommended to Goa State Environment Impact Assessment Authority (Goa-SEIAA - hereinafter referred as 'Authority') for suitable consideration.

Further and subsequent to the site-inspection conducted by the Authority on 9<sup>th</sup> / 10<sup>th</sup> January 2015, *as decided during its* 17<sup>th</sup> *meeting held on* 5<sup>th</sup> *December 2014*, followed by verification of compliances to various site/project-specific observations/clarifications from the PP during its 18<sup>th</sup> and 19<sup>th</sup> meetings held on 12<sup>th</sup> January and 9<sup>th</sup> February 2015 respectively, the Authority subsequently during its 20<sup>th</sup> meeting held on 19<sup>th</sup> February 2015 has considered the said proposal with the following observations.

2. The Authority noted that the proposal is for grant of prior Environmental Clearance (EC) for the proposed construction of residential construction having *88 villas* (*Gr*+2) and 1 club house (B+Gr+1) in at CTS No. 64/1-A, and 67/1 of village Carmona of Salcete Taluka, South Goa district. Further, it was also noted that –

- (i) The 'revised proposal' has been scaled down and has been designed considering the local ecology and demography.
- (ii) There has been no reduction in the density of green-cover (*i.e. mangroves*), especially along the river-front, since the time of acquisition of plot till date as displayed through the series of Google images over a period of years. The green-cover comprised of coconut trees/grove with a land parcel as 'settlement' as per RP-2001, However, PP has accepted the fact that there exist a small patch of *Acanthus ilicifolius* in the proximity of the plot besides a few trees of *Avicennia marina*. Such areas comes under the purview of the CRZ Notification, 2011 and are protected.
- (iii) As regard to approach / access to the proposed site, it was informed that there exist three (03 nos.) roads with variable width. Further, empirical data along with simulation on traffic density on the adjacent and the main road suggest that existing road commensurate with the current and calculated / projected traffic density after completion of the project.
- (iv) PP, in consultation with the Department of Forests, Goa, has proposed to establish a 'Wetland Interpretation Center (WIC)' at Carambolim lake in North Goa (Tiswadi Taluka) as a part of Corporate Social Responsibility (CSR) in addition to other CSR-related initiatives of local site-specific relevance.

Project details and salient features of the proposed developmental activity, as submitted by the proponent, is as under –

1. Total plot area	– 88,874 sq. mts.
2. Net plot area	- 60,737.83 sq. mts

3. Total Build up Area -- 48,717.76 sq.mts.

4. FAR area (proposed) – 34,263 sq.mts. (permissible) – 39,916.33 sq.mts.

5. Non FAR area	14454.51sq. mts.
6. Proposed parking -	204 nos. (including clubhouse)

7. Occupancy Load- 1,060 nos.

**8.** Water Consumption: a) *During construction phase*: about 30 KLD to be sourced through tankers for construction-related activities. b) *During operational phase*: Total requirement of 253 KLD - to be sourced through PWD (i.e. fresh water – 153 KLD) and remaining (i.e. 99 KLD) – to be made available through STP-treated recycled water. Fire tank capacity – 100 m<sup>3</sup> / Domestic – 250 m<sup>3</sup>. Flushing -70 m<sup>3</sup>, garden and waterbody 180 m<sup>3</sup>, RWH tank - 185 m<sup>3</sup>.

**9. Treatment of Solid waste generated:** Solid waste 456 kg/day (*i.e. Biodegradable wastes - 291 kg/day and Non-biodegradable waste - 165 kg/day*). Biodegradable waste is proposed to be treated with on-site waste management technology, while non-biodegradable waste is proposed to be treated / disposed-off through a authorized recycler.

Further, sewage sludge: 3 kg/day as well as generation of grey water - 63 KLD is proposed to be treated in 75-KLD STP while generation of black water – 36 KLD is proposed to be treated in 50-KLD STP facilities. Treated water is to be used for domestic flushing purpose (*i.e. dual-plumbing system*).

**10. Air and Noise pollution:**\_During construction phase, there will be increase in dust emission due to transportation of construction raw materials, vehicular exhaust generated due to traffic, excavation and land development during the construction phase. Accordingly, remedial measures will be adopted for reduction of noise level by providing ear muffs /ear plugs to the workers on-site. Construction will be carried out only during day time, buffer zone is proposed to be created by planting tree (*i.e. biological barrier*) and adherence to smooth flow of traffic management.

**11. Power requirement and conservation:** a) *During construction phase* – 200 KVA – to be sourced from Goa State Electricity Board. B) *During operational phase* – maximum demand - 2,160 KW and connected load – 5,205 KW. Provision of solar energy proposed within common area / water heating purposes in all the units.

**12.** Geotechnical Investigation Results (*M/s. Alcon Construction Goa Pvt. Ltd.*) - The report indicates that sub-surface soils generally consist of residual soils overlying lateritic bedrock. The vertical cut-section consists of -

As	Layer 1 : red clay Layer 2: red lateritic bed rock, 3.5m -7m of the bedrock was weathered.	
110	per the SPT test core recoveries & RQD ranged between 0%-53%. Rock compressive strength between 15.0m -15.66 m below	
groun other	nd surface. No ground water was encountered in the boreholes	
other	than drilling activities.	

Accordingly, foundation is proposed upto a **maximum depth of 3 – 5 mts.BGL** (*i.e. in case of clubhouse*).

Considering the above facts vis-à-vis ascertaining the compliances received from the PP, the Authority has decided to accord prior environmental clearance (EC) to the proposed construction activity under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following **"General Conditions**":-

- j. Nutrient-rich top soil excavated during the construction phase (*from the non-CRZ areas*) be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation.
- k. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- 1. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.

- m. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local plant species.
- n. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity visà-vis its landuse categorization / zoning.
- o. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the EIA- Goa State Secretariat, Patto, Panaji for the period upto project completion so as to enable project monitoring during the construction phase.

In addition, the project proponent should mandatorily submit the compliance to the following **"Specific conditions"** prior to initiate any construction / expansion activity on the site,

- a. Working plan to harness solar photo-voltaic (PV) power towards the south facing walls on building of the proposed complex be ascertained. Provide details if possible based on architectural designs.
- b. Demolition and debris management plan for existing structures (*i.e. caretaker's bungalow*) within the proposed plot.

Further, the project proponent has been advised as regard to the following:

- a. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD), Govt. of Goa prior to construction/operation of the project.
- b. Project proponent shall not make any change in the Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authorities, as applicable.
- c. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
- d. The diesel generator sets (D.G. set), if any, to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards as per the conditions laid down by the GSPCB.

- e. The installation of the Sewage Treatment Plant (STP) need to be certified by the GSPCB and a report in this regard should be submitted to the Authority before the project is commissioned.
- f. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.
- g. The Environmental Clearance is being issued without prejudice to the legal interventions / court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court / National Green Tribunal (NGT) will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- h. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- i. Validity of the Environmental Clearance (EC) shall be for a period of 05 (five) years from the date of its issue.
- j. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully,

Sd. /-

(Srinet Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

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### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438303 Fax. no.: 2438528

e-mail: goaseac@gmail.com

No: 3 – 181 – 2010/STE-DIR/84

Date: 30<sup>th</sup> January 2015

*To*, **M/s Marvel Resort Pvt. Ltd.,** Marvel Realtors, 301-302, Jewel Tower Lane 5, Koregaon Park, Pune - 411001

# Sub.: Proposed construction of residential complex in P. T. sheet no. 121 and Chalta no. 2, 3, 4, 38, 39 & P. T. sheet no. 130 and Chalta no. 33 of St. Inez village, Tiswadi Taluka, North Goa district – reg.,

Sir,

I am directed to refer to your application dated 10<sup>th</sup> February 2014 seeking prior environmental clearance (EC) for the above project as mandated under the provisions of the EIA Notification, 2006 (*as amended till date*). Accordingly, the above proposed has been screened and appraised under **Category 8 (a) – Building and construction projects** (*as per the Schedule annexed to the said notification*) and categorized as **category 'B' project** on the basis of the documents enclosed with application. viz. Form-1 and Form-1A. Subsequently, the Goa-State Expert Appraisal Committee (*Goa-SEAC – hereinafter referred as 'Committee'*) conducted the site-inspection on 1<sup>st</sup> April 2014 and was followed by joint project-specific presentation by the NABET/QCI-accredited environmental consultant, on behalf of the Project Proponent (PP), during its 21<sup>st</sup> meeting held on 29<sup>th</sup> April 2014. Later, based on post-presentation discussions during 22<sup>nd</sup> Committee meeting held on 13<sup>th</sup> May 2014, the aforementioned proposal was recommended to the Authority with mandatory compliance / submission to site/project-specific observations.

Further, Goa State Environment Impact Assessment Authority (*Goa-SEIAA – hereinafter referred as 'Authority'*), as decided during its 13<sup>th</sup> meeting held on 31<sup>st</sup> July 2014, conducted site-inspection on 10<sup>th</sup> October 2014 and sought additional compliances / submission to site / project-specific observations. Further, due to non-compliance / non-submission of project / site-

specific observations, the Authority, during its 14<sup>th</sup> meeting held on 3<sup>rd</sup> November 2014, reverted the proposal to the Committee (*who has earlier recommended the proposal during its 22<sup>nd</sup> meeting held on 13<sup>th</sup> May 2014*) for further action. Later, after verification of project / site specific compliances submitted by the PP on 26<sup>th</sup> November 2014, the Committee, during its 28<sup>th</sup> meeting held on 4<sup>th</sup> December, forwarded the recommendations to the Authority. Thereafter, the Authority, during its 18<sup>th</sup> meeting held on 12<sup>th</sup> January 2015, has considered the said proposal with the following observations.

2. The Authority noted that the proposal is for grant of prior environmental clearance (EC) for the proposed construction of residential complex comprising of **106 flats** (i.e. 2 BHK - (23 nos.), 3 BHK - (54 nos.), 3.5 BHK - (26 nos.), 4.5 BHK - (01 no.), 5.5 BHK - (02 nos.)) and **Bungalow** - (01 no.).

Project details and salient features of the proposed developmental activity, as submitted by the proponent, is as under –

- a. Total plot-area 8,184.00 sq. mts.
  - (i) Area under road-widening 15.74 sq. mts.
  - (ii) Net plot-area 8,168.26 sq. mts.
- b. Total proposed Built up-area (BUA) 28,648.80 sq. mts.
- c. (a) Required open-space 1,225.23 sq. mts., (b) Available open-space 1,270 sq. mts.
  (c) Total proposed covered area 3,007.00 sq. mts.
- d. Total Proposed FAR 16,210.86 sq. mts.
- e. Population (a) In-house 535 (b) Floating 27, Total = 535
- f. (a) Parking required 218 (b) Parking provided 233 (Basement Parking: 140, Stilt Parking: 81, Surface Parking: 12)
- g. Water Consumption (a) *Construction phase* : 20 CMD (18 CMD + Domestic use: 2 CMD) to be sourced through tankers.
  - (b) Operation phase : 87 KLD (51 KLD Fresh water, 25 KLD treated water from STP : 25 KLD for flushing and 10 KLD for landscape area) - fresh water to be sourced from PWD.
- h. Treatment of Solid waste (a) *Construction phase*: Appr.1-2 MT of construction debris. Other solid waste generated will be segregated, stored separately for recycling / reuse, as applicable.

(b) Operation Phase: Total solid waste - 399 Kg/day
(*i.e. Biodegradable - 160 Kg/day (to be treated on-site in mechanical composting unit (vermicomposting)* & compost will be used for landscaping) and non-biodegradable – 239 Kg/day (To be recycled & disposed-off through scrap dealers).

i. Power Requirement and conservation – (a) *Construction phase* – 01 D.G. set of 50 KVA.

(b) *Operation phase* – 1,807 KW – to be sourced from Goa Electricity Department.

Power Back up: (a) D.G. sets (01 of 160 KVA and 02 of 200 KVA) (b) Transformers (01 of 630 KVA and 01 of 315 KVA)

Energy Consumption assumed - 4 W per Sq. ft.

In addition, energy-efficient electrical installations are proposed. Solar energy is proposed for street lights / garden lights and for water heating so as to meet total

of energy requirement.

j. Geotechnical Report (M/s Durocrete Engineering Services Pvt. Ltd., Pune) - : It is recommended to adopt Bored cast in situ piles.

In view of the above and based on Committee's recommendations, the Authority has decided to accord prior environmental clearance (EC) to the proposed developmental activity under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

- p. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation.
- q. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- r. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirements.
- s. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.

20%

- t. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- u. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its land use categorization / zoning.
- v. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the Authority for the period upto project completion so as to enable project monitoring during the construction phase.
- **3.** In addition, the project proponent should mandatorily submit the compliance to the following **"Specific condition"** prior to initiate any construction / expansion activity on the site,
  - c. Proposed rain-water harvesting initiatives cannot be treated as Corporate Social Responsibility (CSR) activity, as such, PP should spell out site-specific CSR initiatives, primarily focussing on remediation of the St. Inez Creek in consultation with the Department / Authority concerned along with inclusion of pragmatic budgetary head for the said purpose.
- 4. Further, the project proponent has been advised as regard to the following:
  - k. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - 1. Project proponent shall not make any change in the Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authorities, as applicable.
  - m. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
  - n. The diesel generator sets (D.G. set), if any, to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards as per the conditions laid down by the GSPCB.
  - o. The installation of the Sewage Treatment Plant (STP) need to be certified by the GSPCB and a report in this regard should be submitted to the Authority before the project is commissioned.

- p. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.
- q. The Environmental Clearance is being issued without prejudice to the legal interventions / court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court / National Green Tribunal (NGT) will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- r. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- s. Validity of the Environmental Clearance (EC) shall be for a period of 05 (five) years from the date of its issue.
- t. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully,

Sd.-(Srinet Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

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### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438303 Fax. no.: 2438528

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/83* 

Date: 30<sup>th</sup> January 2015

Тo,

M/s Counto Metals & Mining Co Ltd., Sukerkar Mansion, 1<sup>st</sup> Floor, M. G. Road, Panaji, Goa – 403 001

### Sub.: Proposed twin-jetty with common deck for loading / unloading purpose in survey nos. 18/2, 18/3, 18/4, 18/5, 19/2 and 20/1 of Tixem village, Pale-Kothambi, Bicholim Taluka, North Goa district – reg.,

Sir,

I am directed to refer to your application dated  $11^{\text{th}}$  August 2014 seeking prior Environmental Clearance (EC) for the above project as mandated under the provisions of the EIA Notification, 2006 (*as amended*). Accordingly, the above proposed has been screened and appraised under **Category 7(e): Physical infrastructure including environmental services** ports, harbours, break waters, dredging (*since proposed cargo handling capacity is < 5 million TPA*) as category – B project (*as per the Schedule annexed to the said notification*) on the basis of the documents enclosed with application viz. Form-1 by the Goa State Expert Appraisal Committee (Goa-SEAC), *hereinafter referred as 'Committee'*. Subsequently, the Committee conducted the site-inspection on 16<sup>th</sup> September 2014 and was followed by a project-specific presentation by the NABET/QCI-accredited environmental consultant, on behalf of the Project Proponent (PP), during its 27<sup>th</sup> meeting held on 20<sup>th</sup> November 2014. Later, based on postpresentation discussions held during 28<sup>th</sup> Committee meeting on 4<sup>th</sup> December 2014, the aforementioned proposal was recommended to the Goa State Environment Impact Assessment Authority (Goa-SEIAA), *hereinafter referred as 'Authority'* seeking mandatory compliances to certain project / site-specific observations.

Further, the Authority during its 18<sup>th</sup> meeting held on 12<sup>th</sup> January 2015, has considered the said proposal with the following observations.

2. Goa-SEIAA noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed expansion of Twin jetty with common deck for loading and unloading in survey nos. 18/2 to 18/5, 19/2 & 20/1 at Tixem in Kothambi village, Bicholim Taluka, North Goa district. Project details and salient features of the proposed developmental activity, as submitted by the proponent, is as under –

1. Total plot area (Privately owned land) - 23,317.00 sq.mts

110 mts.

225 mts.

- 2. Water front length of the project
- 3. Width of the river at proposed jetty
- 4. Storage facilities
  - a. Open stockyard (*hard paved*)
  - b. Covered storage shed
  - c. 2 Silos
- 5. Cargo handling capacity 3 MMT (*Max*.) per annum (*loading* / *unloading*) of dry cargo.

#### Solid **Bulk / Granular Break bulk / Box** Types of cargo Marble, Granite, 1. Slag, Clinker, Cement. Tiles, food grain bags Timber, Wood logs 2. Wood chips, bentonite, iron sugar bags, cement bags. and other dry cargo ore, scrap, gypsum and scrap and other container other dry cargo dry cargo Mode of Cranes with strapping 1. Cranes and Excavators Cranes- pelletized format handling arrangements. with closed grabs 2. Enclosed hopper 3. Covered belt conveyor systems. Storage area Open stockyard 1. Silos for fine material like Covered shed for defined food-grain bags, cement 2. Open stockyard for coarser sugar bags, cement materials like clinker, wood bags. chips, bentonite, iron ore, scrap and other dry cargo

### 6. Cargo type and mode of handling / operation -

7. Total fresh-water requirement – 10 KLD – for domestic use and sprinkling (*Partly through a near-by well and partly through tanker*)

### 8. Solid waste generation –

g. *During construction phase* – construction waste will be segregated and reused on site /sent for recycling. Proper facility for storage of construction wastes will be made on site.

h. *During operational phase* – The total waste generated (*1.12 kgs./day*), being biodegradable in nature, will be composted on-site. While, the domestic sewage (1. 12 kgs./day) generated will be treated in proposed septic tanks and soak pit.

9. Power requirements – 150 KVA – to be sourced from Goa Electricity Department and

### 01 D.G. set of 125 KVA capacity.

In view of the above and based on compliances to specific Goa-SEAC observations, Goa-SEIAA, has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

- w. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation.
- x. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- y. The Project Proponent (PP), considering the project-specific site, should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirements.
- z. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority.
- aa. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- bb. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment. No any varieties of *acacia* be used.
- cc. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization /zoning.
- dd. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.

- **5.** In addition, the project proponent should mandatorily comply and submit the following "<u>information / document</u>" prior to initiate any construction activity on the site, namely
  - a. Access road to the proposed facility should be suitably widened, wherever feasible, and maintained by the PP.
  - b. PP should furnish contingency plan for spillage during construction phase and handling / operational phase.
  - c. PP shall conduct a Primary Biodiversity Inventorization (PBI), with specific reference to 'avifaunal listing' in a radius of 2-km of the project site and submit the same on its completion.
  - d. One season data on 'air quality' be generated and submitted.
- 6. Further, the project proponent has been advised as regard to the following:
  - u. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.
  - v. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - w. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
  - x. The diesel generator sets (D.G. set) to be used, if any, should be low sulphur diesel type and should conform to Environment (*Protection*) Rules prescribed for air and noise emission standards as per the conditions laid down by the Goa-PCB.
  - y. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.
  - z. The Environmental Clearance is being issued without prejudice to the legal interventions / court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court / National Green Tribunal (NGT) will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
  - aa. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the

satisfaction of the Authority or for that matter, for any other administrative reasons.

## bb. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

cc. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully,

Sd./-(Srinet Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

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### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438303 Fax. no.: 2438528

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/82* 

Date: 30<sup>th</sup> January 2015

То,

### M/s Kamat Real Estates Developers

F/1, Indira Apartments, Caetano Albuquetque Road, Panaji, Goa – 403 001

# Sub.: Proposed residential-cum-commercial complex - "Kamat's Marao Kenny Complex" on land bearing Chalta no. 7 of P.T. Sheet no. 144 of City survey, Panaji within the limits of Corporation of the City of Panaji (CCP) at Carazalem, Panaji, Tiswadi Taluka, North Goa district.

Sir,

I am directed to refer to your application dated 18<sup>th</sup> August 2014 seeking prior Environmental Clearance (EC) for the above project as mandated under the provisions of the Environment Impact Assessment (EIA) Notification, 2006 (*as amended till date*). Accordingly, the above proposed has been screened and appraised under Category 8 (a) – Building and construction projects (*as per the Schedule annexed to the said notification*) and as category 'B' project on the basis of the documents enclosed with application. viz. Form-1 and Form-1A. Subsequently, Goa-State Expert Appraisal Committee (*Goa-SEAC – hereinafter referred as* '*Committee*') conducted the site-inspection on 16<sup>th</sup> September 2014 and was followed by projectspecific presentation by the NABET/QCI-accredited environmental consultant on behalf of the Project Proponent (PP) during its 27<sup>th</sup> meeting held on 20<sup>th</sup> November 2014. Later, based on post-presentation discussions held during 28th Committee meeting on 4<sup>th</sup> December 2014, the aforementioned proposal was recommended to Goa State Environment Impact Assessment Authority (*Goa-SEIAA – hereinafter referred as "Authority*) seeking mandatory compliances to certain project / site-specific observations. Further, the Authority during its 18<sup>th</sup> meeting held on 12<sup>th</sup> January 2015, considered the said proposal with the following observations.

**2**. The Authority has noted that the aforementioned proposal is seeking environmental clearance (EC), as per the provisions of the EIA Notification, for proposed residential-cum-commercial complex – "**Kamat's Marao Kenny Complex**" on land bearing Chalta no. 7 of P.T. Sheet no.

144 of City survey, Panaji within the limits of Corporation of the City of Panaji (CCP) at Carazalem, Panaji, Tiswadi Taluka, North Goa district. Further, it was understood that the PP has completed > 50% of the proposed activity on-site and has submitted the application at a later stage of the project execution (*i.e. post-facto*) and has officially substantiated the inadvertent delay which is due to "revision in non-FAR areas during the initial phase of project execution". The proposed development (*after completion*) consists of basement, stilt and upper floors (*i.e. stilt* + 8 *floors*) with 88 residential flats and 17 shops.

Project details and salient features of the proposed developmental activity, as submitted by the proponent, is as under -

21. Total Plot Area -5,862.00 sq. mts.

### 22. Total proposed Built-up area (BUA) – 23,255.89 sq.mts.

23. Parking required – 145, parking provided – 146

4. Water Requirement: - (a) Construction Phase : 20 CMD (construction activity 18 CMD + domestic 2 CMD): Source: Private tankers +

PWD

(b) *Operation Phase* : 77 KLD (domestic - 42 KLD + Landscaping) : Source:PWD

5. Waste-water Treatment - Sewage generated to be disposed through municipal sewer

6. Power Requirements – (a) Construction Phase : D.G. set of 10 KV.
(b) Operation Phase : 849 KW – to be sourced through Goa Electricity Board Power back up : Two D.G. sets (one of 250 KVA and another of 160 KVA).

### 7. Treatment of Solid / liquid waste generated -

 (a) Construction Phase : The solid waste/liquid effluent generation is not significant. Construction waste will be segregated and reused on site or sent for recycling. Proper facility for storage of construction wastes will be made on site.

(b) Operation Phase : (i) Total Domestic waste: 178 kg/day. (i.e. Biodegradable

waste:

105 kg/day and non-biodegradable waste: 73 kg/day).

Domestic garbage is segregated into dry and wet wastes and then disposed accordingly. The dry waste is entrusted to the Municipal Corporation and wet waste is treated through on-site Compost Pits and manure will be used for landscaping. Waste water generated will be disposed through municipal sewers.

# 8. Air Environment – Increase in SPM levels, during the construction phase, due to transport of materials, excavation and land development will be temporary in nature.

7. In view of the above and based on Committee's recommendations, the Authority has decided to accord environmental clearance (EC) to the said project under the provision of EIA Notification, 2006; subject to compliance to the following "General Conditions" :-

- ee. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- ff. The Project Proponent (PP), considering the project-specific site, should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards minimizing power requirements through national grid.
- gg. PP should adopt roof-top rainwater harvesting / conservation measures to optimally utilize the water availability by constructing sumps for collection of rainwater. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers.
- hh. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- ii. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment. No varieties of *acacia* be used either as avenue plantations or as live-fencing.
- jj. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization /zoning.
- kk. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEIAA for the period upto project completion.
- In addition, the project proponent should mandatorily comply with the following "Specific condition" and submit the information prior to initiate any further activity on-site.
  - (i) <u>'Avifaunal listing</u>' needs to be carried out by undertaking primary data collection within a radius of 2-kms around the project site.

- 9. Further, the project proponent is advised to comply with the following:
  - dd. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEIAA.
  - ee. Permission to draw groundwater, as applicable, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - ff. Project proponent shall not make any change in the Surface Layout Plan / Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the Authority.
  - gg. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
  - hh. The diesel generator sets (D.G. set) to be used during construction / after commissioning should be low-sulphur diesel type and should conform to Environment (*Protection*) Rules prescribed for air and noise emission standards as laid down by the GSPCB.
  - ii. The installation of the Sewage Treatment Plant (STP) should be certified by the GSPCB and a report in this regard should be submitted to the Authority before the STP is commissioned.
  - jj. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter will be available on the DST&E website.
  - kk. The Environmental Clearance is being issued without prejudice to the legal interventions / court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court / National Green Tribunal (NGT) will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
  - 11. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

# mm. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

nn. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully,

Sd./-

(Srinet Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

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# GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438303 Fax. no.: 2438528

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/*81

Date: 20<sup>th</sup> January 2015

*To,* **M/s Devashri Real Estates Developers,** 710, 7<sup>th</sup> Floor, Dempo Towers, Patto Plaza, Panaji, Goa – 403 001

# Sub.: Proposed Residential Buildings in survey no. 361/1 (Plot-A), Socorro village, Bardez taluka, North Goa district - reg.,

Sir,

I am directed to refer to your application dated 5<sup>th</sup> August 2014 seeking prior Environmental Clearance (EC) for the above project under the provisions of the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) B – Building and construction projects (*as per the Schedule annexed to the said notification*) on the basis of the documents enclosed with application viz. Form-1 and Form-1A. Subsequently, Goa-State Expert Appraisal Committee (Goa-SEAC), *hereinafter referred as 'Committee'*, conducted the site-inspection on 16<sup>th</sup> September 2014 and was followed by projectspecific presentation by the NABET/QCI-accredited environmental consultant on behalf of the Project Proponent (PP) during 27<sup>th</sup> Committee meeting held on 20<sup>th</sup> November 2014. Later, based on post-presentation discussions during 28<sup>th</sup> Committee meeting held on 4<sup>th</sup> December 2014, the aforementioned proposal was recommended to Goa-SEIAA, *hereinafter referred as 'Authority'*, seeking mandatory compliances to certain project / site-specific observations. Accordingly, the Authority during its 18<sup>th</sup> meeting held on 12<sup>th</sup> January 2015, has considered the said proposal with the following observations.

2. The Authority noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed construction of Residential buildings (*stilt* + 4-*floors*) with 400 nos. of flats (*i.e.* 3-BHK – 112 and 2-BHK – 288) in survey no. 361/1 (Plot-A) of Socorro village, Bardez Taluka in North Goa district. Project details and salient features of the proposed developmental activity, as submitted by the project proponent, is as under –

- 1. Total Plot Area (Plot A) 45,613.00 sq. mts. (refer (2) + (4))
- 2. Plot area under settlement zone 39,882 sq.mts.
- 3. Area for road and road-widening in Settlement zone 1,123 sq.mts.
- 4. Plot area under Non-settlement (Orchard) 5,731 sq.mts.
- 5. Area for road-widening in Non-settlement zone 422 sq.mts.
- 6. Total area in road-widening -1,545 sq.mts. (refer (3) + (5))
- 7. Net plot area under settlement zone -38,759 sq.mts. (*refer* (2) -(3))
- 8. Net plot area under non-settlement zone -5,309 sq.mts. (*refer* (4) -(5))

## 9. Total proposed build up area (BUA) for plot A - : 61,894 sq.mts.

10. Open Space required (15%): 5,983 sq.mts. - Open Space proposed: 6,030.00 sq. mts.

- 11. Parking provided: 414 nos.
- 12. Height of the building 14.65 mts.

13. Water Requirement: - (a) Construction Phase: 50 M <sup>3</sup> /day
(b) Operation Phase: 270 KLD/day and for Fire fighting:
$100M^3$ . Swimming pool-120 M <sup>3</sup> . – to be sourced from the
PWD

14. Wastewater Treatment – 232 KLD of sewage generated (232 KLD) is proposed to

treated 270;KLD capacity STP & treated water will be reused for flushing, gardening and car washing.

- 15. Solid waste Management (a) Construction phase: Approx. 100 kg per day,
  (b) Operation Phase: 1,000 Kg/day
- 16. **Power Requirement -** (a) *Construction phase* 50 KVA to be sourced from Goa State Electricity Board and Generator.
  - (b) Operation phase 2,801.79 KVA to be sourced from Goa

State

be

Electricity Board. For Power Back up – 9 nos. of DG of 30 KVA each.

12. Air Environment – Proper precaution will be taken to reduce the particulate matter by sprinkling of water on the dry site area, barricading the periphery by corrugated tin sheets of 4.0 mtr. Height to protect the surrounding area from dusting to minimize air pollution. Pollution generated by vehicles will be controlled by allowing vehicles that comply to Mass Emission Standards (*Bharat stage II*).

16. Land Environment --- The land is situated in the Development/settlement Zone. The

development of the project will be done on the same plot. The land use is confirming to the approved master plan/Development plan. The surrounding area is developing into commercial and residential area.

**10.** In view of the above and based on compliances to project-specific observations, the Authority has decided to accord prior environmental clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; with the following

## "General Conditions":-

- 11. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation.
- mm. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- nn. The Project Proponent (PP), considering the project-specific site, should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards minimizing power requirements through national grid.
- oo. PP should adopt roof-top rainwater harvesting / conservation measures to optimally utilize the water availability by constructing sumps for collection of rainwater. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures, etc.
- pp. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- qq. As communicated, the PP should initiate and execute "Animal Adoption **Programme**" in <u>Bondla Zoo</u> as conservation measures as proposed vis-a-vis finalized in consultation with the Department of Forest, Goa.
- rr. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- ss. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment. No varieties of *acacia* be used either as avenue plantations or as live-fencing.

- tt. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization /zoning.
- uu. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- 11. In addition, the project proponent should mandatorily comply with the following

"Specific conditions" and submit the following information / document prior to initiate /

undertake any on-site activities.

- a. On proposed execution of Corporate Social responsibility (CSR) the requisite evidences may be furnished by the PP from time to time. Details on conservation initiative in lieu of Schedule-I species on site also need to be provided.
- b. Inventory on the Ephemeral Flush Vegetation (EFV) from the lateritic substrata be submitted at appropriate stage and season.
- c. The PP should monitor presence / movement of any floral / faunal species of conservation concern' (*as per IWPA, 1972 and IUCN*) during the initial phase of project execution and report accordingly.
- 12. Further, the project proponent has been advised as regard to the following:
- oo. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEIAA.
- pp. Permission to draw groundwater, as applicable, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
- qq. Project proponent shall not make any change in the Surface Layout Plan / Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the Authority.
- rr. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
- ss. The diesel generator sets (D.G. set) to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards as laid down by the GSPCB.
- tt. The installation of the Sewage Treatment Plant (STP) should be certified by the GSPCB and a report in this regard should be submitted to the Authority before the STP is commissioned.

- uu. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter will be available on the DST&E website.
- vv. The Environmental Clearance is being issued without prejudice to the legal interventions / court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court / National Green Tribunal (NGT) will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- ww. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

# xx. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

yy. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully, Sd/-(Srinet Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

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### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY EIA-Goa State Secretariat,

3rd Floor, Dempo Towers, Patto, Panaji, Goa - 403 001Phone nos.: 2438303Fax. no.: 2438528

e-mail: goaseac@gmail.com

No: 3 - 181 - 2010/STE-DIR/76

Date: 8th January 2015

*To,* **M/s Akar Creations Pvt. Ltd,** Lake Plaza.Opp.Nehru Stadium, Fatorda, Margao, Goa-403602.

# Subject: Environmental Clearance for Group Housing & Commercial Project "AKAR EXCELSIOR" in Survey No. 40/0 of Village: Vanelim, Taluka: Salcete, South Goa.

### Ref.:Yours resubmission of a revised application dated 2<sup>nd</sup> May 2014

Sir,

With reference to the above subject matter, this is to inform you that the Goa State Environmental Impact Assessment Authority had earlier considered the following points while issuing environmental clearance (EC) to the above project vide this office letter no. 3-181-2010/STE-DIR/20, dated 15.06.2012 as per the procedure laid in the EIA Notification, 2006. These are listed as under –

(a) M/s Akar Creations Pvt. Ltd., Margao (herein after referred to as PP) purchased the property bearing Survey No. 40/0 admeasuring 25,375 square meters, situated in the village Vanelim of Salcete Taluka of South Goa District, in the State of Goa, vide the Deed of Sale dated 12-03-2007 from its erstwhile owners. For the purpose of development of the said property, PP has obtained Exemption Certificate on 02.03.2007 from the Deputy Collector of South Goa District, stating that conversion of use of land (*under the Goa Land Revenue Code, 1968*) is not required. PP has also drawn plans for development of the said land, and got the same approved on 28.03.2007 from the Town & Country Planning (TCP) Department, and the Village Panchayat of Sernabatim, Vanelim, Colva and Gandaulim, has also granted Construction Licence on 31.03.2007. Construction activity of the project was commenced in April 2007.

(b) A local NGO - Colva Civic and Consumer Forum (CCCF), Colva (herein after referred to as Petitioner) on 20.04.2009 has filed a Writ Petition No. 297/2009 against the State of Goa as well as various licensing departments and the PP concerned raising several issues, such as EC is not obtained, Conversion Sanad is not obtained, Mundkars are not settled, etc. PP has filed its detailed reply to the said Writ Petition on 21.06.2009 and 07.09.2009, complying with relevant issues raised by the Petitioner. PP has also admitted that it did not obtain the prior environmental clearance (EC), since the Environment Impact Assessment (EIA) Notification was notified and came into force in 2006 and there was some confusion as regards the total proposed built-up areas (BUA) in a housing scheme, as the concept of BUA and its entities (i.e. areas to be considered while calculating BUA) was not clear in the said Notification vis-a-vis earlier EIA Notification of 1994. However, the PP forwarded the application (with relevant enclosures), seeking environmental clearance, to the Ministry of Environment and Forests (MoEF). New Delhi on 01.09.2009. The PP appraised the facts before the Expert Appraisal Committee (EAC) of the said Ministry, constituted for the construction sector, and accordingly the project proposal was considered during 75th and 76th EAC meeting held on 07.10.2009 and 20.11.2009 respectively and was recommended for grant the Environmental Clearance with 'Silver grading' and PP was informed accordingly on 30.11.2009 that the same is under process for issuance. During the meantime, w.r.t. a Writ Petition before the Hon'ble High Court, the PP has submitted Affidavit in January 2010 conveying its willingness to pay conversion charges of Rs. 6,34,375/- to the Authority concerned (i.e. Revenue Department) if the order is so issued inspite of obtaining Exemption Certificate.

Subsequently, the MoEF constituted the Goa State Environment Impact Assessment Authority (Goa-SEIAA) in April 2010 and accordingly, the proposal was redirected to the State EIA Authority for further screening, appraisal and processing the matter. Considering the post-facto status of the project proposal vis-a-vis MoEF observations, the Goa-SEIAA issued environmental clearance to the said project after imposing penalty / fine of Rs. 6 lakhs against the pp in June 2012.

 Subsequently, on complaint received from Colva Civic and Consumer Forum (CCCF), Colva a Show-Cause Notice (SCN) was issued by this Authority on 10-09-2012. The PP, while submitting the reply on 26.09.2012 to the Show-Cause Notice in response to the mis-representation as alleged by the CCCF, stated that the 'Undertaking' sworn-in in the Hon'ble High Court is regarding payment of Conversion Fee, if found necessary and accordingly ordered so by the Court; while payment of Rs.6 lacs paid to the Authority is towards the fine levied by the Authority towards violating the provisions of the EIA Notification.

In the meantime, **Colva Civic and Consumer Forum (CCCF)**, **Colva** filed an Appeal No. 52/2012 on 13.09.2012 before National Green Tribunal (NGT), New Delhi, challenging the grant of environmental clearance (EC) by this Authority for the said project.

3. Further, the MoEF issued an Office Memorandum (O.M.) dated 12<sup>th</sup> December 2012 specifying general guidelines to be complied by the Project Proponents, while considering such proposals for environmental clearance, involving violation of provisions of the Environment (Protection) Act, 1986 as well as various other Notifications (i.e. CRZ, EIA) issued thereunder. The Hon'ble National Green Tribunal (NGT), New Delhi, in response to the Appeal No. 52/2012 filed by the CCCF, vide its Order dated 22.02.2013 directed the PP to maintain "status quo" till disposal of the said appeal. It was however submitted that since such Order, directing to maintain the status quo, was not communicated to PP in time by the counsel representing the PP before the NGT, the on-site work was continued. Therefore, the CCCF filed complaint before this Authority on 26.02.2013 stating that PP has violated the said Order passed by NGT on 22.02.2013. Subsequently and after hearing the matter, the Authority issued Stop Work Order to PP on 15.03.2013. As a result, construction activities were stopped by PP with a submission that they had no intention of violating the Order passed by the Hon'ble NGT, New Delhi. Subsequently, in response to the O.M. dated 12<sup>th</sup> December 2012 referred above, the Authority, vide its letter dated 15.04.2013, directed the PP to comply with the said guidelines contained therein (*i.e. clause 5(i*)). Accordingly, PP has submitted its compliance vide letter dated 13.05.2013 and 15.05.2013. It is to be mentioned here that validity of the Authority had expired by this time and as such, said compliance could not be considered for any decision in the matter. During the course of time, the NGT disposed of the Appeal No. 52/2012 on 30.07.2013 stating that nothing remained in the said petition since the matter is before the Authority. Further, the Authority was re-constituted only in December 2013 and accordingly, the Authority, vide its letter dated 26.02.2014, informed PP that the project stands

delisted and the PP is at liberty to apply afresh for the environmental clearance (EC) with revised EMP.

- 3. In pursuance to the directions of the Hon'ble NGT vis-a-vis subsequent decision / communication of the Authority dated 26<sup>th</sup> February 2014, PP has applied afresh seeking Environmental Clearance for the said project on 02.05.2014. In view of project facts w.r.t. succession of the events, the re-constituted Goa State Expert Appraisal Committee (*hereinafter called as Committee*) conducted site-inspection 15<sup>th</sup> July 2014 and finally project proposal was presented before 25<sup>th</sup> Committee meeting held on 9<sup>th</sup> September 2014. Compliances to project-cum-site specific observations were submitted by the PP on 16<sup>th</sup> September 2014. Subsequently, the Committee during its 27<sup>th</sup> meeting held on 20<sup>th</sup> November 2014, after verifying the relevant submissions, recommended the proposal for grant of environmental clearance (EC).
- 4. It is noted that the proposal is for grant of environmental clearance (EC) for the Group Housing & Commercial Project "AKAR EXCELSIOR" at Survey No. 40/0 of Village: Vanelim, Taluka: Salcete, South Goa, Goa. The project details and salient features of the project development activity, as submitted / furnished by the project proponent (PP), is as under: -
  - 1) The total plot area of the project: 6.27 acres (25,375.00 sq. mts.) and Effective Plot Area: 5.71 acres (23,092.00 sq.mts.)
  - 2) Built up area (BUA) of the project: 30,035.86 sq. mts.
  - 3) Area already constructed: 27,435.40 sq. mts.
  - 4) Area to be constructed: 2,600.46 sq. mts.
  - 5) Ground coverage of the project: 7,623.01 sq. mts. (33.01 %)
  - 6) F.A.R. Permissible: 20,300 sq. mts. (80.00 %), F.A.R. proposed: 20,198.83 sq. mts (79.60 %)
  - 7) Required Parking: 340 ECS, Parking provided: 347 ECS
  - 8) Estimated population: 1,399 persons.
  - 9) Green-area will be: 7,170.97 sq. mts. (28.26% of plot area)
  - 10) **Total Power Requirement**: 1,355 KW, Power Source: Goa Electricity Board. Power backup: One 125 KVA and One 25 KVA D.G. sets with AMF panel and Acoustic enclosure.

11) Water requirement & source: The total water requirement for the proposed project is 236 KLD, which includes fresh water 188 KLD and recycled water 48 KLD. The waste water generated from the project is about 150 KLD and treated recycled water availability is 134 KLD. Source of water will be PWD Water Supply.

Wastewater will be treated through a sewage treatment facility - STP of 170 KLD capacity.

- 12) **Sewage discharge**: No untreated sewage will be discharged outside the project site. The sewage water will be treated and utilized for green area development, washing and irrigation of municipal gardens.
- 5. The SEIAA, during its 16<sup>th</sup> meeting held on 27<sup>th</sup> November 2014 have considered and accepted the Committee's recommendations and accordingly decided to accord environmental clearance (EC) with mandatory compliance to the following 'Specific conditions':
  - A. Project proponent shall not make any change in the Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authorities, as applicable.
  - B. The commissioning of the Sewage Treatment Plant (STP) to its full / optimum capacity needs to be certified by the Goa State Pollution Control Board (GSPCB) and a report to this effect should be submitted to the Authority.
  - C. The PP will strictly adhere to the proposed storm water management plan *visa-vis* traffic management plan and submit its report to the Authority regularly on half-yearly basis.
  - C. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
  - D. Validity of the Environmental Clearance (EC) shall be for a period of 05 (five) years from the date of its issue.

**E.** Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully,

Sd./-

(Srinet Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

## GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY EIA-Goa State Secretariat,

3rd Floor, Dempo Towers, Patto, Panaji, Goa - 403 001Phone nos.: 2438303Fax. no.: 2438528

e-mail: goaseac@gmail.com

No: 3 – 181 – 2010/STE-DIR/ 73

Date: 5<sup>th</sup> January 2015

#### То,

**M/s Milroc Good Earth Property & Developers L.L.P.** 501, 5<sup>th</sup> floor, Milroc Lar Menezes, Swami Vivekanand Road, Panjim –Goa.

### Sub.: Proposed expansion to construction of residential-cum-commercial complex – "Milroc Kadamba" in Survey No. 21/2-D, Baingiunim village, Tiswadi taluka, North Goa district – reg.,

Ref. : (a) Environmental Clearance issued by the Ministry of Environment & Forests (MoEF) vide its letter no. 21-998 / 2007-IA-III dated 11<sup>th</sup> June 2008

(b) Environmental Clearance issued by the Ministry of Environment & Forests (MoEF) vide its letter no. 21-998 / 2007-IA-III dated 11<sup>th</sup> March 2010

Sir,

I am directed to refer to your application no. MGE/SEAC/17/14-15 dated 16<sup>th</sup> April 2014 seeking environmental clearance (EC) for the above-referred expansion project as mandated under the provisions of the EIA Notification, 2006. Accordingly, the above proposal has been screened and appraised under Category 8 (a) B– Building and construction projects (*as per the Schedule annexed to the said notification*) on the basis of the documents enclosed with said application viz. Form-1 and Form-1A by the Goa State Expert Appraisal Committee (Goa-SEAC), hereinafter referred to as Committee. Subsequently, the Committee conducted the site-inspection on 15<sup>th</sup> May 2014 followed by a project-specific presentation by the Project Proponent (PP) and NABET/QCI-accredited environmental consultant before the Committee during its 24<sup>th</sup> meeting held on 08<sup>th</sup> July 2014. Later, based on post-presentation discussions held during 27<sup>th</sup> Committee meeting held on 20<sup>th</sup> November 2014, the aforementioned proposal was recommended to Goa-SEIAA for further needful.

2. Accordingly, Goa State Environment Impact Assessment Authority (Goa-SEIAA\_ - hereinafter referred to as Authority, during its 16<sup>th</sup> meeting held on 27<sup>th</sup> November 2014, has considered Committee's recommendations along with the following observations.

- a. It is inter-alia noted that the environmental clearance (EC) was issued earlier to **M/s Milroc Good Earth Property & Developers** for the developmental activity proposed on a **plot area of 68,336.00 sq.mts.** involving total built-up area (BUA) of 74,376.82 sq.mts. by the MoEF vide letters referred at (a) and (b) above.
- **b.** As on date, about 73,376.01 sq.mts. of BUA (*for which EC has been obtained vide (a) above*) is at different stages of completion on-site by the Project Proponent (PP).
- c. Vide the above-referred application dated 16<sup>th</sup> April 2014, the PP has proposed project-expansion with additional BUA of 5,860.48 sq.mts. and totalling the BUA to 80,237.30 sq.mts. (*i.e. over and above 74,376.82 sq.mts. for which EC has been obtained form the MoEF*).
- **d.** With the proposed expansion, salient features of the proposed developmental activity are as under
  - 1. Open space including garden / play area 27,764.92 sq.mts.
  - 2. Area proposed for landscape development 12,400 sq.mts.
  - 3. (i) Number flats/units 438 i.e. (a) 3-BHK:160 nos., (B) 2-BHK: 278 nos. (Stilts + 04 (ii) Number of hotel rooms 48 nos.
    (iii) Number of shops 36 nos.
    (iv) Height of building 18 mts.
  - 4. Total occupants 2,687 persons
  - 5. Total parking 755 (4-wheelers) + 100(2-wheelers)
  - Water Requirement: (a) Construction Phase: 35.00 M<sup>3</sup>/day to be sourced through private tankers. (b) Operation Phase: 326.00 M<sup>3</sup> /day. Provision of 100 M<sup>3</sup> for fire fighting.
  - 7. **Waste water Treatment -** Sewage generated is 261 KLD and to be treated in 300-KLD capacity STP. The treated waste water (about 240 KLD) is proposed for Flushing and landscaping.

- 8. Solid waste Management During the operation Phase: total municipal waste 1,143 Kg/day, biodegradable waste about 686 Kg/day., non biodegradable -457 kg/day.
- Power Requirement & Conservation: (a) Construction phase 50 KVA and (b) Operation phase – 2,130 KVA to be sourced from Goa State Electricity Board. For Power Back up 06 DG Sets (04 sets of 320 KVA and 02 sets of 250 KVA capacities) will be used.

Solar energy is proposed to be utilized for heating water as well as for street and garden lights towards reduction of 20% total energy conservation. Max. use of natural lighting, use of annealed glass. Sloping roofs for heat reduction. Use of energy efficient electrical and electronic systems/fixtures are proposed.

10. **Air Environment** - Increase in SPM levels during Construction Phase is proposed to be controlled by using machinery generating sound not greater than 90 dB(A) & sufficient landscaping with green belt will be developed in open spaces.

**13.** In view of the above and based on compliances to Goa-SEAC observations, Goa-SEIAA, has decided to accord Environmental Clearance (EC) to the said expansion project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following **"General Conditions"**:-

- vv. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation.
- ww. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- xx. The Project Proponent (PP), considering the project-specific site, should necessarily explore the possibility of energy conservation by tapping solarbased or hybrid energy sources towards power requirements.
- yy. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers.

- zz. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- aaa. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- bbb. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- ccc. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity visà-vis its landuse categorization / zoning.
- ddd. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the Authority for the period upto project completion so as to enable project monitoring during the construction phase.
- 4. Further, the project proponent has been advised as regard to the following:
  - zz. 'Consent to Establish / Operate' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the Authority.
  - aaa.Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - bbb. Project proponent shall not make any change in the Surface Layout Plan / Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authorities, as applicable.
  - ccc. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
  - ddd. The diesel generator sets (D.G. set) to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards as per the conditions laid down by the GSPCB.

- eee. The installation of the Sewage Treatment Plant (STP) should be certified by the GSPCB and a report in this regard should be submitted to the Authority before the project is commissioned for operation.
- fff. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.
- ggg. The Environmental Clearance is being issued without prejudice to the legal interventions / court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court / National Green Tribunal (NGT) will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- hhh. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

# iii. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

jjj. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully, Sd./-(Srinet Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

\*\*\*\*\*

# GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY EIA-Goa State Secretariat,

3rd Floor, Dempo Towers, Patto, Panaji, Goa - 403 001Phone nos.: 2438303Fax. no.: 2438528

e-mail: goaseac@gmail.com

No: 3 - 181 - 2010/STE-DIR/ 74

Date: 5th January 2015

Τо,

# M/s Balchandra A. Wagle,

C/o Mr. Amit Sukhatankar, 2<sup>nd</sup> Floor, Lawande Manor, Near St. Inez Church, Panaji, Goa – 403 001

# Sub.: Proposed construction of Commercial-cum-Residential project in Survey No. 276/1 of Morombi-O-Grande village, Tiswadi taluka. reg.,

Sir,

I am directed to refer to your application dated 10<sup>th</sup> March 2014 seeking prior Environmental Clearance (EC) for the above project as mandated under the provisions of the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) B – Building and construction projects (*as per the Schedule annexed to the said notification*) on the basis of the documents enclosed with application viz. Form-1 and Form-1A. Subsequently, Goa-State Expert Appraisal Committee (GSEAC) conducted the site-inspection on 15<sup>th</sup> May 2014 and was followed by project-specific presentation by the Project Proponent (PP) along with NABET/QCIaccredited environmental consultant during its 24<sup>th</sup> Goa-SEAC meeting held on 08<sup>th</sup> July 2014. Later, based on post-presentation discussions during 27th Goa-SEAC meeting held on 20<sup>th</sup> November 2014, the aforementioned proposal was recommended to Goa-SEIAA with certain project / site-specific observations. Further, Goa-SEIAA during its 16<sup>th</sup> meeting held on 27<sup>th</sup> November 2014, has considered the said proposal with the following observations.

2. Goa-SEIAA has noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed construction of a Residential-cum-commercial complex

consists of (*ground+4 floors*) having 5 blocks with 159 flats and 8 shops in Survey no. 276/1 of Morombi-O-Grande village, Tiswadi taluka, North Goa district, Goa. Project details and salient features of the proposed developmental activity, as submitted by the proponent, is as under –

- 1. Total Plot Area -87,439.00 sq. mts.
- 2. Area within road widening; 398.00 sq. mts.
- 3. Total build up area (BUA): 22,645.87 sq. mts. (BUA (*Residential*): 21,922.74 sq. mts. + BUA (*commercial*): 723.13 sq. mts.)
- 4. Area of the part-development from total property: 19,750.00 sq. mts.
- 5. Open Space required: 2,917.50 sq. mts.
- 6. Open Space proposed: 3,038.00 sq. mts.
- 7. Total Permissible Coverage (40% of permissible FAR): 7,620.00 sq. mts.
- 8. Proposed coverage area: (25.09%): 4,333.35 sq. mts.
- 9. Proposed FAR: 15,462.69 sq. mts.
- 10. Total population 881
- 11. (a) Parking required 200 nos., (b) Parking provided 227 nos.
- 12. Water Requirement: (a) *Construction Phase*: 35 M<sup>3</sup>/day to be sourced from PWD water (b) *Operation Phase*: 137 M<sup>3</sup>/day.
- 13. **Waste water Treatment -** Sewage proposed to be generated is 101 KLD and to be treated in 110 CMD-capacity STP using MBBR technology. The treated waste water (about 96 KLD) is proposed to be utilized for Flushing, Car washing and Gardening.
- 14. Solid waste Management (a) Construction phase: Approx. 25 kg per day,(b) Operation Phase: total waste 434 Kg/day
- Power Requirement (a) Construction phase: 35 KVA to be sourced from Goa State Electricity Board and (b) Operation phase: 1,400 KVA to be sourced from Goa State Electricity Board.

As a Power Back-up, one DG set of 250 KVA using HSD fuel @ 130 lit./hr. will be used. The light fittings used will be combination of solar, CFL fluorescents, LED and conventional. Solar and LED lights fittings will be especially provided for outdoor lighting.

16. Air Environment - Project proponent has proposed to adopt APC measures

to

reduce the particulate matter by using sprinklers as well as barricading the boundary periphery by corrugated tin sheets of 5.0 mitre height to protect the surrounding area from dusting.

**14.** In view of the above and based on compliances to project specific observations, Goa-SEIAA, has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following **"General Conditions"**:-

- eee.Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation.
- fff. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- ggg. The Project Proponent (PP), considering the project-specific site, should necessarily explore the possibility of energy conservation by tapping solarbased or hybrid energy sources towards minimizing power requirements through national grid.
- hhh. PP should adopt roof-top rainwater harvesting / conservation measures to optimally utilize the water availability. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures, etc.
- iii. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach. PP should give the proposed CSR commitments and the duration.
- jjj. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- kkk. PP should submit the map indicating the existing natural drainage with site details and should not disturb the same and as far as possible maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment. No varieties of *acacia* be used either as avenue plantations or as live-fencing.

- III. The PP in consultation with the office of the Chief Wildlife Warden (CWW), Dept. of Forest shall submit in-situ/ex-situ conservation action plan towards occurrence of Schedule-1 species as per IWPA, 1972/ IUCN guidelines and comply with the same.
- mmm. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its land use categorization / zoning.
- nnn. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- 15. In addition, the project proponent should mandatorily comply with the following "Specific conditions" and submit the following information / document prior to
  - (ii) Working plan to harness solar photo-voltaic (PV) power towards the south facing walls on building of the proposed complex be executed.
  - (iii) Submission of the storm-water drain management plan and its satisfactory compliance.
- **16.** Further, the project proponent has been advised as regard to the following:
- kkk. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEIAA.
- lll. Permission to draw groundwater, as applicable, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
- mmm. Project proponent shall not make any change in the Surface Layout Plan / Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the Authority.
- nnn. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
- ooo. The installation of the Sewage Treatment Plant (STP) should be certified by the GSPCB and a report in this regard should be submitted to the Authority before the STP is commissioned.

- ppp. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter will be available on the DST&E website.
- qqq. The Environmental Clearance is being issued without prejudice to the legal interventions / court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court / National Green Tribunal (NGT) will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- rrr. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

# sss. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

ttt. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*). Yours faithfully,

. Sd./-

(Srinet Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

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### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

3rd Floor, Dempo Towers, Patto, Panaji, Goa - 403 001Phone nos.: 2438303Fax. no.: 2438528

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/72* 

*Date:* 23<sup>*rd*</sup> *December* 2014

*To,* **M/s. Goa Institute of Management (GIM),** Sanquelim (Goa) Campus, Poriem, Sattari, Goa.

Sub.: Proposed expansion of the institutional infrastructure facility (i.e. *construction* of International Student Hostel, Visiting Faculty accommodation) and new construction of Faculty Housing in survey no. 58/1-C-2 & 58/1-C-3, Poriem, Sattari – reg.,

Ref.: This office letter no. No: 3 - 181 - 2010/STE-DIR/53 dated 15th September 2014

Sir,

In partial modification to the contents mentioned in **"para (2)**" of the abovereferred letter, the same may please be <u>replaced and read</u> as under –

"2. Goa-SEIAA has noted that the aforementioned proposal is seeking prior Environmental Clearance (EC) for **expansion of the institutional infrastructure facility** (i.e. *construction of International Student Hostel, Visiting Faculty accommodation*) **and a new construction of Faculty Housing** involving proposed built-up area (BUA) of 3,311.96 sq.mts. which is over and above the existing BUA (*i.e. already consumed*) of 18,260.31 sq.mts. in survey nos. 58/1-C-2 & 58/1-C-3, Poriem, Sattari. Project details and salient features of the proposed developmental activity, as furnished by the proponent, is as under –

- 1. Total plot Area: 2,00,000.00 sq.mts.
- 2. Total deductions: 46,660.00 sq.mts. (i.e. 5,300 sq.mts. for road widening, 5,360 sq.mts. reserved as internal road, 36,000 sq.mts. as open space and green belt development 9,712.50 sq.mts (existing) & 2,250 sq.mts. (proposed)).
- 3. Effective plot area: 1,53,340 sq.mts.
- 4. Total built up area (existing): 18,260.31 sq.mts.

- 5. Proposed additional built-up area (BUA): 3,311.96 sq.mts. that includes -
  - (a) expansion of International Students Hostel by 567.72 sq. mts., (*total BUA* 1,255.75 sq.mts.)
  - (b) expansion of Visiting Faculty accommodation by 245.79 sq.mts. (*total-BUA 734.86 sq.mts.*)
  - (c) construction of new Faculty Hosing-2 with BUA of 2,498.45 sq.mts.
- 6. Gross BUA (existing + proposed) *i.e.* (4) + (5) 21,572.27 sq.mts.
- 7. Expected increase in population: (a) during construction 50 persons, (b) Operation phase 1881 persons (*i.e. existing 751 & proposed 1130*).

### 8. Water Requirement:

- (a) *During construction phase* water requirement of 35 m<sup>3</sup> per day will be sourced from private tankers.
- (b) During operational phase 218.40 m<sup>3</sup>/day to be sourced from PWD and bore -wells. Out of this, about 108.40 m<sup>3</sup>/day is sourced through Municipal supply (PWD) and 110 m<sup>3</sup>/day is sourced through STP-treated water.
  - i. Green Belt development : 64 m<sup>3</sup>/day (STP-treated water)
  - ii. Toilet flushing as dual plumbing system : 46 m<sup>3</sup>/day (*STP-treated water*)

Further, water requirement is also towards Cooling Tower: 14.4 m<sup>3</sup>/day (*Municipal supply*), Swimming pool: 10 m<sup>3</sup>/day (*one-time requirement*) and Fire fighting system: 100 m<sup>3</sup> (*one-time requirement*). As such, a rainwater harvesting tank/pond (*effective use of natural depression within the complex*) is proposed with storage capacity of 800 m<sup>3</sup>.

9. Sewage Treatment: It is proposed to use of Submerged Aerobic Fixed Film (SAFF) reactor to degrade organics with tubular diffusers which gives good air dispersal and low level of blockage. It also has settler and polishing filters to separate the biomass for absolute filtration. This technology has advantages over other conventional STP wherein sludge gerenation is reduced to almost 20 - 40 %. Accordingly, total sewage generation 122 m<sup>3</sup>/day is proposed to be treated in the existing STP having treatment capacity of 150 m<sup>3</sup>/day. Thus, it will generate 110 m<sup>3</sup>/day of treated water (64 m<sup>3</sup>/day to be used for gardening and 46 m<sup>3</sup>/day to be used for toilet flushing).

## 10. Solid Waste generation and treatment:

(a) Construction phase - about 200 Kgs./day of normal excavation/construction debris during excavation period is proposed to be used for land filling/levelling at site. Inert metallic waste - about 50 Kg/day will be collected separately, recycled or sold to authorized recyclers. Solid waste (Food waste, other biodegradable & non-biodegradable waste) - about 25 Kg/day will be segregated, stored in separate bins &

disposed-off through local composting unit. About 20 Kg/month of used /waste oil, diesel /lubricants from D.G. sets or construction equipments like JCB, Poclain, & STP will be collected in drums & disposed-off by selling it to CPCB registered vendors. Plastic packaging material: 5 Kg/day will be handed over for recycling.

(b) Operation phase: 1,128.60 kg./day (for 1,881 persons) of which Biodegradable waste (60%) - 677.16 kg./day shall be treated in existing inhouse Bio-composting plant, while non-degradable waste (40%) - 451.44 kgs./day will be sent for recycling for co-processing unit. Hazardous waste (*i.e. used oil*) - 10 kgs./month and STP untreated sludge of abt. 80 kgs./month will be disposed-off scientifically.

## 11. Power Requirement & Conservation:

- (a) *Construction phase*: 65 KVA to be sourced from Goa State Electricity Board.
- (b) *Operational phase*: 625 KVA to be sourced from the Goa State Electricity Board.

Emergency power supply is proposed through two (02 *nos*.) of D.G. sets of 500 KVA capacity each.

Provisions are also provided for natural lighting & ventilation to minimize energy consumption. Use of Energy efficient electrical and electronic products/fixtures are proposed in order to save upto 50% energy. Use of Solar street lamps and solar water heating system is proposed to minimize the electricity usage.

- 12. Air Environment: Generation of noise level of about 65-75 dB(A) is expected during Construction phase. Ambient air monitoring will be carried out to confirm the compliance in respect of parameters as per Natural Ambient Air Quality Standards.
- 13. **Fire fighting**: Fire Hydrant systems for stairwells will be provided. 6.0 mts. wide internal road is planned for fire tender with access from all sides of the buildings. "

Further, other contents of the said letter dated 15<sup>th</sup> September 2014 remain **unchanged**.

Yours faithfully, Sd./-

(Srinet Kothwale) Member Secretary, Goa-SEIAA

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#### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

3<sup>rd</sup> Floor, Dempo Towers,

Phone nos.: 0832-2438303 Fax. no.: 0832-2438567

e-mail: goaseac@gmail.com

*No:* 3 – 181 – 2010/STE-DIR/69

Date: 5<sup>h</sup> December 2014

Тo,

### The Director,

Department of Science and Technology (DST), Opposite Saligao Seminary, Saligao, Bardez, Goa – 403 512

# Sub.: Establishment of Solid Waste Management Facility (SWMF) at Cacora, Quepem Taluka, South Goa - Issuance of the Prior Environmental Clearance (EC) – Reg.

Ref.: (a) Your letter no. 3-209-2012/STE-DIR/Part/1628 dated 19<sup>th</sup> February 2014

- (b) SEAC letter no. 3/181/2012/STE-DIR/Part-I/EIA-GOA/93 dated 20<sup>th</sup> March 2014
  - (c) Your letter no. 3-209-2012/STE-DIR/Part/868 dated 9<sup>th</sup> September 2014
  - (d) Your letter no. 3-209-2012/STE-DIR/Part-16B/SWMC-17 dated 28th November 2014

Sir,

This has a reference to your letter referred to at (a) above seeking Terms of References (ToRs') to conduct EIA study for proposed Solid Waste Management Facility (SWMF) at Cacora in South Goa, letter referred to at (b) above, Goa-SEAC's communication regarding issuance of Terms of References (ToRs'), letter referred to at (c) above, requesting for project-specific presentation before the EIA Authority and letter referred to at (d) above, requesting for issuance of environmental clearance (EC) for the proposed SWMF at Cacora.

In this context, I am directed to inform you that said application (*i.e. Form-I*) along with enclosed information has been screened and appraised by the Goa-SEAC under Category 7 (i) – Common Municipal Solid Waste Management, as per the 'Schedule' annexed to the EIA Notification, 2006 (as amended) during its 17<sup>th</sup> and 18<sup>th</sup> Goa-SEAC meetings held on 24<sup>th</sup> February and 11<sup>th</sup> March 2014 respectively. Subsequently, based on the recommendations of the Goa-SEAC during its 28<sup>th</sup> meeting held on 4<sup>th</sup> December 2014, the Goa-SEIAA during its 17<sup>th</sup> meeting held on 5<sup>th</sup> December 2014 has considered the proposal and accordingly it is noted that-

- The proposal is for grant of prior Environmental Clearance (EC) under the EIA Notification, 2006 for setting up of proposed Solid Waste Management Facility (SWMF) at Cacora in Quepem Taluka of South Goa and located in survey nos. 165/1(Part), 164/8(Part), 167, 168/1, 168/2 and 169 of Cacora village of Quepem Taluka. Salient project details of the proposed SWMF are as under:
  - f. Total plot area: 82,750 sq.mts. which is proposed to be notified as Industrial Area.
  - g. Proposed treatment / handling capacity of the SWM facility : 100 Tones per day
  - h. Major sections of the SWM facility:
    j. Material Segregation and Recycling Center
    ii. Bio-methanation and Composting section
    iii. Scientific secured Landfill
  - i. Water Requirement: 10 KLD + *it is also proposed to utilize recycled water as per need.*
  - j. Electrical Requirement: 549.64 KW + *it is also proposed to generate captive energy for in-house utilization.*
- 2. The proposed site is an existing dumping site which is being used for unscientific dumping of garbage for around 10 years. The project proponent (PP) proposes to reclaim the present site by adapting to enviro-friendly disposal of the dumped garbage in addition to scientific treatment of the incoming waste through material and energy recovery.
- 1. Vide judgment dated 13<sup>th</sup> August 2013 passed in Suo Motto Writ Petition No.2 of 2007, Hon'ble High Court of Bombay at Goa has directed the State Government to establish and set-up waste disposal / treatment facilities in the State within a years timeframe.
- 2. In addition, the project proponent has also submitted secondary data including documents and reports that highlight the present degraded status of the site, directions issued by the Goa State Pollution Control Board (GSPCB) to the Cacora-Curchorem Municipal Council, copies of the pertinent Court Orders, site plan and maps of the area and plans of the proposed facility.
- Procedure towards collection of primary data, in terms of the ToRs' issued, has already been initiated by the project proponent through the empanelled environmental consultant – M/s National Environmental Engineering Research Institute (NEERI), Nagpur.

In view of the above, Goa-SEIAA has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions",-

1. The PP should comply with all the measures towards environment management as envisaged and documents in the Tender Document (*i.e. Concept Note and the Request for Proposal (RFP)*.

2. PP should comply with the terms and conditions as stipulated by the Goa State Pollution Control Board (GSPCB) while issuing Consent to establish under the Air and Water Acts as well as Authorization issued under the Municipal Solid Waste (*Management and Handling*) Rules, 2000.

3. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.

4. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. In any case, no varieties of *acacia* be used either as avenue plantations or as live-fencing.

5. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.

6. PP should carry out assessment on the pre-construction vis-à-vis functioning of the landfill site, through M/s NEERI, Nagpur. The depth of the proposed landfill facility be decided based on the existing hydro-geological status of the site and accordingly necessary clearance / NOC should be obtained from the Groundwater Authority concerned, as applicable.

7. In the event of a modification / alteration / expansion in the project profile or change in the implementing agency / executing agency, a fresh reference shall be made to the Goa-SEIAA / Regional Office of the Ministry of Environment, Forests and Climate Change (*MoEF&CC*), as applicable.

8. Project proponent shall advertise at least in two local newspapers widely circulated in the region, one of which shall be in the Konkani or Marathi language within seven days of the receipt of this letter, informing that the project has been accorded prior Environmental Clearance (EC).

9. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other reasons such as submission of false and misleading information, etc.,

10. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of issue of this letter.

11. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*)

In addition, following "Specific Conditions" to be complied with by the project proponent:

- The PP should concurrently compile and submit a rapid site-specific EIA report to this Authority not later than 15<sup>th</sup> February 2015 so as to suggest further longterm measures.
- 2. Accordingly, an on receipt and perusal of rapid site-specific EIA report, the conditions stipulated in the EC, as referred above, may be reviewed and accordingly modified for mandatory compliance by PP towards long term management / post-EC monitoring of the site.
- 3. The PP shall get the site conditions monitored and submit details at regular intervals to this Authority during all stages of the project initiation, execution, and implementation.

Yours faithfully, Sd./-(Srinet Kothwale) Member Secretary, Goa-SEIAA

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### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

3<sup>rd</sup> Floor, Dempo Towers,

Phone nos.: 0832-2438303 Fax. no.: 0832-2438567

e-mail: goaseac@gmail.com

*No:* 3 – 181 – 2010/STE-DIR/64

Date: 4<sup>th</sup> November 2014

То,

# The Director,

Department of Science and Technology (DST), Opposite Saligao Seminary, Saligao, Bardez, Goa – 403 512

### Sub.: Establishment of Solid Waste Management Facility (SWMF) at Calangute/ Saligao, Bardez Taluka, North Goa - Issuance of the Prior Environmental Clearance (EC) – Reg.

Ref.: (a) Your letter no. 3-209-2012/STE-DIR/Part/1627 dated 19<sup>th</sup> February 2014
(b) SEAC letter no. 3/181/2012/STE-DIR/Part-I/EIA-GOA/93 dated 20<sup>th</sup> March 2014
(c) Your letter no. 3-209-2012/STE-DIR/Part/868 dated 9<sup>th</sup> September 2014
(d) Your letter no. 3-209-2012/STE-DIR/Part-16/1062 dated 21<sup>st</sup> October 2014

Sir,

This has a reference to your letter referred to at (a) above seeking Terms of References (ToRs') to conduct EIA study for proposed Solid Waste Management Facility (SWMF) at Calangute/Saligao in North Goa, letter referred to at (b) above, Goa-SEAC's communication regarding issuance of Terms of References (ToRs'), letter referred to at (c) above, requesting for project-specific presentation before the EIA Authority and letter referred to at (d) above, requesting for issuance of environmental clearance (EC) for the proposed SWMF at Saligao/Calangute..

In this context, I am directed to inform you that said application (*i.e. Form-I*) along with all enclosed relevant information as well as additional clarifications / documents / reports furnished in response to the observations made by Goa-SEAC has been screened and appraised under Category 7 (i) – Common Municipal Solid Waste Management , as per the 'Schedule' annexed to the EIA Notification, 2006 (as amended) during its 17<sup>th</sup> and 18<sup>th</sup> Goa-SEAC meetings held on 24<sup>th</sup> February and 11<sup>th</sup> March 2014 respectively and later during first and second joint Goa-SEAC / Goa-SEIAA meetings held on 11<sup>th</sup> September and 23<sup>rd</sup> October 2014 respectively. Subsequently, based on the recommendations of the Goa-SEAC during its 26<sup>th</sup> meeting held on

 $31^{st}$  October 2014, the Goa-SEIAA during its  $14^{th}$  meeting held on  $3^{rd}$  November 2014 has considered the proposal and accordingly it is noted that –

- 3. The proposal is for grant of prior Environmental Clearance (EC) under the EIA Notification, 2006 for setting up of proposed Solid Waste Management Facility (SWMF) at Calangute / Saligao in Bardez Taluka of North Goa and located in survey nos.112/1(Part), 114/1(Part), 116/1(Part) and 117/1(Part) of Saligao village of Bardez Taluka and under survey nos. 47/1(Part) of village Calangute, Bardez taluka in North Goa. Salient project details of the proposed SWMF are as under:
  - a. Total plot area: 1,21,580 sq.mts. which is in the notified Industrial Area.
  - b. Proposed treatment / handling capacity of the SWM facility : 100 Tones per day
  - c. Major sections of the SWM facility:
    - k. Material Seggregation and Recycling Center
    - ii. Bio-methanation and Composting section
    - iii. Scientific secured Landfill
  - d. Water Requirement: 10 KLD + *it is also proposed to utilize recycled wateras per need.*
  - e. Electrical Requirement: 549.64 KW + *it is also proposed to generate captive energy for in-house utilization.*
- 4. The proposed site is an existing dumping site which is being used for unscientific dumping of garbage for around 20 years. The project proponent (PP) proposes to reclaim the present site by adapting to enviro-friendly disposal of the dumped garbage in addition to scientific treatment of the incoming waste through material and energy recovery.
- 5. Vide judgment dated 13<sup>th</sup> August 2013 passed in Suo Motto Writ Petition No.2 of 2007, Hon'ble High Court of Bombay at Goa has directed the State Government to establish and set-up waste disposal / treatment facilities in the State within a years timeframe.
- 6. In addition, the project proponent has also submitted significant secondary data including documents and reports that highlight the present degraded status of the site, directions issued by the Goa State Pollution Control Board (GSPCB) to the Calangute Panchayat, copies of the pertinent Court Orders, site plan and maps of the area, plans of the proposed facility and an Environmental Impact Assessment (EIA) Report of the Pilerne Industrial Estate which is located at a distance of around 1 kms. from the proposed facility site.

 Procedure towards collection of primary data, in terms of the ToRs' issued, has already been initiated by the project proponent through the empanelled environmental consultant – M/s National Environmental Engineering Research Institute (NEERI), Nagpur.

In view of the above and based on the recommendations of the Goa-SEAC; Goa-SEIAA has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions",-

- 1. The PP should comply with all the measures towards environment management as envisaged and documents in the Tender Document (*i.e. Concept Note and the Request for Proposal (RFP)*.
- 2. PP should comply with the terms and conditions as stipulated by the Goa State Pollution Control Board (GSPCB) while issuing Consent to Establish under the Air and Water Acts as well as Authorization issued under the Municipal Solid Waste (Management and Handling) Rules, 2000.
- 3. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- 4. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. In any case, no varieties of *acacia* be used either as avenue plantations or as live-fencing.
- 5. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- 6. PP should carry out assessment on the pre-construction vis-à-vis functioning of the landfill site, through M/s NEERI, Nagpur. The depth of the proposed landfill facility be decided based on the existing hydro-geological status of the site and accordingly necessary clearance / NOC should be obtained from the Groundwater Authority concerned, as applicable.

- In the event of a modification / alteration / expansion in the project profile or change in the implementing agency / executing agency, a fresh reference shall be made to the Goa-SEIAA / Regional Office of the Ministry of Environment, Forests and Climate Change (*MoEF&CC*), as applicable.
- 8. Project proponent shall advertise at least in two local newspapers widely circulated in the region, one of which shall be in the Konkani or Marathi language within seven days of the receipt of this letter, informing that the project has been accorded prior Environmental Clearance (EC).
- 9. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other reasons such as submission of false and misleading information, etc.,
- 10. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of issue of this letter.
- 11. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (Central Act 19 of 2010)

In addition, following "Specific Conditions" to be complied with by the project proponent:

- 2. The PP should concurrently compile and submit a rapid site-specific EIA report to this Authority **not later than 15<sup>th</sup> February 2015** so as to suggest further long-term measures.
- 3. Accordingly, an on receipt and perusal of rapid site-specific EIA report, the conditions stipulated in the EC, as referred above, may be reviewed and accordingly modified for mandatory compliance by PP towards long term management / post-EC monitoring of the site.
- 4. The PP shall get the site conditions monitored and submit details at regular intervals to this Authority during all stages of the project initiation, execution, and implementation.

Yours faithfully, Sd./-(Srinet Kothwale)

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EIA-Goa State Secretariat,

3rd Floor, Dempo Towers, Patto, Panaji, Goa - 403 001Phone nos.: 2438303Fax. no.: 2438528

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/51* 

*Date:* 15<sup>th</sup> September 2014

Τо,

M/s Anand Chandra Bose,

# 801, 8<sup>th</sup> Floor, Anand Square, Block-B, Near Sanjeevani Hospital, Baina, Vasco-da-Gama.

## Sub.: Proposed construction of residential complex – 480 flats - Basement + 8 floors: (2-BHK-224, 3-BHK-256) along with Community facility in Survey No. 215/1 of Sancoale village, Mormugao taluka. – reg.,

Sir,

I am directed to refer to your application dated 30<sup>th</sup> May 2013 seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) – Building and construction projects (*as per the Schedule annexed to the said notification*) on the basis of the documents enclosed with application viz. Form-1 and Form-1A by the Goa State Expert Appraisal Committee (Goa-SEAC). Subsequently, Goa-SEAC conducted the site-inspection on 14<sup>th</sup> March 2014 and was followed by joint projectspecific presentation by the Project Proponent (PP) and NABET/QCI-accredited environmental consultant during its 21<sup>st</sup> Goa-SEAC meeting held on 29<sup>th</sup> April 2014. Later, based on post-presentation discussions during 22<sup>nd</sup> Goa-SEAC meeting held on 13<sup>th</sup> May 2014, the aforementioned proposal was recommended to Goa-SEIAA with certain project/site-specific observations.

Further, Goa-SEIAA during its 13<sup>th</sup> meeting held on 31<sup>st</sup> July 2014, has considered the said proposal with the following observations.

2. Goa-SEIAA noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed construction of a **Residential complex –** 480 flats - Basement + 8

floors: (2-BHK-224, 3-BHK-256) along with a Community facility in Survey No. 215/1 of

Sancoale village, Mormugao taluka. Project details and salient features of the proposed

developmental activity, as submitted by the proponent, is as under -

- 1. Total plot area 19,525 sq.mts.
- 2. Effective plot area 18,597.93 sq.mts.
- 3. Total FAR allowed 41,978.75 sq.mts.
- 4. Total proposed BUA 78,160.22 sq.mts.
- 5. Net Floor area 41,339 sq.mts.
- 6. Height of building 28.2 mts.
- 7. Expected occupancy 2,400
- 8. Parking Require 480 nos. and Proposed 629 nos.
- 9. Water requirement
  - a. During construction phase 20 CMD (2 CMD for domestic and 18 CMD for construction) PWD tankers
  - b. During operational phase 530 CMD (320 CMD is fresh source and 210 CMD is STP-treated water).
- 10. Wastewater generation 480 CMD to be treated in SBR-based 480-KLD capacity STP. It will generate 270 CMD of treated water (240 CMD for sewer line & 30 CMD for landscaping. 10 kg. of sludge / day will be generated.
- 11. Solid waste generation
  - i. During construction phase 1-2 MT / day.
  - j. During operational phase 1,080 kg.day (60% 40% of Biodegradable / non-biodegradable) to be treated Organic Bio-Convertor.
- 12. Power requirement
  - g. Construction phase 20 HP D.G. set
  - h. Operation phase 2,634 KVA through GEL
     Back-up power through (a) 02 D.G. sets of 250 KVA capacity each and (b) two transformers of 500 KVA each and one transformer of 250 KVA.
- 13. Fire-fighting is proposed for the building designed based on the recommendadations of NBC-part-IV (Table 23-2005) and local norms.

**17.** In view of the above and based on compliances to specific Goa-SEAC observations, Goa-SEIAA, has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following **"General Conditions"**:-

- ooo. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation.
- ppp. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- qqq. The Project Proponent (PP), considering the project-specific site, should necessarily explore the possibility of energy conservation by tapping solarbased or hybrid energy sources towards power requirements.
- rrr. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures, etc. Plan of rain water harvesting map will be submitted with current water table.
- sss. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- ttt. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- uuu. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- vvv. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization /zoning. Submit details of any litigations etc in progress.
- www. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period

upto project completion so as to enable project monitoring during the construction phase.

- 18. In addition, the project proponent should mandatorily comply and submit the following information / document prior to initiate any construction activity on the site, namely -
  - (i) Plan indicating the locations for independent emergency exit. Accordingly the Plan No. FF-03, submitted earlier, be re-submitted <u>within 60 days</u>.
  - (ii)Working plan to harness solar photo-voltaic (PV) power towards the south facing walls and terraces on buildings of the complex be ascertained and complied with.
  - (iii) Traffic Management Plan for main as well as approach road at Entry / Exit points with clearance, as applicable; be sought from the local authorities concerned.
- **19.** Further, the project proponent has been advised as regard to the following:
  - uuu. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.
  - vvv. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - www. Project proponent shall not make any change in the Surface Layout Plan / Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authorities, as applicable.
  - xxx. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
  - yyy. The diesel generator sets (D.G. set) to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards as per the conditions laid down by the GSPCB.

- zzz. The installation of the Sewage Treatment Plant (STP) should be certified by the GSPCB and a report in this regard should be submitted to the Authority before the project is commissioned for operation.
- aaaa. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.
- bbbb. The Environmental Clearance is being issued without prejudice to the legal interventions / court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court / National Green Tribunal (NGT) will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- cccc. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

## dddd. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

eeee. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully,

Sd./-

(Srinet Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

\*\*\*\*\*

EIA-Goa State Secretariat,

3rd Floor, Dempo Towers, Patto, Panaji, Goa - 403 001Phone nos.: 2438303Fax. no.: 2438528

e-mail: goaseac@gmail.com

No: 3 – 181 – 2010/STE-DIR/52

*Date:* 15<sup>th</sup> September 2014

*To,* **M/s. Maharudra Real Estate,** Shop No.3, Shantadurga Housing Society, Super Market, Ponda.

# Sub.: Proposed residential complex (i.e. flats + villas) in Survey no. 209/1-A, Ponda, Goa – reg.,

Sir,

I am directed to refer to your application dated 8<sup>th</sup> May 2013 seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) – Building and construction projects (*as per the Schedule annexed to the said notification*) on the basis of the documents enclosed with application viz. Form-1 and Form-1A by the Goa State Expert Appraisal Committee (Goa-SEAC). Subsequently, Goa-SEAC conducted the site-inspection on 25<sup>th</sup> March 2014 and was followed by joint projectspecific presentation by the Project Proponent (PP) and NABET/QCI-accredited environmental consultant during its 21<sup>st</sup> Goa-SEAC meeting held on 29<sup>th</sup> April 2014. Later, based on post-presentation discussions during 22<sup>nd</sup> Goa-SEAC meeting held on 13<sup>th</sup> May 2014, the aforementioned proposal was recommended to Goa-SEIAA with certain project / site-specific observations.

Further, Goa-SEIAA during its 13<sup>th</sup> meeting held on 31<sup>st</sup> July 2014, has considered the said proposal with the following observations.

2. Goa-SEIAA noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed construction of a Residential complex that includes 186 flat (*i.e.* 2 *BHK-* 140 *flats and* 3 *BHK-*46 *flats*) and two villas in Survey no. 209/1-A, Ponda, Goa.

Project details and salient features of the proposed developmental activity, as submitted by the proponent, is as under –

- 1. Total Plot Area 21,113.00 sq. mts.
- 2. Area under encroachment 1,830.00 sq. mts.
- 3. Net Plot Area 20,957.00 sq. mts.

#### 4. Gross Built up Area - 29,567.00 sq. mts.

- a. Area under S1 Zone 17,630.00 sq. mts. (admissible FAR 1.0)
- b. Area under S2 Zone 3,500.00 sq. mts. (admissible FAR 0.80)
- c. Permissible FAR (17,630 + 2,800) 20,430.00 sq. mts.

5. (a) Required open Space - 3,143.55 sq. mts., (b) Open space provided - 3,400

sq.

#### mts.

6. (a) Permissible coverage – 8,382.80 sq. mts., (b) Proposed covered Area – 4,980.20 sq. mts.

- 7. Proposed coverage 23.76%
- 8. Proposed floor Area 16,615.00 sq. mts.
- 9. Expected Occupancy 846 persons

10. (a) Parking required – 255 nos., (b) Parking provided – 284 nos.

- 11. Water Requirement: (a) Construction Phase: 25 CMD (*i.e. construction* 23 *CMD* + *Domestic use:* 02 *CMD*) to be sourced through private tankers.
  (b) Operation Phase: 144 CMD. Out of this, 81 CMD as fresh water and 63 CMD to be sourced through treated STP water.
- 12. Waste water Treatment Sewage generated is 98 CMD and to be treated in

## 110

CMD capacity STP using MBBR technology. The treated waste water is proposed for Flushing (38 CMD), Car washing (8 CMD), Gardening (17

## CMD).

Further, generation of 10 Kg/day sludge will be treated in the STP.

13. Solid waste Management - (a) Construction phase: Approx. 1-2 MT per day,

(b) Operation Phase: total municipal waste - 359 Kg/day (*i.e.* @425*g/capita/day*),

wherein, Biodegradable waste is 179 Kg/day (50% of this waste is proposed to be treated in the OWC-150 mechanical composting). While, non-biodegradable waste of 179 Kg/day (50%) is proposed to be sent to the agency for regenerating and recycling.

- 14. Power Requirement & Conservation: (a) Construction phase 120 KW and
- (b)

Operation phase – 1,500 KW to be sourced from Goa State Electricity Board. For Power Back up DG Sets will be used.

Solar energy is proposed to be utilized for heating water as well as for street and garden lights towards reduction of 20% total energy conservation. Max. use of natural lighting, use of annealed glass. Sloping roofs for heat reduction. Use of energy efficient electrical and electronic systems/fixtures are proposed.

15. Air Environment - Increase in SPM levels during Construction Phase which can be controlled by using machinery having sound not greater than 90 dB(A) & sufficient landscaping with green belt will be developed in open spaces.

**20.** In view of the above and based on compliances to specific Goa-SEAC observations, Goa-SEIAA, has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following **"General Conditions"**:-

- xxx. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation.
- yyy. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- zzz.The Project Proponent (PP), considering the project-specific site, should necessarily explore the possibility of energy conservation by tapping solarbased or hybrid energy sources towards power requirements.
- aaaa. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures, etc.

- bbbb. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- cccc. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- dddd. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- eeee. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization / zoning.
- ffff. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- **21.** In addition, the project proponent should mandatorily comply with the following **"Specific conditions"** and submit the following information / document prior to initiate any construction activity on the site, namely -
  - (iv) Submission of 'Sanad' obtained from the competent authority.
  - (v) Submission of Geotechnical soil report indicating the hydrogeological status of the proposed site.
  - (vi) Traffic Management Plan for main as well as approach road at Entry / Exit points be submitted <u>within 60 days</u>.
  - (vii)Working plan to harness solar photo-voltaic (PV) power towards the south facing walls on building of the proposed complex be ascertained.
  - (viii) Mandatory requirement towards budgetary outlay and commitment to State Forest Department in event of IWPA Schedule-I species if encountered.
  - (ix) Submission of storm-water drain management plan.

- 22. Further, the project proponent has been advised as regard to the following:
  - ffff. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.
  - gggg. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - hhhh. Project proponent shall not make any change in the Surface Layout Plan / Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authorities, as applicable.
  - iiii.Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
  - jjjj. The diesel generator sets (D.G. set) to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards as per the conditions laid down by the GSPCB.
  - kkkk. The installation of the Sewage Treatment Plant (STP) should be certified by the GSPCB and a report in this regard should be submitted to the Authority before the project is commissioned for operation.
  - Illl.Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.
  - mmmm. The Environmental Clearance is being issued without prejudice to the legal interventions / court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court / National Green Tribunal (NGT) will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.

nnnn. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

## oooo. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

pppp. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully,

Sd./-

(Srinet Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

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EIA-Goa State Secretariat,

3rd Floor, Dempo Towers, Patto, Panaji, Goa - 403 001Phone nos.: 2438303Fax. no.: 2438528

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/50* 

*Date:* 15<sup>th</sup> September 2014

Τo,

**M/s Prudential Developers Pvt. Ltd.,** Prudential Panache, 1<sup>st</sup> Floor, Near Chinmay Mission, Gogol Housing Board, Margao.

## Sub.: Proposed construction of residential-cum-commercial complex (*i.e.* Ground + 08 *floors*) in Chalta No. 34, P. T. Sheet No. 129, Margao, Gogal, Salcete-Goa – reg.,

Sir,

I am directed to refer to your application dated 22<sup>nd</sup> April 2013 seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) – Building and construction projects (*as per the Schedule annexed to the said notification*) on the basis of the documents enclosed with application viz. Form-1 and Form-1A by the Goa State Expert Appraisal Committee (Goa-SEAC). Subsequently, Goa-SEAC conducted the site-inspection on 25<sup>th</sup> March 2014 and was followed by joint projectspecific presentation by the Project Proponent (PP) and NABET/QCI-accredited environmental consultant during its 21<sup>st</sup> Goa-SEAC meeting held on 29<sup>th</sup> April 2014. Later, based on post-presentation discussions during 22<sup>nd</sup> Goa-SEAC meeting held on 13<sup>th</sup> May 2014, the aforementioned proposal was recommended to Goa-SEIAA with site-specific observations.

Further, Goa-SEIAA during its 13<sup>th</sup> meeting held on 31<sup>st</sup> July 2014, has considered the said proposal with the following observations.

2. Goa-SEIAA noted that the proposal is for grant of prior Environmental Clearance (EC) for the proposed construction of residential-cum-commercial complex (*i.e. G* + 08 *floors*) and includes 252 flats (*i.e.* 2-BHK *flats:* 128 *nos.*,3-BHK *Flats:* 110 *nos.* & 4-BHK *Flats:* 14 *nos.*) plus 2 Shops in Chalta No. 34, P. T. Sheet No. 129, Margao, Gogal, Salcete-

Goa. Project details and salient features of the proposed developmental activity, as submitted by the proponent, is as under –

- 1. Total Plot Area 15,536 sq. mts.
  - a. Area for road-widening 1,460 sq. mts.
  - b. Effective area of the plot 1,4076 sq. mts.

#### 2. Gross built-up area (BUA) - 56,184 sq. mts.

- a. Block A 13,189.06 sq. mts.
- b. Block B, C, D & E 30,493.68 sq. mts.
- c. Remaining to be utilized for shops
- 3. Open Space Required 2,115 sq. mts.
- 4. Total Open Space Provided 2,150 sq.mts.
  - a. Open Space provided for A 850 sq.mts.
  - b. Open Space provided B,C and D 1,300 sq.mts.
- 5. Expected Occupancy 1,134 (residential) + 2 persons/shop (commercial)
- 6. (a) Parking required 371 nos. (b) Parking Provided 578 nos.
- 7. Water Consumption:
  - a. Construction Phase: 20 CMD (*i.e. construc.-18 CMD* + *Domestic use* 02 *CMD*) to be sourced through private tankers + PWD
  - b. Operation Phase : 181 CMD (*i.e. fresh water-105 CMD* + *Recycled water-76 CMD*) to be sourced from PWD + private tankers + treated water from the STP.
- 8. Wastewater Treatment: 130 CMD of wastewater is expected to be generated which is
- to

be treated in 220 CMD capacity STP. About 76 CMD of treated water to be used for flushing (i.e. dual plumbing), car washing and gardening while, remaining will be supplied to nearby areas.

- 9. Treatment of Solid waste Generated Total Municipal Solid waste = 932 kg/day (50%
- is

bio-degradable: 466 kg/day). It is proposed that biodegradable waste will be collected manually, stored in ventilated rooms and treated in mechanical composting units

within

non-

the premises. The manure generated will be used for gardening. While, 50% of the

degradable portion - 466 kg/day, this will be collected manually and sold to private contractors. Further, 10 Kg/day sludge generated will be used as material for landfilling.

 Power Requirement and conservation: (a) Construction Phase: 10 KVA and (b) Operation Phase: 2500-3000 KVA – to be sourced from Goa State Electricity Board. Power Backup : Two Diesel Generator Sets each of 125 KVA capacity. Further, Energy efficient electrical and electronic systems as well as installations/fittings are proposed towards energy conservation (i.e. solar operated pole lights.)

11. Air Environment - increase in SPM levels during construction phase will be minimized

as well as noise will be controlled by using machinery which do not generate noise greater than 90 Db(A).

12. Geotechnical Investigation have been carried out by M/s. Surabhi Enterprises. Accordingly, two boreholes dug at depths upto 10 mts. using have revealed presence

of

residual laterite soil and weathered laterite bedrock. As such, foundations can be for a maximum net bearing capacity of 40 t/m<sup>2</sup>. Groundwater has been encountered at a depth of 1.9 mts. Thus, raft foundations at depth of 1.5 m below ground level has been proposed with a maximum net bearing capacity of 25 t/m<sup>2</sup>. Further, modulus of sub-grade reaction of 1000t/m<sup>3</sup> can be utilized for design of foundations.

**23.** In view of the above and based on recommendations of the Goa-SEAC, Goa-SEIAA, has decided to accord Environmental Clearance (EC) to the proposed expansion activity under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following **"General Conditions"**:-

- gggg. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation.
- hhhh. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- iiii. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirements.
- jjjj. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- kkkk. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.

- IIII. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity visà-vis its landuse categorization / zoning.
- mmmm. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- 24. In addition, the project proponent should mandatorily submit the compliance to the following "Specific conditions" prior to initiate any construction / expansion activity on the site,
  - d. Plan indicating the location for independent emergency exit <u>be submitted</u> <u>within 60 days</u> from date of receival of this letter.
  - e. Working plan to harness solar photo-voltaic (PV) power towards the south facing walls on building of the proposed complex be ascertained. Provide details if possible based on architectural designs.
  - f. Traffic Management Plan for main as well as approach road at Entry / Exit points.
  - g. As the project proponent (PP) has proposed to utilize the rain-stored water as secondary domestic source, it is mandatory to establish a monitoring protocol for conducting microbiological testing of such stored water on regular basis and compliance to this effect needs to be submitted to Goa-SEIAA <u>within 30</u> <u>days</u> from date of receival of this letter.
  - h. Implementation of rain water harvesting for storm-water in terms of infiltration wells along with grease filter to effectively recharge groundwater be ascertained.
  - i. Demolition and debris management plan for existing structures within the proposed plot.
- **25.** Further, the project proponent has been advised as regard to the following:
  - qqqq. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - rrrr. Project proponent shall not make any change in the Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the

scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authorities, as applicable.

- ssss. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
- tttt. The diesel generator sets (D.G. set), if any, to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards as per the conditions laid down by the GSPCB.
- uuuu. The installation of the Sewage Treatment Plant (STP) need to be certified by the GSPCB and a report in this regard should be submitted to the Authority before the project is commissioned.
- vvvv. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.
- www. The Environmental Clearance is being issued without prejudice to the legal interventions / court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court / National Green Tribunal (NGT) will be binding on the project proponent. **Hence, this EC does not give immunity to the project proponent in the case filed against it**.
- xxxx. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- yyyy. Validity of the Environmental Clearance (EC) shall be for a period of 05 (five) years from the date of its issue.

zzzz. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully,

Sd./-

(Srinet Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

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EIA-Goa State Secretariat,

3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438303 Fax. no.: 2438528

e-mail: goaseac@gmail.com

No: 3 – 181 – 2010/STE-DIR/ 49

Date: 15th September 2014

*To,* **M/s. Birla Institute of Technology & Science (BITS)**, KK Birla Goa Campus, NH 17B, Bypass Road, Sancoale, Zuarinagar, Goa – 403726.

Sub.: Proposed expansion of BITS complex (i.e. *construction of Hostel Building*) in survey no. 189/1 (plot no. 2), 189/1 (plot P4), 190/1 (part), 191/1, 191/2, 191/3, 192/1 (plot no. 1), 193/1, 229/1, 230/1, 231/1, 232/1, 233/1, 234/1, 235/1, 235/3, 241/1, 243/1 (plot no. 1) of village Sancoale, Marmugao, South Goa by (BITS) Pilani, Goa Campus- reg.,

Sir,

I am directed to refer to your application dated 5<sup>th</sup> December 2013 seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) – Building and construction projects (*as per the Schedule annexed to the said notification*) on the basis of the documents enclosed with application viz. Form-1 and Form-1A by the Goa State Expert Appraisal Committee (Goa-SEAC). Subsequently, Goa-SEAC conducted the site-inspection on 14<sup>th</sup> March 2014 and was followed by joint projectspecific presentation by the Project Proponent (PP) and NABET/QCI-accredited environmental consultant during its 21<sup>st</sup> Goa-SEAC meeting held on 29<sup>th</sup> April 2014. Later, based on post-presentation discussions during 22<sup>nd</sup> Goa-SEAC meeting held on 13<sup>th</sup> May 2014, the aforementioned proposal was recommended to Goa-SEIAA with site-specific observations.

Further, Goa-SEIAA during its 13<sup>th</sup> meeting held on 31<sup>st</sup> July 2014, has considered the said proposal with the following observations.

2. Goa-SEIAA noted that the proposal is for grant of prior Environmental Clearance (EC) for expansion of existing facility at the BITS, Goa Complex (*i.e. construction of hostel building*) with built-up area (BUA) of 3,301.46 sq.mts. which is over and above the BUA consumed earlier – i.e. 1,23,183.30 sq.mts. in survey no. 189/1 (plot no. 2), 189/1 (plot P4), 190/1 (part), 191/1, 191/2, 191/3, 192/1 (plot no. 1), 193/1, 229/1, 230/1, 231/1, 232/1, 233/1, 234/1, 235/1, 235/3, 241/1, 243/1 (plot no. 1) of village Sancoale. Project details and salient features of the proposed developmental activity, as submitted by the proponent, is as under –

1. Total Area of the plots - 6,90,300 sq. mts.

2. (a) Existing FAR / BUA - 1,23,183.30 sq.mts.

(b) Proposed BUA during expansion (i.e. construction of hostel building) - 3,301.46

#### sq.mts.

3. Total BUA (i.e. existing +proposed expansion) -1,26,484.76 sq.mts.

4. Water Requirement – <u>Construction Phase</u> - 20 CMD (*Construction activity* - 18 *CMD* + *Domestic Use* - 2 *CMD*) to be source from seasonal nallah existing

#### within

the site / Groundwater abstracted for the cooling purpose Tankers <u>Operation phase</u> - Total requirement - 763 CMD : to be sourced from PWD + treated water from STP & Borewell (i.e. Fresh Water-438 CMD +Recycled

#### water-

325 CMD.

5. Power requirement - <u>Construction phase</u> : 120 KW to be sourced from Goa State

Electricity Board. <u>Operation phase</u> : 5537 KVA with Power backup – Two DG sets of 62.5 KVA each, two DG sets of 500 KVA each and one DG set of 750 KVA.

6. Solid waste & treatment - <u>Construction phase</u>: demolition waste: 1-2 MT day debris. <u>Operation phase</u>: (a) Total municipal – 900 kg/day (Bio-degradable= 800kg/day. Non-biodegradable=100kg/day), (b) sewage sludge - 10 kg/day to be treated in STP. Agricultural wastes / organic wastes to converted to ost.

#### compost.

7. Community facilities: The complex has children park near the staff quarters, shopping centre, saloon, parlour, small dispensary, SBI bank and horticulture unit.

8. Parking needs – for Four wheeler : 8,125 sq. mts., for Two wheeler : 190 sq.mts. and for Cycle parking 2,220sq.mts.

9. Sewage Treatment - Treated water from STP is used for gardening, total greenbelt is about 65,000 sq. mts. is maintained by STP. Waste water generated about 342 CMD will be treated in the existing STP of 600 CMD capacity. Septic tank will be provided for treatment & disposal of sewage from labour camp.

10. Air Pollution - Mobile source: transportation of raw materials will be carried out at non-peak hrs. To minimize dust emissions ready mix concrete carried

enclosed container. Dust covers will be provided on trucks used for transportation of materials. Covering scaffolding equipment & cleaning of vehicles to be carried out to reduce dust.

11. Stationary source - Machineries will be screened with sheets of suitable material to reduce SPM & noise. Areas prone to fugitive dust emissions will

frequently water sprinkled.

- 12. Noise pollution <u>During construction</u> noise will not be exceeding 90 db (A). Workers working near high noise construction machineries will be provided with muffs/earplugs. During operation buffer (tree/wall) will be provided along the main roads. Smooth flow of traffic will be ensured.
- 13. Vegetation Greenbelt has been developed in open spaces. Total landscape area: 65,000 sq.mts.

**26.** In view of the above and based on recommendations of the Goa-SEAC, Goa-SEIAA, has decided to accord Environmental Clearance (EC) to the proposed expansion activity under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following **"General Conditions"**:-

- nnnn. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation.
- oooo. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.

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in

- pppp. The Project Proponent (PP), considering the project-specific site, should necessarily explore the possibility of energy conservation by tapping solarbased or hybrid energy sources towards power requirements.
- qqqq. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- rrrr. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- ssss. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization / zoning.
- tttt. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- 27. In addition, the project proponent should mandatorily submit the compliance to

the following prior to initiate any construction / expansion activity on the site,

- (a) PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Accordingly, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures, etc.
- **28.** Further, the project proponent has been advised as regard to the following:
  - aaaaa. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - bbbbb.Project proponent shall not make any change in the Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authorities, as applicable.
  - ccccc. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.

- dddd. The diesel generator sets (D.G. set), if any, to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards as per the conditions laid down by the GSPCB.
- eeeee. The installation of the Sewage Treatment Plant (STP) need to be certified by the GSPCB and a report in this regard should be submitted to the Authority before the project is commissioned.
- fffff. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.
- ggggg.The Environmental Clearance is being issued without prejudice to the legal interventions / court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court / National Green Tribunal (NGT) will be binding on the project proponent. **Hence, this EC does not give immunity to the project proponent in the case filed against it**.
- hhhhh. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

## iiiii. Validity of the Environmental Clearance (EC) shall be for a period of 05 (five) years from the date of its issue.

jjjjj. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully,

Sd./-

(Srinet Kothwale) Director/ex-officio Jt. Secy. Environment & Member Secretary, Goa-SEIAA

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(Goa-SEIAA) Secretariat, O/o Goa State Pollution Control Board (GSPCB), 3<sup>rd</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/10* 

Date: 9<sup>th</sup> May 2014

*To,* **M/s Ganesh Benzoplast Limited**, Diana Building, 1<sup>st</sup> Floor, 53, Mharshi Karve Road, Marine lines, Mumbai – 400 002

#### Sub.: Proposed expansion in handling and storage capacity by constructing two (02 nos.) storage tanks, each of 10,000 Metric Tons (MT) – i.e. total about 20,000 MT capacity for storage of Liquefied Petroleum Gas - propane, butane – Environmental clearance regarding

Sir,

I am directed to refer to your application dated 22<sup>nd</sup> May 2012 seeking prior Environmental Clearance (EC) for the above project as required under the EIA Notification, 2006. Accordingly, the above proposal has been screened and appraised under Category 6 (b) -Service Sector - Isolated storage and handling of Hazardous chemicals (as per threshold planning quantity indicated in column 3 of the schedule 2 & 3 of MSIHC Rules 1989 amended in 2000). Further, on the basis of the documents enclosed with application viz. Form -1 along with (a) layout of the site plan and (b) foundation details of the tank as well as in response to project presentation followed by submission of compliances by M/s Ganesh Benzoplast Limited (GBL) to the Goa-SEAC's as well as Goa-SEIAA's site-specific/project-specific observations/clarifications, the matter was discussed and deliberated during subsequent SEAC meeting (i.e. 7<sup>th</sup> meeting held on 24<sup>th</sup> July 2012) as well as SEIAA meetings (i.e. 5<sup>th</sup> meeting held on 18<sup>th</sup> December 2012, 6<sup>th</sup> meeting held 7<sup>th</sup> February 2013, 10<sup>th</sup> meeting held on 23<sup>rd</sup> January 2014 and 11<sup>th</sup> meeting held on 27<sup>th</sup> March 2014). Accordingly, the matter was finally considered for issuance of prior environmental clearance (EC) to the aforesaid expansion activity during the 12<sup>th</sup> Goa-SEIAA meeting held on 24<sup>th</sup> April 2014 under the Chairmanship of Dr. Pramod V. Pathak.

**2.** It is noted that the project proponent has submitted the proposal for grant of prior Environmental Clearance (EC) for the proposed expansion comprising of -

- 1. Two no. of storage tanks of 10,000 Metric Tons each, having double wall, double integrity insulation Total capacity 20,000 MT.
- 2. MS Pipelines (from MPT to the site): 02 Nos. each of 14", 12" & 06" diameter.
- 3. Pump houses for road loading, bullet loading, ethyl mercaptant dosing & fire water.
- 4. 08 bay Tank truck loading gantry
- 5. 02 Nos. weigh bridge (50 T each)
- 6. D.G. room & Compressor room.
- 7. Fixed and potable fire fighting system comprising of storage for fire water, fire water network- with hydrants & monitors, fire water sprinklers & deluge system in accordance with OISD 118 norms and dry powder / foam firefighting equipments as per the standard norms.

Project information from documents submitted by you and considered by the Goa-SEAC

and Goa-SEIAA is summarized as follows -

- (i) **Name of the project** proposed expansion in handling and storage capacity for Liquefied Petroleum Gas.
- (ii) **Project description** construction of storage facility for propane and butane and other ancillary infrastructure as mentioned in 2(2) to 2 (7) above.
- (iii) Project Proponent M/s Ganesh Benzoplast Limited, Mumbai.
- (iv) Location of the project Chalta No. 1, P. T. Sheet no. 49 of Vasco city area.
- (v) Type of project category (as per 'Schedule' annexed to EIA Notification, 2006) Category 6 (b) Service Sector Isolated storage and handling of Hazardous chemicals (as per threshold planning quantity indicated in column 3 of the schedule 2 & 3 of MSIHC Rules 1989 amended in 2000).
- (vi) Land details proposed site falls within the Mormugao Port Trust (MPT) port limits.
- (vii) **Capacity of storage tanks** two tanks each of 10,000 Metric Tons capacity, totaling to 20,000 MT.
- (viii) Tank dimensions (Dia. X height in mm) 38,000 X 20,000

**3.** Based on the above, Goa-SEIAA has decided to accord prior Environmental Clearance (EC) to the said project expansion under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

- a. Nutrient-rich top soil excavated, if any, during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation.
- b. The project proponent should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- c. The Project Proponent should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirement.
- d. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the available water source. Alternatively, groundwater be effectively recharged either through construction of recharge-pits or augmenting the existing bore-wells present within the project-area, if any.
- e. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority.
- f. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species.
- g. Project proponent should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its land use categorization/zoning.
- h. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o Goa-SEIAA for the period up to project completion so as to enable project monitoring during the construction phase.

4. In addition, certain **"Specific Conditions"** to be complied with by the project proponent are as under:-

- a. All the safety measures as suggested by the designing aspects should be 100% complied with by the project proponent.
- b. The 'Display Board' / 'Site Map' for the safety operations in the event of any disaster situation should be displayed / available at the site entrance, at 2 or 3 places, so that even public is aware of safety measures during emergencies.
- c. The specific measures for contentment of fire using anhydrous medium like powder foam, etc., should be of the international standard while storing, periodically checked

and annual report of the system check should be submitted to the Collector (South Goa District) and the Authority (*i.e. Goa-SEIAA*).

- d. A fire station is located within the MPT jurisdiction, which is the closest fire station, It should be equipped with anhydrous medium for fire fighting to the extent of 10% of the total quantity. The PP will ensure that MPT provides adequate storage place, easy access and periodic check of the facility jointly provided / supported by MPT and the PP together.
- e. PP should appoint 'Safety Officer / Fire Officer' with full training and adequate experience for handling petroleum gas products. Further, he should be made incharge of the safety, handling of operation and periodic mock trial by maintaining records there upon.
- f. It will be obligatory responsibility of such a Safety Officer to quarterly report to the O/o the District Collector (South Goa) and Goa-SEIAA in respect of the facility check, replacement and modification(s), if any, in the safety setup. In absence of which, he will be held responsible lapses, if any.
- g. The District Collector (South Goa) has full authority to summon, question the Safety Officer / Fire Officer and inspect the fire fighting / safety gadgets facility at MPT and/or PP's site-premise as surprise check. He has full authority to seek opinion from MPT and CISF on dependability of existing disaster management measures.
- h. Once in six months compulsory mock drills should be held with MPT Officer's participation.
- i. As suggested in the earlier visit by the Authority, the PP should associate minimum two Members as recommended by the Authority for inspection and certification at the time of panel inspection and checking of the vessel while off-loading the consignment.
- j. CISF should ensure logistic backing traffic management during the time of exigencies. The Safety Officer should conduct traffic control and diversion trials in collaboration with CISF by closing approach road at least once in a year for half an hour and report the difficulties and experience of handling to the District Collector (South Goa) and SEIAA.
- k. No land development / construction work preliminary or otherwise relating to the project shall be taken up without obtaining due NOCs' / clearances from competent authorities, as applicable.

**5.** Further, the project proponent is required to comply with the following terms and conditions:

a. 'Consent to Establish/Operate' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEIAA.

- b. Permission to extract / draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
- c. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.
- d. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided.
- e. Project proponent shall make suitable provisions for storm water disposal as well as safe disposal of waste-water generated, if any.
- f. The diesel generator (D.G.) sets to be used should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- g. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within fifteen days of the receipt of this letter, informing that the project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are made available on the DST&E website.
- h. The Environmental Clearance is being issued without prejudice to the court case / legal interventions pending in the Court of law, as applicable and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court / National Green Tribunal (NGT) will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- i. The Authority reserves the right to add any other terms and conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- j. No further expansion or modification in the storage facility shall be carried out without prior approval of Goa-SEIAA.
- k. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.
- 1. This Environmental Clearance (EC) is issued without prejudice to any other prior permission / license / NOC as required under the law. As such, the project proponent is required to obtain all the required permissions, etc., as applicable, before actual commencement of works / commissioning of storage facility, etc.,

m. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully, Sd/-(Srinet Kothwale) Director/ex-officio Jt. Secy. (Env.) & Member Secretary, Goa-SEIAA

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## GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY EIA-Goa State Secretariat,

#### O/o Goa State Pollution Control Board (GSPCB),

1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001

Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

No: 3 - 181 - 2010/STE-DIR/Part-II/EIA-Goa/80

Date:26th February 2014

То,

#### M/s Model Real Estate Developer,

7th Floor, Karim Mansion,

Behind Goa College of Pharmacy,

Panaji, Goa - 403 001.

# Sub.: Proposed construction of residential complex "Model's Status" in Survey No. 231/2 of Taleigao village in Tiswadi taluka, North Goa district – reg.,

Sir,

With reference to the above subject matter as well as in response to your compliance dated 7<sup>th</sup> January 2014, the said project proposal was discussed during the 10<sup>th</sup> Goa State Environment Impact Assessment Authority (Goa-SEIAA) meeting held on 23<sup>rd</sup> January 2014 wherein, it was decided to seek documentary evidence, justifying the actual on-site initiation of the construction activity prior to enforcement of the Environment Impact Assessment (EIA) Notification, 2006 (*i.e.* 14<sup>th</sup> September 2006), from the Project Proponent (PP) prior to take any final decision.

Subsequently, on detailed scrutiny of the documents submitted by the PP, the Authority has decided to accord environmental clearance (EC) to a residential complex

'Model's Status' - (G + 8 – *height of 24 mt. & G* + 1 – *height of 7.5 mt.*) in survey no. 213/2 of Taleigao village in Tiswadi taluka in North Goa District, as inferred from the following points –

- (a) The aforementioned construction activity is prior to enforcement of provisions of the EIA Notification i.e. prior to on 14<sup>th</sup> September 2006 and as such, does not attract provisions of the said Notification.
- (b) The said project activity comes under the purview of the EIA Notification, 1994 subject to the applicability of the following criteria for construction projects namely –
  - (i) Meant for 1,000 persons or more <u>or</u>
  - (ii) Discharging sewage more than 50 KL per day <u>or</u>
  - (iii) Investment more than 50 crores.
- (c) In response to (b) above, the PP, vide letter dated 7<sup>th</sup> January 2014, has submitted that the construction activity is meant for 760 persons, optimum sewage discharge is 43-KL per day and investment of 42 crores. As such, construction project does not mandate requirement of environmental clearance (EC) under EIA Notification, 1994.

2. It is noted that the proposal is for grant of Environmental Clearance (EC) for a **residential complex 'Model's Status'** - (G + 8 – *height of 24 mt.* & G + 1 – *height of 7.5 mt.*) in survey no. 213/2 of Taleigao village in Tiswadi taluka in North Goa District,. Project details and salient features of the proposed developmental activity is as under –

- a. Total plot area 27,389 sq. mt.
- b. Total Built-up area 33,752.08 sq. mt.
- c. Total nos. of flats 270
- d. Plinth area / Terrace area 4,104.89 sq. mt.
- e. Total green area + open space proposed 4,514.00 sq. mt.

f. Physico-chemical analysis of soil as well as microbial characteristics has been done.

g. Coast of the project - 42.39 crores

h. Parking facility - 325 four wheelers & 50 two wheelers

i. Rainwater harvesting involving (a) groundwater recharge as well as (b) roof-top harvesting to store the water has been proposed.

i. Water requirement - 50 m<sup>3</sup> / day during construction - 130.1 m<sup>3</sup>/ day during

Operation phase.

k. Sewage Treatment Plant – Out of 117.35 m $^3$ /day waste-water generated, about 93.52 of

treated water from the STP is proposed to be utilized for gardening and greenarea

development.

l. Power requirement - 100 KVA during construction phase - 1500 KVA during operation

phase to be sourced from Goa Electricity Dept. (GED). 01 no. of D. G. set of 100 KVA capacity is proposed as stand-by energy source.

m. Solid waste generated – 500 kg. /day during construction phase and 108 kgs. /day during operation phase (i.e. 64.8 kg – biodegradable waste & 43.2 non-biodegradable

waste). Hazardous waste (20 kgs. /month during construction and 10 kgs./month during

operation phase) is expected to be generated.

n. Environment Management Plan (EMP) addressing following issues related to - (a) fire

fighting facility (b) Traffic management (c) noise reduction (d) energy conservation (e)

post-project monitoring and management have been proposed.

29. The Project Proponent (PP) is directed to comply with the following "General

#### Conditions":-

- uuuu. Nutrient-rich top soil excavated during the construction phase be be utilized during landscape development instead of using the same as filling material/reclamation.
- vvvv. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- wwww.The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirements.
- xxxx. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or by collecting water in large polythene tanks thereby saving on utilization of tap water. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures / STP installation, etc.
- yyyy. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- zzzz. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- aaaaa. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.

- bbbbb. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.
- ccccc. Considering the existing land use / land cover of the plot area, the PP should necessarily adapt roof-top rainwater harvesting system for optimum utilization of water resources, especially for landscape development and its maintenance.
- **4.** Further, the project proponent has been advised as regard to the following:
  - kkkkk. 'Consent to Establish / Operate', as applicable, shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.
  - lllll. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - mmmm. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.
  - nnnnn. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.
  - ooooo.Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.
  - ppppp. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
  - qqqqq. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority.

- rrrrr. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within seven days of the receipt of this letter, informing that the project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.
- sssss. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- ttttt. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

## uuuuu. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

vvvvv. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully,

Sd./-

(Levinson J. Martins)

Director/ex-officio Jt. Secy. (STE) &

Member Secretary, Goa-SEIAA

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(Goa-SEIAA) Secretariat,

O/o Goa State Pollution Control Board (GSPCB),

1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/ 12* 

Date: 12<sup>th</sup> April 2013.

*To,* Mr. Parag M. Nagarsekar, **Assistant Director,** Directorate of Mines and Geology (DMG), Udyog Bhavan, Panaji, Goa – 403 001

### Sub.: Issuance of prior Environmental Clearance (EC) towards New / Renewal of Minor Mineral Quarry Lease – reg.,

Sir,

I am directed to refer to your communications enclosing applications of project proposals / applications seeking prior Environmental Clearance (EC) for 'New' / 'Renewal', as applicable, of Minor Mineral Quarry Lease(s), for areas upto 50 hectares, from the following lease holders as detailed below:-

- 1. <u>Renewal</u> proposals by M/s Halarnkar Industries, Mapusa of *two* 'Basalt stone quarries' namely
  - *a.* Lease no., 09/Basalt/90 5,200 sq.mts.) with proposed extraction capacity of 60m<sup>3</sup> per day, located in survey no. 272(P) of village Casarvarnem in Pernem taluka of North Goa district.
  - *b.* Lease no., 06/Basalt/03 12,075 sq.mts.) with proposed extraction capacity of 60m<sup>3</sup> per day, located in survey no. 47/1 and 47/2, of village Alorna in Pernem taluka of North Goa district.
- 2. <u>Renewal</u> proposal by Mrs. Anila Rege, Margao for one 'Basalt stone quarry' (*Lease* no.05/Basalt/06 4,800 sq.mts.) with proposed extraction capacity of 1,800m<sup>3</sup> per year, located in survey no. 86/0 of Kotambi village in Quepem taluka of South Goa district.
- 3. <u>New</u> 'Basalt stone quarry' proposal by Mr. Chandrashekhar G. Dessai, Canacona. (*plot area* 5,000 sq.mts) with proposed extraction capacity of 4,200m<sup>3</sup> per year, located in survey no. 62/1 of village Cordem in Quepem taluka of South Goa district.
- 4. <u>Renewal</u> proposals by M/s Joao Lourenco Baptista of two 'Basalt stone quarries' namely (i) Lease nos. - 01/Basalt/04 (7,150 sq.mts.) and (ii) 0 4/Basalt/04 (5,080 sq.mts.) with proposed extraction capacity of 50m<sup>3</sup> per day per lease, located in survey no. 52/0 of Ugeum village in Sanguem taluka of South Goa district.
- 5. <u>**Renewal**</u> of one 'Basalt stone quarry' (*Lease no.05/Basalt/00 7,000 sq.mts.*) with increase in extraction capacity from existing 6,000 m<sup>3</sup> per year to proposed 12,000 m<sup>3</sup> per year, located in

survey no. 62/1 of Santona village in Sanguem taluka of South Goa district by M/s Mario Mascarenhas, Margao.

- 6. <u>New</u> 'Laterite stone quarry' (*plot area 2,000 sq.mts.*) with proposed extraction capacity of 3,000m<sup>3</sup> per year, located in survey no. 24/1 of Menkurem village in Bicholim taluka of North Goa district by Shri. M/s Nilu Jaidev Shetye, Bicholim.
- <u>New</u> 'Laterite stone quarry' (*plot area 7,180 sq.mts.*) with proposed extraction capacity of 6,250m<sup>3</sup> per year, located in survey no. survey no. 42/0 of Muguli village in Sanguem taluka of South Goa district by Shri. Shri. Rumaldo Fernandes.
- 8. <u>New</u> 'Basalt stone quarry' (*plot area 4,000 sq.mts*) with proposed extraction capacity of 12,000m<sup>3</sup> per year, located in survey no. 19/1(P) of Goculdem village in Quepem taluka of South Goa district by M/s Anil Shaba Fal Dessai, Cuncolim.
- <u>Renewal</u> of 'Basalt stone quarry' (*Lease no. 15/Basalt/88 plot area -5,400 sq.mts.*) with proposed extraction capacity of 24,000m<sup>3</sup> per year, located in survey no. 12/1 of Damochem village in Sattari taluka of North Goa district by M/s Kaloshi Granites, C/o Mr. B. A. Xavier, Margao.

In this context, it is informed that all the above-referred proposal were appraised as 'Category – B' and screened as 'category 1(a)-B2 projects', by the Goa State Expert Appraisal Committee (Goa-SEAC) in light of the –

- a. Hon'ble Supreme Court "Order" issued dated 27<sup>th</sup> February 2012 in a matter S. L. P. (c) No. 19628 19628 of 2009 between *Deepak Kumar & Others V/s State of Haryana & Others*, the lease of Minor minerals including their Renewals (s) be granted by the State (*i.e. Directorate of Mines and Geology DoMG, Goa*) only after getting Environmental Clearance (EC) from the State Environment Impact Assessment Authority concerned (*i.e. Goa SEIAA*) as mandated in the Environment Impact Assessment (EIA) Notification 2006 (*as amended upto 13<sup>th</sup> March 2013*)
- b. "Office Memorandum" (O.M.) bearing No. L-11011 / 47 / 2011-IA.II (M) dated 18<sup>th</sup> May 2012 issued by the Ministry of Environment & Forests (MoEF), Govt. of India, New Delhi.
- c. "Environment Impact Assessment (EIA) Notification, 2006 (as amended)" and the Schedule annexed thereto, by the Ministry of Environment & Forests (MoEF), Govt. of India, New Delhi.
- d. **"Order"** bearing no. 34/10/12-Mines/365 dated 10<sup>th</sup> May 2012 issued by the Directorate of Mines and Geology (DMG), Goa.
- e. "Goa Minor Mineral Concession (Amendment) Rules, 2012" notified by the Directorate of Mines and Geology (DMG), Goa and published in State's Official Gazette Series 1, No. 24 (*Extraordinary No. 4*) dated 17<sup>th</sup> September 2012.

and accordingly project-specific comments / suggestions / recommendations, as applicable, were forwarded to the Goa State Environment Impact Assessment Authority (Goa-SEIAA).

Subsequently, these proposals were deliberated and re-examined during the 8<sup>th</sup> and 9<sup>th</sup> Authority meeting convened on 1<sup>st</sup> April and 12<sup>th</sup> April 2013 respectively and has decided to accord prior Environmental Clearances (EC) to project proposals referred above (i.e. 1 to 9) subject to mandatory compliance to the following by the Directorate of Mines and Geology (DMG), Goa, namely –

- a. Final decision / Order in the matter of the Public Interest Litigation (PLI) Writ Petition no. 10/2012 (i.e. *Francis Xavier Carvalho V/s Dept. of Mines and Geology)*, as applicable.
- b. Current status / follow-up action on 'Suspension-cum-Show Cause Notice' issued to minor mineral quarry leases by the DMG dated 8<sup>th</sup> October 2012, as applicable.
- c. 'Goa Mineral Concession (Amendment) Rules, 2012 notified by the Directorate of Mines and Geology (DMG) and published in Official Gazette Series-I, No. 24 dated 17<sup>th</sup> September 2012.
- d. Submission of **'approved quarrying plan'** by the competent officer as per Sub-rule (7) as well as specific compliance to Sub-rules 7(A) to 7(D) of the above-referred Rules, as applicable.
- e. Ascertaining the compliance to 'Order' issued by National Green Tribunal (NGT) dated 21<sup>st</sup> September 2012 in a matter related to Review Application no. 8/2012 in Application No. 26/2012 and verifying that the minor minerals lease areas above do not fall within the Ecologically Sensitive Zone (ESZ-1) as defined in the Western Ghats Ecology Expert Panel (WGEEP) report compiled by Dr. Gadgil Committee.

Further, the project proponent (*i.e. minor mineral quarry lease holder*) is required to mandatorily comply with the following 'specific conditions':-

- 102. The lease holder should ascertain on-site demarcation and construction of lease boundary with cement poles / bio-fencing / barbed wire for the proposed leased area in question. The lease boundary may be subsequently geo-referenced for precise positioning and ground-truth verification. As such, the lease holder should ensure that minor mineral quarrying operations are restricted within the prescribed lease boundary.
- 103. The lease holder should ensure construction of approach road / proper access to enable transportation of quarried material from site to desired destination and/or crushing unit, as applicable.
- 104. The lease holder should comply with the proposed plan of action / modus operandi for extraction of basalt / laterite stones within the available lease boundary limits in terms of provisions of Mines and Safety Rules / Guidelines, as applicable.
- 105. The lease holder shall undertake adequate safeguard measures during extraction of material *(i.e. especially in case of basalt stone quarry)* and ensure that due to this activity, the hydro-geological regime of the surrounding area shall not be affected / altered / polluted. Regular monitoring of groundwater levels and its physico-chemical quality parameters shall be carried out around the quarry lease area (for minimum two

locations of permanent water sources / open well / borewell). If there are no groundwater sources, then nearest perennial surface water sources (*i.e. stream / river / pond / lake / reservoir / irrigational canal*) should be monitored for similar parameters on quarterly basis and/or seasonally (*i.e. pre-monsoon / monsoon and post-monsoon*).

- 106. The lease holder shall implement air pollution control measures / dust minimizing initiatives / noise control measures, wherever applicable, within the lease area as well as establish adequate buffer zone around the lease boundary to minimize such pollution hazards. It should be ensured that the Ambient Air Quality (AAQ) parameters (*to be measures in January, April and November every-year*) as well as Noise parameters conform to the norms prescribed by the Central Pollution Control Board (CPCB) and Noise Pollution (Control) Rules, 2000 respectively.
- 107. Green belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with Forest Department / Zonal Agricultural Office, as applicable.

# 108. The validity of the EC will be upto the validity of the lease period or maximum upto five years from the date of issuance of this letter.

In addition, respective lease holder should satisfy the following 'General conditions' -

- a. All necessary statutory clearances from relevant Authorities concerned shall be obtained before start of quarrying operations.
- b. Quarrying operations should be limited to day-hours time only with specified time reserved for 'blasting', as applicable and whenever required.
- c. No quarrying be carried out within the safety zone of any bridge and/or embankment as well as within the vicinity of natural / man-made archaeological site(s).
- d. The lease holder shall obtain necessary prior permission (NOC) from the Groundwater Cell of the Water Resources Department (WRD) for drawl of requisite quantity of water (surface water / groundwater), if required.
- e. Waste water / effluents, if any, shall be properly collected, treated and monitored so as to conform to the standards prescribed by the MoEF / CPCB.
- f. Environmental clearance (EC) is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent Authority, if applicable.
- g. Transportation of quarried material shall be done by covering the trucks with tarpaulin so that no spillage of material / dust takes place en route.
- h. The lease holder should provide safety gadgets and health-care facilities to workers vis-avis maintain hygiene surrounding the proposed lease boundary.
- i. The mining officer / in-charge of quarrying operations on-site shall submit six-monthly report in hard and soft copy formats w.r.t. the status of compliance of the stipulated environmental clearance conditions (*i.e. Specific and General conditions*) to the

Directorate of Mines and Geology (DMG), Goa, Goa-SEIAA as well as Goa State Pollution Control Board (GSPCB).

- j. Any change (i.e. modification / expansion / alteration) in lease area / quarrying operations / extraction capacity / modernization / scope of working / environment management plan (EMP) shall require re-appraisal by this Authority (i.e. Goa-SEIAA) for according prior EC as per the provisions of the EIA Notification, 2006 (as amended upto 13<sup>th</sup> March 2013).
- k. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that lease holder has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the lease holder. Hence, <u>this EC does not give immunity to the lease holder in the case filed against it</u>.
- 1. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- m. Any appeal against this prior environmental clearance shall lie before the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully, Sd./-(Levinson J. Martins) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

# GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY EIA-Goa State Secretariat, O/o Goa State Pollution Control Board (GSPCB), 1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/13* 

Date: 12<sup>th</sup> April 2013

*To,* **M/s Leading Hotels Limited,** 573, Road Four, La Campala, Miramar, Panaji, Goa – 403 001.

Kind attention: Ms. Purti Kathpalia

# Sub.: Setting up of 18-hole PGA-standard golf course and Eco-resort in survey nos. 2 to 13(P) of Tiracol village in Pernem taluka of North Goa district.

Sir,

I am directed to refer to your application dated  $24^{th}$  January 2013 seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under "**Category 8 (a)** – **Building and construction project**" on the basis of the documents enclosed with application viz. Form 1 and Form 1A as well as in response to the project-specific observations (*i.e. project presentation followed by site-inspection*) considered by the Goa State Expert Appraisal Committee (Goa-SEAC) and subsequently by the Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its Eighth and Ninth meeting held on 1<sup>st</sup> April and 12<sup>th</sup> April 2013.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for "proposed construction of a golf course and Eco-resort in survey nos. 2 to 13 of Tiracol village in Pernem taluka of North Goa district". Project details and salient features of the proposed developmental activity is as under –

- a. Tiracol land area 13,84,000 sq.mts.
- b. Total acquired land (including village) 12,18,000 sq.mts.
- c. Area occupied by Tiracol village 3,15,000 sq.mts. (i.e. area enclosed within laxman-rekha)
- d. Total project area (244.6 acres) 9,90,000 sq.mts.
- e. Permissible FAR 40,000 sq.mts. (Max.)
- f. Project elements -
- 1. Golf course proposed in land area 5,62,536 sq.mts.
- 2. Resort villas : Standard (128 nos.) proposed in land area 2,02,350
- 3. Resort villas : Premium (60 nos.) proposed in land area 1,29,504 sq.mts.

- 4. Engineering utilities / maintenance house land area 95,610 sq.mts.
- g. No. of car parking 660
- h. Peak occupancy 725 nos.
- i. Total water requirement 2,550 m<sup>3</sup> per day. (1,200 m<sup>3</sup> for golf course and 1,350 m<sup>3</sup> for resort)
- j. Wastewater to be treated through STP of 200 CMD capacity (MBR technology)
- k. Power requirement 5,050 KVA / Back-up D.G. sets 06 nos. Of 750 KVA each.
- l. Total quantity of waste generated (i) Biodegradable 260 kgs/day

(ii) Non-biodegradable – 260 kgs./day.

m. The proposed development would affect 1,966 trees. Out of which, about 1,101 trees are proposed to be preserved or transplanted.

**30.** In view of the above and based on the recommendations of the Goa-SEAC; Goa-SEIAA, subsequent to compliances sought to project-specific observations / site-specific clarifications, has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

- dddd. Nutrient-rich top soil, as per its availability, excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation.
- eeeee. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- fffff. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirements.
- ggggg. As a Corporate Social Responsibility (CSR), the PP, as proposed, should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority namely – (a) Primary school, (b) 25bedded health care centre, (c) Police outpost, (d) Bank and post-office, (e) Garbage disposal-cum-treatment facility and (f) Disaster management site with helipad.
- hhhhh. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management during construction period and post-developmental stage.
- iiiii. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species / less-water intensive and which are not alien to the local environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.

- jjjjj. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.
- kkkkk. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- lllll. Considering the existing land use / land cover of the plot area, the PP should necessarily adapt roof-top rainwater harvesting system for optimum utilization of water resources, especially for landscape development and its maintenance.
- 4. In addition, the Project Proponent (PP) is directed to comply with the following

# 'Specific condition'.

- a. The proposed construction-cum-development project should be in accordance with the <u>'Master Plan'</u> as approved by the Town and Country Planning (TCP) Department. Any deviation, irrespective of its nature, be brought to the notice of this Authority as well as TCP, Goa, for re-appraisal.
- b. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water (*i.e. collection tank of 10,000 m<sup>3</sup> capacity, two lakes with total storage capacity of 40,000 m<sup>3</sup>*) so as to optimally utilize the water availability by constructing sumps for collection of rainwater. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers.
- c. The PP should use "Paspalum" Grass species a salt-tolerant variety for the proposed construction of 18-hole PGA-standard Golf-course. In addition, proposed golf course should be integrated with application with bio-pesticides and bio-stimulants (i.e. Integrated Pest management Techniques) along with (a) Moisture sensors (for automatic irrigation control), (b) Weather monitoring station (for irrigation control) and (c) Sub-surface drainage (to capture excess irrigation water / rainfall).
- d. PP should adopt suitable soil-erosion control measures / earth-stitching / application of geo-textiles, if any, as well as site-specific shoreline protection interventions (hard and soft solutions) based on local geomorphological set-up of Tiracol coast.
- e. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently. In addition, the **PP should analyse and monitor, on quarterly basis, pesticide content in surface (streams / nalla / lake) as well as groundwater sources (well water / bore well) within the project area as well as local water sources in Tiracol village.**
- f. 'No Objection Certificate (NOC)' shall be obtained from the Goa State Coastal Zone Management Authority (GCZMA) or the Ministry of Environment & Forests (MoEF), as applicable, considering project/site-specific applicability to the Coastal Regulation Zone (CRZ) Notification, 2011.

- g. PP should thrive hard to aim for 'Platinum' certification by improving relevant sustainability indicators, in addition to being EIA and LEED compliant.
- 5. Further, the project proponent needs to comply with the following:
  - wwww. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.
  - xxxxx. Withdrawal of groundwater is not permitted from within the NDZ as demarcated on the master plan based on the CRZ applicability.
  - yyyyy. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.
  - zzzzz. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.
  - aaaaaa. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
  - bbbbbb. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.
  - cccccc. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within seven days of the receipt of this letter, informing that the project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E as well as PP's website.
  - ddddd. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
  - eeeeee. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
  - ffffff. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

gggggg. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully, Sd./-(Levinson J. Martins) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

## GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

**EIA-Goa State Secretariat, O/o Goa State Pollution Control Board (GSPCB),** 1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/07* 

Date: 8<sup>th</sup> April 2013

*To*, **M/s Nitin Developers Pvt. Ltd.,** La Casa Grande, Plot No. E-1, Lane No. 2, St. Mary's Colony, Miramar, Panaji, Goa – 403 001

Kind attention: Mr. Nitin Saraf

# Sub. : Proposed expansion of Residential complex in survey nos. 402/2, 404/5 and 404/2-C of Soccorro village in Bardez taluka of North Goa district – reg.,

# Ref.: (1) This office letter no. 3 / 181 / 2010 / STE – DIR / 94 dated 21<sup>st</sup> March 2013 (2) Your compliance vide letter no. Nil dated 8<sup>th</sup> April 2013

## Sir,

In continuation to this office letters referred in (1) above and in response to your compliance referred to in (2) above, I am directed to refer to your application dated 8<sup>th</sup> November 2010 seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) on the basis of the documents enclosed with application viz. Form 1 and Form 1A (conceptual plan) by the Goa State Environment Impact Assessment Authority (Goa-SEIAA).

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed 'expansion' of residential complex in survey nos. 402/2, 404/5 and 404/2-C of Soccorro village in Bardez taluka of North Goa district. Project details and salient features of the proposed developmental activity is as under –

- a. Total plot area -22,896.38 sq. mts.
- b. Built-up area (BUA) constructed as on date 19.934.70 sq.mts.
- c. Total built-up area (BUA) with additional proposed BUA during expansion thereby totalling it to 29,007.74 sq.mts.
- d. FAR (permissible) 18,317.10 sq. mts. (proposed) 17,072.69 sq. mts.
- e. Coverage (permissible) 9,124.15 sq. mts. (proposed) 7,048.11 sq. mts.

- f. Total parking provide for 275 cars.
- g. Total occupancy (optimum) 746 persons.
- h. Water requirement About 125m<sup>3</sup>/day (sump of 1,00,000 liters capacity is proposed) to be sourced from P.W.D.

Rainwater harvesting (RWH) is proposed for both, as storage (02 tanks) as well as groundwater recharge (02 pits) and to be integrated with storm-water drainage. Wells existing on site are proposed to be recharged to be used for plantations.

- i. Total waste-water generated 98,000 liters/d. As such, STP is to be provided with generation of sewage sludge of 1.5 m<sup>3</sup> per day part of this is proposed to be recirculated and part to be disposed-off to STP.
- j. Total solid waste generated 500 kgs. per day (max.)

**31.** In view of the above and based on the compliance submitted by the Project Proponent (PP) vis-a-vis payment of penalty, Goa-SEIAA has decided to accord prior Environmental Clearance (EC) to the said 'Expansion' project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to provisions of the Office Memorandum (O.M.) issued by the Ministry of Environment & Forests (MoEF), Govt. of India, New Delhi dated 18<sup>th</sup> December 2012. In addition, the PP is required to adhere to the following **"General Conditions"**:-

- mmmm. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.
- nnnn. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- ooooo. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirements.
- ppppp. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- qqqqq. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.

- rrrrr. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- sssss. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.
- ttttt. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- uuuu. Considering the existing land use / land cover of the plot area, the PP should necessarily adapt roof-top rainwater harvesting system for optimum utilization of water resources, especially for landscape development and its maintenance.
- 4. Further, the project proponent has been advised as regard to the following:
  - hhhhhh. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.
  - iiiiii. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - jjjjjjj. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.
  - kkkkkk. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.
  - lllll. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.
  - mmmmm. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
  - nnnnn. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.

- oooooo. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within seven days of the receipt of this letter, informing that the project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.
- pppppp. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- qqqqqq. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

# rrrrrr. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

ssssss. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully, Sd./-(Levinson J. Martins) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

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## GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

O/o Goa State Pollution Control Board (GSPCB),

1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/06* 

Date: 8<sup>th</sup> April 2013

*To,* **M/s Rockfirst Real Estate Ltd.,** 1, Peninsula Spenta, Mathurdas Mills, Senapati Bapat Marg, Lower Parel, Mumbai – 400 013

Kind attention: Mr. Sanjay Ghatwal

Sub. : Proposed expansion of a Residential complex 'Ashok Beleza' in survey no. 57/1 of Reis Magos village, Alto-Batim in Bardez taluka, North Goa district – reg.,

Ref.: (1) This office letter no. 3 / 181 / 2010 / STE – DIR / 93 dated 21<sup>st</sup> March 2013 (2) This office letter no. 3 / 181 / 2010 / STE – DIR / 02 dated 1<sup>st</sup> April 2013 (3) Your letter no. Nil dated 3<sup>rd</sup> April 2013

Sir,

In continuation to this office letters referred in (1) and (2) above and in response to your compliance referred to in (3) above, I am directed to refer to your application dated 2<sup>nd</sup> November 2010 seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposal has been screened and appraised under Category 8 (a) on the basis of the documents enclosed with application viz. Form 1 and Form 1A (conceptual plan) by the Goa State Environment Impact Assessment Authority (Goa-SEIAA).

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed expansion of a residential complex 'Ashok Beleza' in survey no. 57/1 of Reis Magos village, Alto-Batim in Bardez taluka, North Goa district. Project details and salient features of the proposed developmental activity is as under –

- a. Total plot area 29,120.13 sq. mt.
- b. Total Ground coverage area 8,751.61 sq. mts.
- c. Green cover area -20,368.52 sq. mts.
- d. Built-up area (BUA) constructed as on date 7,881.44 sq. mts. (*part in block 'B' and block 'C'*)

- e. Total proposed built-up area BUA 32,452.52 sq. mts. (Block 'A' (plot nos. 136 to 154) + Block 'B' (plot nos. 155 to 181) + Block 'C' (plot nos. 121 to 135)
- f. Total occupancy 652 nos. (max.).
- g. About 26,711.37  $\text{m}^3$  of earth would be removed / excavated.
- h. Geotechnical soil investigation has been carried out through 17 boreholes with permanent benchmark of +50 mt. No groundwater table was encountered.
- i. Reinforced concrete (i.e. Spread foundation) is proposed with maximum water: cement ratio of 0.50 at an average depth of 1.5 mt.. This foundation has a safe bearing capacity of 40 T/sq.mt. (with total settlement of 9 mm). California Bearing Ratio (CBR) of 6 is proposed for construction design. Retaining walls with weep holes with gravel filters are proposed.
- j. Water requirement: During construction: 42 m<sup>3</sup>/d ( $12m^3/d$  for workers from local authority 20 to 30 m<sup>3</sup>/d for construction proposed to be sourced through tankers).

During operation : Total requirement – 150 m3/d ( $60m^3/d$  for domestic use,  $30m^3/d$  for flushing and  $60m^3/d$  for gardening).

- k. RWH is proposed and has provided technical details.
- 1. 86 trees are proposed to be planted in lieu of 43 trees for which permission is sought for cutting.
- m. Power requirement: During construction-75 kVA:to be sourced from Goa Electricity Dept.

During operation - 3828 KW : to be sourced from Goa Electricity Department. In addition, back-up power through four diesel generator – two of 750 kVA and two of 500 kVA.

- n. Solid waste generated 291 kg/d (Dry garbage 89 kg. & Wet garbage 203 kg. / d) Vessel composting is proposed to manage wet garbage (i.e. biodegradable). STP using Moving Bed Bio Reactor (MBBR) technology is proposed to be provided. Dry sludge to be used as manure for plants.
- o. EMP for HW management has been detailed out.
- p. Disaster Management Plan has also been compiled and has submitted the same.

**32.** In view of the above and based on the compliance submitted by the Project Proponent (PP) vis-a-vis payment of penalty, Goa-SEIAA has decided to accord prior Environmental Clearance (EC) to the said 'Expansion' project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to provisions of the Office Memorandum (O.M.) issued by the Ministry of Environment & Forests (MoEF), Govt. Of India, New Delhi dated 18<sup>th</sup> December 2012. In addition, the PP is required to adhere to the following **"General Conditions"**:-

vvvvv. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development

instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.

- wwww. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- xxxxx. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirements.
- yyyyy. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- zzzzz. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- aaaaaa. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- bbbbbb. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.
- cccccc. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- ddddd. Considering the existing land use / land cover of the plot area, the PP should necessarily adapt roof-top rainwater harvesting system for optimum utilization of water resources, especially for landscape development and its maintenance.
- 4. Further, the project proponent has been advised as regard to the following:
  - tttttt. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.
  - uuuuu. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.

- vvvvvv. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.
- wwwww. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.
- xxxxxx. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.
- yyyyyy. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- zzzzzz. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.
- aaaaaaa. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within seven days of the receipt of this letter, informing that the project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.
- bbbbbbb. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- ccccccc. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

# dddddd. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

eeeeeee. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully, Sd./-(Levinson J. Martins) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

#### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

(Goa-SEIAA) Secretariat, O/o Goa State Pollution Control Board (GSPCB), 1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com / goapcb@rediffmail.com

*No:* 3 – 181 – 2010/STE-DIR/96

Date: 21<sup>st</sup> March 2013

*To,* Chief General Manager, Goa Industrial Development Corporation (Goa-IDC), Plot No. 13A-2, EDC Complex, Patto Plaza, Panaji, Goa – 403 001.

## Sub.: Establishment of Common Hazardous Wastes Treatment, Storage and Disposal Facility (CHWTSDF) at Dharbandora – Renewal / Extension of the Prior Environmental Clearance (EC) – reg.,

# Ref.: Your letters no. (a) GIDC/GM/(E)/CHWTSDF/3663 dated 10<sup>th</sup> January 2013 (b) GIDC/GM(E)/CHWTSDF/3888 dated 24<sup>th</sup> January 2013

Sir,

I am directed to refer to your application referred to in (a) above seeking renewal/ extension of the prior Environmental Clearance (EC) granted by the Ministry of Environment and Forests (MoEF), Govt. of India, New Delhi, for the proposed establishment of CHWTSDF at Dharbandora in Sanguem taluka of South Goa district. In this context, it is informed that the said proposal was discussed and deliberated during the twelfth Goa-SEAC meeting held on 30<sup>th</sup> January 2013, the recommendations of which was subsequently dealt with in the Sixth Goa-SEIAA meeting convened on 7<sup>th</sup> February 2013 as mandated in the Environment Impact Assessment (EIA) Notification, 2006.

2. It is noted that the proposal is for renewal / extension grant of prior Environmental Clearance (EC) for the proposed establishment of the CHWTSDF which was earlier granted byu the MoEF vide its letter no. 10-32/07-IA-III dated 19<sup>th</sup> February 2008. Accordingly and as per clause (9) of the EIA Notification, the validity of the prior EC expires on 18<sup>th</sup> February 2013 (*i.e. for a period of five years from the date of its issuance*). Further, the said clause also specifies that the period of the validity may be extended by the regulatory authority concerned by a maximum period of five years provided an application is made to the regulatory authority by the applicant

within the validity period. Further, it is also understood that the Project Proponent (PP) has not yet initiated any construction work on ground and the site conditions are the same as in 2008.

**33.** In view of the above and based on the recommendations of the Goa-SEAC; Goa-SEIAA has decided to accord renewal / extension to the prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions,-

- eeeeee. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.
- ffffff. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase and should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirement.
- gggggg. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- hhhhhh. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. In any case, no varieties of *acacia* be used either as avenue plantations or as live-fencing.
- iiiiii. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.
- jjjjjjj. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- kkkkkk. PP should set-up a separate environmental management cell for effective implementation of the stipulated environmental safeguards / guidelines, issued, as applicable, by the competent Authorities concerned from time-to- under the supervision of a Senior Executive.
- lllll. PP should carry out assessment on the functioning of the landfill site, through third party. Constitution of such independent body shall be informed to the Goa-SEIAA as well as regional office of the MoEF concerned.

**4.** In addition, certain **"Specific Conditions"** to be complied with by the project proponent are as under:-

- ✓ PP should ascertain that the proposed facility is exclusively utilized for storage, treatment and disposal of landfilliable part of the Hazardous Wastes (HW) only. The incinerable waste should be sent to the hazardous waste disposal facility at Taloja in Maharashtra. Any other category of the hazardous wastes should not be a part of the said treatment / disposal facility at Dharbandora. Accordingly, it should set-up a necessary laboratory and testing facility on-site for characterization of wastes to decide requirement of a pre-treatment, if any, before final disposal.
- ✓ The PP should ensure that the proposed CHWTSDF fulfils all the provisions of the Hazardous Wastes (Management and Handling) Rules, 2003 and the design of the landfill is as per the guidelines of the Central Pollution Control Board (CPCB) with proper leachate collection arrangement.
- ✓ The PP should ensure that the transportation of the HW to the proposed facility conforms to the norms laid down in the said Rules and the facility should handle the HW generated from the member units of the Association, if any.
- ✓ The depth of the proposed landfill facility be decided based on the existing hydrogeological status of the site and accordingly necessary clearance / NOC should be obtained from the Groundwater Authority concerned, as applicable.
- ✓ The PP should ensure that the HW with organic content > 5% of degradable organic matter are not disposed into the landfill. However, required arrangement for collection, treatment and disposal of gases from the landfill should be provided.
- ✓ In the event of a modification / alteration / expansion in the project profile or change in the implementing agency / CHWTSDF operator, a fresh reference shall be made to the Goa-SEIAA / Ministry of Environment and Forests (MoEF), as applicable.
- 5. Further, the project proponent has been advised as regard to the following:
  - fffffff. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEIAA.
  - ggggggg. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided.
  - hhhhhh. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within seven days of the receipt of this letter, informing that the

project has been accorded renewal / extension of the prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.

- iiiiiii. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- jjjjjjjj. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- kkkkkkk. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of issue of issue of this letter or upto 18<sup>th</sup> February 2018, whichever is later.
- IIIIII. Any appeal against this prior environmental clearance shall lie with the National Environmental Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of the National Environmental Appellate Act, 1997 (Central Act 22 of 1997); or before the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (Central Act 19 of 2010)

**6.** This issues with the approval of the Government vide U. O. No. 1613-F dated  $15^{\text{th}}$  February 2013.

Yours faithfully, Sd/-(Levinson J. Martins) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

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# GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (Goa-SEIAA) Secretariat, O/o Goa State Pollution Control Board (GSPCB), 1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001

Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/ 97* 

Date: 21<sup>st</sup> March 2013.

*To,* Mr. Parag M. Nagarsekar, **Assistant Director,** Directorate of Mines and Geology (DMG), Udyog Bhavan, Panaji, Goa – 403 001

# Sub.: Issuance of prior Environmental Clearance (EC) towards New / Renewal of Minor Mineral Quarry Lease – reg.,

Sir,

I am directed to refer to your communications enclosing applications of project proposals

/ applications seeking prior Environmental Clearance (EC) for 'New' / 'Renewal', as applicable,

of Minor Mineral Quarry Lease(s), for areas less than 5 hectares, from the following lease

holders as detailed below:-

- <u>Renewal</u> of *one* 'Basalt stone quarry' lease belonging to M/s Shailaja Vasudev Tamba bearing no. 04/Basalt/07 (*lease area - 1.62 Ha.*) with proposed capacity of 7,500 m<sup>3</sup> per month, located in Survey No. 11/1, 2 & 6 at St. Pedro, Village Panelim, Tiswadi taluka, North Goa district.
- 11. <u>Renewal</u> of *two* 'Basalt stone quarries' lease with common boundary belonging to M/s Vasudev Tamba bearing no. 5/Basalt/MU/91 (*lease area 2.98 Ha.*) and 3/Basalt/05 (*lease area 1.20 Ha.*) with proposed combined capacity of 42,500 m<sup>3</sup> per month, located in Survey No. 11/1, 2 & 6 at St. Pedro, Village Panelim, Tiswadi taluka, North Goa district.
- 12. <u>New</u> lease of *one* 'Laterite quarry' (*lease area 8,000 sq.mts.*) and proposed extraction capacity of 240 m<sup>3</sup> per month in Survey no. 29/4 of Soliem village in Cacora of Quepem taluka in South Goa district by **Mr. Shirish Kamat**.
- 13. <u>Renewal</u> of *one* 'Laterite quarry' (lease no.13/Lat. Boulder/2007) and proposed extraction capacity of 200 m<sup>3</sup> per month located in Survey No. 123/1 (*plot area 35,575 sq.mts.*) of Lotulim village in Salcete taluka of South Goa district by **Mrs. Maria Yvonne Baptista, Rai.**

- 14. <u>Renewal</u> of following *three* 'Basalt stone quarries' namely (a) Lease no. 10/basalt/93: *lease area 10,000 sq.mts.*, (b) Lease no. 03/Basalt/94: *lease area 29,225 sq.mts.*, (c) Lease no. 2/Basalt/98: *lease area 22,000 sq.mts.* (Total lease area 61,225 sq.mts.) and <u>one New Lease</u> covering total *lease area of 50,000 sq.mts.* and proposed total capacity of 1,250 tons per day, located in Survey No. 29/1, of village Conquerim in Sattari taluka of North Goa district by M/s Sapna Ceramics Pvt. Ltd., Margao.
- 15. <u>Renewal</u> of *one* 'Basalt stone quarry' (lease no. 01/Basalt/97 : *lease area 10,000 sq.mts.*) and proposed extraction capacity of 50 m<sup>3</sup> per day, located in Survey No, 63/1 of village Santona in Sanguem taluka of South Goa district by **Mr. Vinayak Vasudev Chodankar, Sanvordem.**
- 16. <u>Renewal</u> of following *three* 'Laterite stone quarries' (including murrum / laterite rubble) (a) 02/Laterite/88 (*lease area 2.6424 ha.*), having proposed extraction capacity of 460 m3 per month, (b) 03/Laterite/03 (*lease area 2.35 ha.* and (c) 06/Laterite/07 (*lease area 2.9886 ha.*) having combined extraction capacity of 460 m<sup>3</sup> per month, located in Survey Nos. 58/0 (2.8650 ha.), 52/1&2 (4.26 ha.) and 56/0 (3.2275 ha.) in Loutolim village in Salcete taluka of South Goa district by M/s Bomba Laterite Stones, Margao.
- 17. <u>New</u> 'Laterite stone / rubble quarry' (*plot area 4 Ha.*) and proposed extraction capacity of 1,500 m<sup>3</sup> per year, located in Survey No. 15/2 of Costi village in Sanguem taluka of South Goa district by **Dr. Damodar T. Gaonkar, Sanguem.**
- 18. <u>Renewal</u> of *one* 'Basalt stone quarry' (lease no. 05/Basalt/03:*plot area 3.360 Ha.*) and proposed extraction capacity of 4,500 m<sup>3</sup> per month (*i.e. expansion in the existing capacity of 180 m3 per month*), located in Survey No. 70/1 of Santona village in Sanguem taluka of South Goa district by **Smt. Maria Alda Pinto, Sanguem**.
- 19. <u>New</u> 'Laterite rubble stone quarry' (*plot area –15,000 sq.mts.*) and proposed extraction capacity of 1,600 m<sup>3</sup> per month, located in Survey No. 38 of Codar village in Ponda taluka of North Goa district by **Shri. Shriram V. Gaonkar, Margao.**
- 20. <u>New</u> 'Laterite rubble quarry' (*plot area –20,000 sq.mts.*) and proposed extraction capacity of 500 m<sup>3</sup> per month, located in Survey No. 150 (Part-B) of Verna village in Salcete taluka of South Goa district by **Mr. Jaiwas Naik, Sancoale.**
- <u>Renewal</u> of *two* 'Basalt stone quarries' by Mr. Manual Da Coasta, Margao (a) lease no. 05/Basalt/89 – plot area - 5 Ha. And (b) lease no. 04/Basalt/89 – plot area - 4.9 Ha. located in Survey no. 77/1(Part) and 72/1(Part) respectively of Santona village in Sanguem taluka of South Goa district.
- 22. <u>Renewal</u> of following *two* 'Basalt stone quarries' by Mr. R.B.S. Khandeparkar (a) lease no. 03/Basalt/93 (*plot area 2.32 Ha.*) having proposed extraction capacity of 6,000 m<sup>3</sup> per annum, located in Survey no. 6/2(P) of Piliem village in Dharbandora taluka of South Goa district and (b) lease no. 04/Basalt/93 (*plot area 3.42 Ha.*) having proposed extraction capacity of 5,000 m<sup>3</sup> per annum located in Survey no. 11/1(P) of Piliem village in Dharbandora taluka of South Goa district and ka of South Goa district.

In this context, it is informed that all the above-referred proposal, subsequent to conducting respective site-inspections, were appraised as 'Category – B' and screened as 'category 1(a)-B2 projects', by the Goa State Expert Appraisal Committee (Goa-SEAC) in light of the –

- f. Hon'ble Supreme Court "Order" issued dated 27<sup>th</sup> February 2012 in a matter S. L. P. (c) No. 19628 19628 of 2009 between *Deepak Kumar & Others V/s State of Haryana & Others*, the lease of Minor minerals including their Renewals (s) be granted by the State (*i.e. Directorate of Mines and Geology DoMG, Goa*) only after getting Environmental Clearance (EC) from the State Environment Impact Assessment Authority concerned (*i.e. Goa SEIAA*) as mandated in the Environment Impact Assessment (EIA) Notification 2006 (*as amended upto 13<sup>th</sup> December 2012*)
- g. "Office Memorandum" (O.M.) bearing No. L-11011 / 47 / 2011-IA.II (M) dated 18<sup>th</sup> May 2012 issued by the Ministry of Environment & Forests (MoEF), Govt. of India, New Delhi.
- h. "Environment Impact Assessment (EIA) Notification, 2006 (as amended in 13<sup>th</sup> December 2012)" and the Schedule annexed thereto, by the Ministry of Environment & Forests (MoEF), Govt. of India, New Delhi.
- i. **"Order"** bearing no. 34/10/12-Mines/365 dated 10<sup>th</sup> May 2012 issued by the Directorate of Mines and Geology (DMG), Goa.
- j. **"Goa Minor Mineral Concession (Amendment) Rules, 2012"** notified by the Directorate of Mines and Geology (DMG), Goa and published in State's Official Gazette Series 1, No. 24 (*Extraordinary No. 4*) dated 17<sup>th</sup> September 2012.
- k. A draft compiled report entitled **"Environmental aspects of quarrying of Minor minerals"** by the Ministry of Environment and Forests (MoEF), Govt. of Goa, New Delhi in March 2010.

and accordingly project-specific comments / suggestions / recommendations, as applicable, were forwarded to the Goa State Environment Impact Assessment Authority (Goa-SEIAA). Subsequently, these proposals were deliberated and re-examined during the  $5^{th}$ ,  $6^{th}$  and  $7^{th}$  Authority meeting convened on  $18^{th}$  December 2012,  $7^{th}$  February 2013 and  $15^{th}$  March 2013 respectively and has upheld SEAC's recommendations and decided to accord prior Environmental Clearances (EC) to above project proposals referred to above (i.e. 1 to 13) subject to mandatory compliance to the following by the Directorate of Mines and Geology (DMG), Goa, namely –

- f. 'Goa Mineral Concession (Amendment) Rules, 2012 notified by the Directorate of Mines and Geology (DMG) and published in Official Gazette Series-I, No. 24 dated 17<sup>th</sup> September 2012.
- g. Submission of **'approved quarrying plan'** by the competent officer as per Sub-rule (7) as well as specific compliance to Sub-rules 7(A) to 7(D) of the above-referred Rules, as applicable.

h. Ascertaining the compliance to 'Order' issued by National Green Tribunal (NGT) dated 21<sup>st</sup> September 2012 in a matter related to Review Application no. 8/2012 in Application No. 26/2012 and verifying that the minor minerals lease areas referred in (i), (ii) and (iii) above do not fall within the Ecologically Sensitive Zone (ESZ-1) as defined in the Western Ghats Ecology Expert Panel (WGEEP) report compiled by Dr. Gadgil Committee.

Further, the project proponent (i.e. lease holder) is required to mandatorily comply with the following 'specific conditions':-

- 109. The lease holder should ascertain on-site demarcation and construction of lease boundary with cement poles / bio-fencing / barbed wire for the proposed leased area in question. The lease boundary may be subsequently geo-referenced for precise positioning and ground-truth verification. As such, the lease holder should ensure that minor mineral quarrying operations are restricted within the prescribed lease boundary.
- 110. The lease holder should ensure construction of approach road / proper access to enable transportation of quarried material from site to desired destination and/or crushing unit, as applicable.
- 111. The lease holder should comply with the proposed plan of action / modus operandi for extraction of basalt stones within the available lease boundary limits in terms of provisions of Mines and Safety Rules / Guidelines, as applicable.
- 112. The lease holder shall undertake adequate safeguard measures during extraction of material (*i.e. especially in case of basalt stone quarry*) and ensure that due to this activity, the hydro-geological regime of the surrounding area shall not be affected / altered / polluted. Regular monitoring of groundwater levels and its physic-chemical quality parameters shall be carried out around the mine lease area (minimum two locations of permanent water sources / open well / borewell). If there are no groundwater sources, then nearest perennial surface water sources (*i.e. stream / river / pond / lake / reservoir / irrigational canal*) should be monitored for the similar parameters on quarterly basis and/or seasonally (*i.e. pre-monsoon / monsoon and post-monsoon*).
- 113. The lease holder shall implement air pollution control measures / dust minimizing initiatives / noise control measures, wherever applicable, within the lease area as well as establish adequate buffer zone around the lease boundary to minimize such pollution hazards. It should be ensured that the Ambient Air Quality (AAQ) parameters (*to be measures in January, April and November every-year*) as well as Noise parameters conform to the norms prescribed by the Central Pollution Control Board (CPCB) and Noise Pollution (Control) Rules, 2000 respectively.
- 114. Green belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with Forest Department / Zonal Agricultural Office, as applicable.
- 115. The validity of the EC will be upto the validity of the lease period or maximum upto five years from the date of issuance of this letter.

In addition, respective lease holder should satisfy the following 'General conditions' -

- n. All necessary statutory clearances shall be obtained before start of quarrying operations.
- o. Quarrying operations should be limited to day-hours time only with specified time reserved for 'blasting', as applicable and whenever required.
- p. No quarrying be carried out within the safety zone of any bridge and/or embankment as well as within the vicinity of natural / man-made archaeological site(s).
- q. The lease holder shall obtain necessary prior permission (NOC) from the Groundwater Cell of the Water Resources Department (WRD) for drawl of requisite quantity of water (surface water / groundwater), if required.
- r. Waste water / effluents, if any, shall be properly collected, treated and monitored so as to conform to the standards prescribed by the MoEF / CPCB.
- s. Environmental clearance (EC) is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent Authority, if applicable.
- t. Transportation of quarried material shall be done by covering the trucks with tarpaulin so that no spillage of material / dust takes place en route.
- u. The lease holder should provide safety gadgets and health-care facilities to workers vis-avis maintain hygiene surrounding the proposed lease boundary.
- v. The mining officer / in-charge of quarrying operations on-site shall submit six-monthly report in hard and soft copy formats w.r.t. the status of compliance of the stipulated environmental clearance conditions (*i.e. Specific and General conditions*) to the Directorate of Mines and Geology (DMG), Goa, Goa-SEIAA as well as Goa State Pollution Control Board (GSPCB).
- w. Any change (i.e. modification / expansion / alteration) in lease area / quarrying operations / extraction capacity / modernization / scope of working / environment management plan (EMP) shall require re-appraisal by this Authority (i.e. Goa-SEIAA) for considering the proposal for according prior EC as per the provisions of the EIA Notification, 2006 (as amended upto 13<sup>th</sup> December 2012).
- x. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that lease holder has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the lease holder. Hence, this EC does not give immunity to the lease holder in the case filed against it.
- y. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- z. Any appeal against this prior environmental clearance shall lie before the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (Central Act 19 of 2010)

This issues with the approval of the Government vide U. O. No.1613-F dated 15<sup>th</sup> February 2013.

Yours faithfully,

Sd.-(Levinson J. Martins) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

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### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

O/o Goa State Pollution Control Board (GSPCB),

1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/ 103* 

*Date: 22<sup>nd</sup>* March 2013

*To*, **M/s Mahindra & Mahindra Ltd.,** Mahindra Towers, 17/18, Pattulos Road, Chennai – 600 002

Kind attention: Mr. S. V. Balram, Betalbatim

## Sub.: Proposed construction of Eco-resort in Survey nos. 16 & 7 of Moitem village in Bardez taluka of North Goa district – reg.,

Sir,

I am directed to refer to your application dated 7<sup>th</sup> January 2013 seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) on the basis of the documents enclosed with application viz. Form 1 and Form 1A (conceptual plan) as well as in response to the project-specific observations (*i.e. project presentation followed by siteinspection*) considered by the Goa State Expert Appraisal Committee (Goa-SEAC) in its Eleventh meeting held on 11<sup>th</sup> January 2013 and Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its Sixth and Seventh meeting held on 7<sup>th</sup> February 2013 and 15<sup>th</sup> March 2013 respectively.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed construction of Eco-resort (*i.e.* 1 restaurant – 572 seats and 16 building clusters (*i.e.* G + 2) with 200 rooms) in Survey nos. 16 & 7 of Moitem village in Bardez taluka of North Goa district. Project details and salient features of the proposed developmental activity is as under –

- a. Total plot area 45,853 sq. mt.
- b. Area for road-widening 1,629.64. sq.mts.
- c. Effective plot area 44,223.36 sq. mts.
- d. Permissible F.A.R. (50%) 23,741.32 sq.mts.
- e. Proposed built-up area 29,059.10 sq.mts.
- f. Open space required 6,877.80 sq.mts.
- g. Open space proposed 9,546.80 sq.mts.
- h. Ground coverage 9,674.17 sq.mts.

- i. Greenbelt development 9,586 sq.mts.
- j. Parking proposed 100 ECS.
- k. Geo-technical soil investigation has been prepared through 04 bore holes drilled upto the depth of 6 mts. Accordingly, isolated footing / foundations (as per IS 1904-1986) at a depth of 1.2 mts. from ground level is proposed with allowable bearing pressure of  $20t/m^2$ .
- 1. As the plot / land is a sloppy area, embankment wall of 525 mts. is proposed.
- m. Water requirement -
  - *During Construction phase* 20cmd (2cmd for domestic purpose and 18cmd for construction activity) to be sourced from private tankers as well as proposed open well.
  - During operational phase 105 cmd (i.e. 27 cmd for domestic use to be sourced from PWD + open well and 78 cmd (i.e. for flushing, gardening and cooling) to be sourced from STP-recycled). As such. Dual plumbing system is proposed.
- n. Wastewater generated 225 cmd to be treated in Sewage Treatment Plant of 260cmd capacity with Moving Bed Bio-Reactor (MBBR) technology upto tertiary level. The sludge generated will be dried on drying beds and will be mixed with other compostable waste to be treated through OWC-130.
- o. Solid waste generated -

*During construction phase* - Debris of about 1–2 MT/day – to be used for land-filling within the plot.

During operational phase - 175 kgs./day – proposed to be segregated at source into wet and dry garbage. Wet waste to be composted onsite.

p. Power requirement. – *Construction phase* – 125 KVA.

*Operation phase* – 2.5 HP. In addition, back-up power through 02 DG sets of 750 KVA capacity each, totaling to 1,500 KVA.

- q. EMP has been prepared.
- 4. In view of the above and based on the recommendations of the Goa-SEAC; Goa-SEIAA, subsequent to compliances sought to project-specific observations / site-specific clarifications, has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":
  - a. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape

development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.

- b. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- c. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirements.
- d. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or by collecting water in large polythene tanks thereby saving on utilization of tap water. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures / STP installation, etc.
- e. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- f. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- g. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- h. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.

- i. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- j. Considering the existing land use / land cover of the plot area, the PP should necessarily adapt roof-top rainwater harvesting system for optimum utilization of water resources, especially for landscape development and its maintenance.

**4**. In addition, the Project Proponent (PP) is directed to comply with the following **'Specific condition'**.

- a. Considering the site-specific proximity of the said project area to the 'Assonora Water Treatment Plant' vis-a-vis Assonora river, the project proponent should mandatorily maintain a buffer zone / No Development Zone of minimum 100 mts. from respective boundaries / bank and monitor river water quality (*i.e. physico-chemical, microbial analysis*) on "monthly" basis and ensure its compliance to the Central Pollution Control Board standards. The copy of the monthly analysis report should be submitted to the GSPCB regularly.
- 5. Further, the project proponent has been advised as regard to the following:
  - a. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.
  - b. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - c. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.
  - d. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.
  - e. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.
  - f. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.

- g. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.
- h. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within seven days of the receipt of this letter, informing that the project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.
- i. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- j. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

# k. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

1. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully, Sd./-(Levinson J. Martins) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

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#### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

O/o Goa State Pollution Control Board (GSPCB),

1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/102* 

Date: 22<sup>nd</sup> March 2013

*To,* **M/s Palacio Property Developers Pvt. Ltd.,** Gera Imperium – I, Patto Plaza, Panaji, Goa, 403 001

# Sub.: Proposed expansion of a residential project comprising of 17 residential buildings (256 flats) with amenities – playground, swimming pool in Survey Nos. 181/(P), 181/2, 181/3, 181/5(P), 182/7, 183/9, 180/1(P), 180/2(P), and 184/3 of St. Andre – (Near Lobo Garage), Goa Velha village in Tiswadi taluka of North Goa district. – reg.,

Sir,

I am directed to refer to your application dated 23<sup>rd</sup> August 2012 seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) on the basis of the documents enclosed with application viz. Form 1 and Form 1A (conceptual plan) as well as in response to the project-specific observations (*i.e. project presentation followed by siteinspection*) considered by the Goa State Expert Appraisal Committee (Goa-SEAC) in its Ninth meeting held on 11<sup>th</sup> October 2012 and Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its Fifth and Sixth meeting held on 18<sup>th</sup> December 2012 and 7<sup>th</sup> February 2013 respectively.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for 'expansion' of the residential project comprising of 17 residential buildings (i.e. 256 flats – 1BHK-112, 2BHK-52 and 3BHK-92) with amenities like playground, swimming pool proposed in survey nos. 181/(P), 181/2, 181/3, 181/5(P), 182/7, 183/9, 180/1(P), 180/2(P), and 184/3 of St. Andre, Goa Velha village in Tiswadi taluka of North Goa district. Project details and salient features of the proposed developmental activity is as under –

a. Total plot area -41,240 sq. mt.

- b. Effective plot area 30,640 sq. mts.
- c. Total built-up area 28,487 sq.mts.
- d. Open area required 4,596 sq. mts.
  - e. Open space proposed -4,750 sq. mts.
  - f. Approved covered area -4,427.48 sq. mts.
  - g. Proposed covered area -1,463.40 sq. mts.
  - h. Total covered area 5,980.88 sq. mts. (19.51%)
- i. Permissible FAR 24,512 sq. mts.
  - j. Approved FAR 18,901.70 sq. mts.
  - k. Proposed FAR 5,569.20 sq. mts.
  - l. Consumed FAR 24,470.90 sq. mts.
- j. Expected total occupancy 1,152 persons.
- k. Parking proposed 332 ECS
- 1. Geo-technical soil investigation has been carried out to understand the foundation characteristics through M/s Safe Cores and Tests, Mumbai in June 2006 by analyzing four (04) bore holes ranging in depth from 24 28 mts. Groundwater has been uniformly encountered at a depth of 1.5 mts. Chemical analysis of water indicate that it is aggressive to 'concrete' and corrosive to 'reinforcement steel'.
- m. Water requirement During Construction phase 20m<sup>3</sup>/day. During operational phase 231.7m<sup>3</sup>/day (74.15m<sup>3</sup>/day through PWD supply, 94.65m<sup>3</sup>/day through recycled water through STP). About 10 kgs./day of sludge will be generated which is proposed to be mixed with biodegradable waste and composted on-site.
- n. Wastewater generated 134.78 m<sup>3</sup>/day to be treated through two STPs' of 70 KLD each for better operational / maintenance.
- o. Solid waste generated 1-2 MT/day of debris (construction phase) to be utilized for land-filling, 340 kgs./day (operational phase) to be treated through OWC.
- p. Power requirement. Construction phase 20 HP Diesel generator. Operation phase – 1,600 KW, to be sourced from Goa Electricity Dept. Back-up power through two DG sets of 160 KVA capacity each.
- q. EMP has been proposed.
- r. The Project Proponent (PP) has obtained NOC from the Goa Coastal Zone Management Authority (GCZMA), as applicable.

3. In view of the above and based on the recommendations of the Goa-SEAC; Goa-SEIAA, subsequent to compliances sought to project-specific observations / site-specific clarifications, has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

- a. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.
- b. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- c. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirements.
- d. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or by collecting water in large polythene tanks thereby saving on utilization of tap water. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures / STP installation, etc.
- e. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- f. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- g. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- h. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.

- i. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- j. Considering the existing land use / land cover of the plot area, the PP should necessarily adapt roof-top rainwater harvesting system for optimum utilization of water resources, especially for landscape development and its maintenance.
- 4. Further, the project proponent has been advised as regard to the following:
  - a. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.
  - b. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - c. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.
  - d. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.
  - e. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.
  - f. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
  - g. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.
  - h. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within seven days of the receipt of this letter, informing that the project has

been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.

- i. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- j. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

## k. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*)

**5.** This issues with the approval of the Government vide U. O. No.1613-F dated 15<sup>th</sup> February 2013.

Yours faithfully, Sd./-(Levinson J. Martins) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

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EIA-Goa State Secretariat, O/o Goa State Pollution Control Board (GSPCB), 1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/105* 

*Date:22<sup>nd</sup>* March 2013

*To,* **Mr. Pascoal Trindade,** Palbrica Mansion, Near White House, Donapaula, Goa.

## Sub.: Proposed residential project in Survey no. 93/2 of Bambolim village in Tiswadi taluka of North Goa district. – reg.,

Sir,

I am directed to refer to your application dated 7<sup>th</sup> November 2012 seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) on the basis of the documents enclosed with application viz. Form 1 and Form 1A (conceptual plan) as well as in response to the project-specific observations (*i.e. project presentation followed by siteinspection*) considered by the Goa State Expert Appraisal Committee (Goa-SEAC) in its Tenth meeting held on 11<sup>th</sup> December 2012 and Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its Sixth and Seventh meeting held on 7<sup>th</sup> February 2013 and 15<sup>th</sup> March 2013 respectively.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for the construction a **new residential project** (*i.e.* 111 units with G+4 structure including 72 flats and 39 villas) in Survey no. 93/2 of Bambolim village in Tiswadi taluka of North Goa district. Project details and salient features of the proposed developmental activity is as under –

- a. Total plot area 35,600 sq. mt.
- b. Area under No Development Zone 600 sq.mts.
- c. Area under road widening 120 sq.mts.
- d. Effective plot area 34,880 sq. mts.

e. Proposed built-up area – 26,313.69 sq.mts.

- f. Open space proposed 5,245 sq. mts.
- g. Proposed covered area -9,219.32 sq.mts.
- h. Proposed area for green-belt 10,000 sq.mts.

- i. Expected total occupancy 850 persons
- j. Parking proposed 217 ECS
- k. Geo-technical soil investigation has been proposed.
- 1. Water requirement -

During Construction phase – 55m3/day to be sourced from private tankers.

*During operational phase*  $- 125m^3/d$  (i.e. 75 m<sup>3</sup>/d sourced from PWD and 50 m<sup>3</sup>/d sourced from recycled water from STP)

- m. One time water demand for fire-fighting  $-200 \text{ m}^3$ .
- n. PP has proposed to construct underground water storage tanks (50 m<sup>3</sup> capacity for every building.
- o. Wastewater generated 100 m<sup>3</sup>/d to be treated in 120 CMD Sewage Treatment Plant (STP) with Moving Bed Bio-Reactor (MBBR) technology. 80 kgs./month of sludge generated is to be used as manure. It is proposed that recycled water will be used for flushing, car washing / gardening.
- p. Solid waste generated -

*During construction phase* - 50 kgs./day of domestic waste to be disposed-off through local authorities and 200 kgs./day of debris generated to be used for land-filling within the plot.

Hazardous waste generated (i.e. used oil from D.G. sets (20 kgs./m during construction and 10 kgs./m during operation) will be suitably disposed- off.

*During operational phase* - 425 kgs./day - biodegradable waste (255 kgs./d) to be treated through in-house mechanical composting. While, non-biodegradable waste (170 kgs./d) to be disposed through authorized recycler.

q. Power requirement :

*Construction phase* – 100 KVA to be sourced from GSEB / Diesel generator. *Operation phase* – 800 KVA, to be sourced from Goa State Electricity Board. Back-up power through 01 DG sets of 65 KVA capacity.

r. EMP has been prepared.

1. In view of the above and based on the recommendations of the Goa-SEAC; Goa-SEIAA, subsequent to compliances sought to project-specific observations / site-specific clarifications, has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

a. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the

location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.

- b. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- c. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirements.
- d. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or by collecting water in large polythene tanks thereby saving on utilization of tap water. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures / STP installation, etc.
- e. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- f. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- g. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- h. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.
- i. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.

- j. Considering the existing land use / land cover of the plot area, the PP should necessarily adapt roof-top rainwater harvesting system for optimum utilization of water resources, especially for landscape development and its maintenance.
- 4. Further, the project proponent has been advised as regard to the following:
  - a. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.
  - b. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - c. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.
  - d. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.
  - e. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.
  - f. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
  - g. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.
  - h. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within seven days of the receipt of this letter, informing that the project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.
  - i. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any

environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.

- j. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- k. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.
- 1. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully, Sd./-(Levinson J. Martins) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

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EIA-Goa State Secretariat,

O/o Goa State Pollution Control Board (GSPCB),

1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/104* 

Date: 22<sup>nd</sup> March 2013

*To*, **Mr. Pascoal Trindade,** Palbrica Mansion, Near White House, Donapaula, Goa.

## Sub.: Proposed residential project in Survey no. 93/4 of Bambolim village (Curca village panchayat) in Tiswadi taluka of North Goa district. – reg.,

Sir,

I am directed to refer to your application dated 7<sup>th</sup> November 2012 seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) on the basis of the documents enclosed with application viz. Form 1 and Form 1A (conceptual plan) as well as in response to the project-specific observations (*i.e. project presentation followed by siteinspection*) considered by the Goa State Expert Appraisal Committee (Goa-SEAC) in its Tenth meeting held on 11<sup>th</sup> December 2012 and Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its Sixth and Seventh meeting held on 7<sup>th</sup> February 2013 and 15<sup>th</sup> March 2013 respectively.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for the construction a **new residential project** (*i.e.* Stilt + 4 floors building comprising of 103 flats – 3BHK-31 and 2BHK-72) in Survey no. 93/4 of Bambolim village in Tiswadi taluka of North Goa district. Project details and salient features of the proposed developmental activity is as under –

- a. Total plot area 35,075 sq. mt.
- b. Open space (including garden / playground) proposed 26,961.46 sq. mts.
- c. Total proposed built-up area 25,918.85 sq.mts.
- d. Proposed area for green-belt 9,000 sq.mts.
- e. Expected total occupancy 783 persons
- f. Parking proposed -217 ECS.
- g. Geo-technical soil investigation has been proposed.
- h. Water requirement –

During Construction phase – 50m3/day to be sourced from private tankers.

During operational phase  $-120 \text{ m}^3/\text{d}$  (i.e. 75 m<sup>3</sup>/d sourced from PWD and  $45\text{m}^3/\text{d}$  sourced from recycled water from STP). One time water demand for firefighting  $-100\text{m}^3$ . One time water demand for swimming pool  $-100\text{m}^3$ .

- i. PP has proposed to construct underground water storage tanks of 50 m3 capacity.
- j. Wastewater generated 95m<sup>3</sup>/d to be treated in 100CMD Sewage Treatment Plant (STP) with Moving Bed Bio-Reactor (MBBR) technology. 80 kgs./month of sludge generated is to be used as manure. It is proposed that recycled water (about 85 CMD) will be used for toilet flushing (45 CMD) through dual plumbing system and irrigation in garden–40 CMD (i.e. green-area maintenance)
- k. Solid waste generated -

*During construction phase* - 50 kgs./day of domestic waste to be disposed-off through local authorities and kgs./day of debris generated to be used for land-filling within the plot.

Hazardous waste generated (i.e. used oil from D.G. sets (20 kgs./m during construction and 10 kgs./m during operation) will be suitably disposed-off.

*During operational phase* - 400 kgs./day : biodegradable waste (240 kgs./d) to be treated through in-house mechanical composting. While, non-biodegradable waste (160 kgs./d) to be disposed through authorized recycler.

1. Power requirement. -

Construction phase - 100 KVA to be sourced from GSEB / Diesel generator.

*Operation phase* – 800 KVA, to be sourced from Goa State Electricity Board. Back-up power through 01 DG set of 65 KVA capacity.

m. EMP has been prepared.

3. In view of the above and based on the recommendations of the Goa-SEAC; Goa-SEIAA, subsequent to compliances sought to project-specific observations / site-specific clarifications, has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

a. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the location where such topsoil is proposed

to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.

- b. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- c. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirements.
- d. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or by collecting water in large polythene tanks thereby saving on utilization of tap water. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures / STP installation, etc.
- e. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- f. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- g. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- h. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.
- i. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.

- j. Considering the existing land use / land cover of the plot area, the PP should necessarily adapt roof-top rainwater harvesting system for optimum utilization of water resources, especially for landscape development and its maintenance.
- 4. Further, the project proponent has been advised as regard to the following:
  - a. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.
  - b. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - c. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.
  - d. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.
  - e. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.
  - f. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
  - g. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.
  - h. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within seven days of the receipt of this letter, informing that the project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.
  - i. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble

Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.

- j. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- k. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.
- 1. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully, Sd./-(Levinson J. Martins) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

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EIA-Goa State Secretariat,

O/o Goa State Pollution Control Board (GSPCB),

1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

*No:* 3 – 181 – 2010/STE-DIR/ 107

Date:22<sup>nd</sup> March 2013

*To*, **M/s Raj Housing Development Pvt. Ltd.,** S-1, Pai House, Above Goa Urban Co-operative Bank Ltd., Ponda, Goa – 403 401

### Sub.: Proposed construction of a residential project 'Raj Ryle' in P.T. Sheet No. 14 of Chalta Nos. 40, 41, 42, 43, 44, 45, 46, 47 & 48 and P. T. Sheet No. 32 of Chalta Nos. 4 & 36, Mapusa, Bardez, North Goa district in Mapusa Municipal Council area of Bardez taluka in North Goa district – reg.,

Sir,

I am directed to refer to your application dated 13<sup>th</sup> July 2012 seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) on the basis of the documents enclosed with application viz. Form 1 and Form 1A (conceptual plan) as well as in response to the project-specific observations of the Goa State Expert Appraisal Committee (Goa-SEAC) in its Seventh meeting held on 24<sup>th</sup> July 2012 and Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its Fourth, Fifth and Sixth meeting held on 10<sup>th</sup> August 2012, 18<sup>th</sup> December 2012 and 7<sup>th</sup> February 2013 respectively.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed construction of a new residential project 'Raj Ryle' (G + 6 building with max. height – 20.50 mts. and comprises of 168 flats (1 BHK-28, 2 BHK-116 and 3BHK – 24) along with 10 shops ) located in P.T. sheet no. 14 of chalta nos. 40, 41, 42, 43, 44, 45, 46, 47 & 48 and P. T. sheet no. 32 of chalta nos. 4 & 36 in Mapusa Municipal Council area of Bardez taluka in North Goa district. Project details and salient features of the proposed developmental activity is as under –

a. Total plot area -8,336.00 sq. mt.

b. Effective plot area – 8,197.00 sq. mts.

c. Total built-up area – 22,626.44 sq. mt.

- d. Proposed open space (including garden) 1,230.71 sq. Mt.
- e. Expected total occupancy 750 persons
- f. Parking proposed 179 ECS
- g. Hydro-geological study is proposed to be undertaken subject to digging of bore-well.
- h. Water requirement :

During Construction phase  $-50 \text{ m}^3/\text{day}$ .

*During operational phase* – 120 KLD (70 m<sup>3</sup>/day through PWD supply, 80 m<sup>3</sup>/day through recycled water through STP). Additional, 30 m<sup>3</sup>/day or recycled water from STP is to be utilized for green-area development. Water demand for fire fighting : 100 m<sup>3</sup>

i. Total waste-water generated – 150 KLD STP based on Moving Bed Bio-Reactor (MBBR) technology is proposed. Total wastewater is about  $120m^3/day$  from which  $110m^3/day$  is expected to be generated as treated water (80 m<sup>3</sup> for dual plumbing system and  $30m^3$  for landscaping).

Total quantity of sludge produced is about 100 kg./month and will be utilized as manure.

j. RWH initiatives with technical specifications proposed to be adapted.

k. Power requirement:

Construction phase – 100 KVA / Diesel generator.

*Operation phase* – 1,200 KVA, to be sourced from Goa Electricity Dept. Back-up power through DG sets of 100 KVA capacity

1. Municipal Solid waste generated:

50 kg. per day (*Construction phase*) including Plastic waste - 5 kg./day during construction phase

About 150 kg./day (*on Operation*). About 10 kg./month of hazardous wastes during construction and about 10kg./month during operational phase.

In addition, demolition waste of about 30 MT is expected to be generated which is proposed to be utilized for land-filling / levelling. While, metal debris to be sold to scrap dealer for recycling.

m. Organic Waste Convertor (OWC) is proposed for biodegradable waste.

n. EMP has been submitted.

3. In view of the above and based on the recommendations of the Goa-SEAC; Goa-SEIAA, subsequent to clarifications sought to project-specific observations, has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

- a. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.
- b. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- c. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirements.
- i. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or by collecting water in large polythene tanks thereby saving on utilization of tap water. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures / STP installation, etc.
- j. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- k. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- 1. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- m. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.

- n. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- o. Considering the existing land use / land cover of the plot area, the PP should necessarily adapt roof-top rainwater harvesting system for optimum utilization of water resources, especially for landscape development and its maintenance.
- 4. Further, the project proponent has been advised as regard to the following:
  - a. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.
  - b. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - c. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.
  - d. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.
  - e. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.
  - f. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
  - g. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.
  - h. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within seven days of the receipt of this letter, informing that the project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.

- i. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- j. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

# k. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

1. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*)

**5.** This issues with the approval of the Government vide U. O. No.1613-F dated 15<sup>th</sup> February 2013.

Yours faithfully, Sd./-(Levinson J. Martins) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

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EIA-Goa State Secretariat,

O/o Goa State Pollution Control Board (GSPCB),

1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/ 100* 

Date: 22<sup>nd</sup> March 2013

То,

**M/s Rajendra Prasad Singla,** House No. 235/1, Karle Properties, Pulwada, Margao-Benaulim Road, Margao, Goa.

## Sub.: Proposed Group Housing and Commercial project in Survey no. 20/3-A of Baiguinim village of Tiswadi taluka in North Goa district – reg.,

Sir,

I am directed to refer to your application dated 26<sup>th</sup> November 2012 seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) on the basis of the documents enclosed with application viz. Form 1 and Form 1A (conceptual plan) as well as in response to the project-specific observations (*i.e. project presentation followed by siteinspection*) considered by the Goa State Expert Appraisal Committee (Goa-SEAC) in its Eleventh meeting held on 11<sup>th</sup> January 2013 and Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its Sixth and Seventh meeting held on 7<sup>th</sup> February 2013 and 15<sup>th</sup> March 2013 respectively.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed construction a new 'Group Housing and Commercial project' (*i.e.* three bldgs. housing  $400 \ flats - A \ (48 \ flats \ and \ 52 \ shops), B \ (320 \ flats) \ and C \ (32 \ flats))$  in survey no. 20/3-A of Baiguinim village of Tiswadi taluka in North Goa district. Project details and salient features of the proposed developmental activity is as under –

- a. Total plot area 32,893 sq. mt.
- b. Effective plot area 27,966 sq. mts.
- c. Permissible F.A.R. 26,314.40 sq.mts.
- d. Proposed F.A.R. 26,306.34 sq.mts.
- e. Proposed built-up area 44,604.70 sq.mts.

- f. Total green area 9,710.4 sq.mts. (34.74% of effective plot area)
- g. Expected total occupancy 2,399 persons (residential 2,000 and floating-399)
- h. Parking proposed 478 ECS.
- i. Geo-technical soil investigation has been conducted to understand soil characteristics.
- j. Water requirement -

*During Construction phase* – 25KLD to be sourced from private tankers. *During operational phase* – 353 KLD (i.e. 195 KLD from PWD and 158 KLD from STP-recycled).

- k. Wastewater generated 248 KLD to be treated in Sewage Treatment Plant (250 KLD STP) with Moving Bed Bio-Reactor (MBBR) technology upto tertiary level which will generate 223 KLD of treated water. Out of this, 50 KLD to be used in green area development, toilet flushing (100 KLD) and car washings (8 KLD) and the excess treated water (i.e. 65 KLD) will be used in forested preservation area and green areas.
- l. Solid waste generated –

*During operational phase* - 1,000 kgs./day– proposed to be segregated at source into wet and dry garbage and treated / disposed-off accordingly.

m. Power requirement. –

Construction phase -20 kw. In addition, back-up power through one (01) DG set of 60KVA capacity.

Operation phase – 2,060 kw to be sourced from Goa State Electricity Board. In addition, back-up power through 2 DG sets of (1) 1 of 200 KVA and 2 of 125 KVA.

n. EMP has been prepared.

3. In view of the above and based on the recommendations of the Goa-SEAC; Goa-SEIAA, subsequent to compliances sought to project-specific observations / site-specific clarifications, has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

- a. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.
- b. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.

- c. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirements.
- d. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or by collecting water in large polythene tanks thereby saving on utilization of tap water. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures / STP installation, etc.
- e. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- f. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- g. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- h. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.
- i. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- j. Considering the existing land use / land cover of the plot area, the PP should necessarily adapt roof-top rainwater harvesting system for optimum utilization of water resources, especially for landscape development and its maintenance.
- 4. Further, the project proponent has been advised as regard to the following:
  - a. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.

- b. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
- c. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.
- d. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.
- e. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.
- f. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- g. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.
- h. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within seven days of the receipt of this letter, informing that the project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.
- i. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- j. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied

with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

## k. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

1. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully, Sd./-(Levinson J. Martins) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

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EIA-Goa State Secretariat, O/o Goa State Pollution Control Board (GSPCB), 1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/ 109* 

*Date:22<sup>nd</sup>* March 2013

*To,* **M/s SRE Estates Developers,** Supreme, Behind New Telephone Exchange, Opposite Bombi House, Comba, Margao – 403 601

### Sub.: Proposed expansion of residential complex "Supreme Colmorod Central" in Chalta no. 13 & 15 of P. T. sheet no. 299 of Margao city (near Navelim) in Salcete taluka of South Goa district – reg.,

Sir,

I am directed to refer to your application dated 23<sup>rd</sup> January 2013 seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) on the basis of the documents enclosed with application viz. Form 1 and Form 1A (conceptual plan) as well as in response to the project-specific observations (*i.e. project presentation followed by siteinspection*) considered by the Goa State Expert Appraisal Committee (Goa-SEAC) in its Thirteenth Eleventh meeting held on 7<sup>th</sup> February 2013 and Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its Seventh meeting held on 15<sup>th</sup> March 2013.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed expansion of a residential complex "Supreme Colmorod Central" (*i.e.* G + 8 floors housing 156 flats 01 –Studios, 06 – 1 BHK, 124 – 2 BHK, 25 – 3 BHK) in Chalta no. 13 & 15 of P. T. sheet no. 299 of Margao city (near Navelim) in Salcete taluka of South Goa district. Project details and salient features of the proposed developmental activity is as under –

a. Total plot area – 8,566 sq. mt.

b. Approved Built-up area – 6,958.15 sq.mts.

c. Proposed built-up area – 22,386.21 sq.mts.

d. Gross built-up area – 29,344.36 sq.mts.

- e. Permissible F.A.R. 16,932 sq.mts.
- f. FAR consumed 16,904 sq.mts.
- g. Open space required 1,284.90 sq.mts.

- h. Open space provided 1,580 sq.mts.
- i. Expected total occupancy 702 persons
- j. Parking proposed 185 ECS
- k. Geo-technical soil investigation (through three bore-holes drilled upto 10mts.) has been prepared and submitted with the proposal (*conducted by M/s Surbhi Enterprises – a Geotek Consortium, Mahim, Mumbai*.). Accordingly, Groundwater table is encountered at a depth ranging from 1.7 mts. to 2 mts. As such, Raft foundation has been proposed with allowable bearing pressure of 15 t/m<sup>2</sup> that may result with maximum settlement less than 65 mm.

### 1. Water requirement -

During Construction phase – 20CMD (2CMD for domestic use and 18CMD for construction purpose) to be sourced from private tankers and proposed open well.

*During operational phase* – 139CMD (i.e. 63CMD to be sourced from PWD and 76CMD to be sourced from STP-recycled)

 m. Wastewater generated – 81CMD of wastewater to be treated in Sewage Plant of 85CMD capacity having Moving Bed Bio-Reactor (MBBR)
 which will generate 76CMD of treated water. Out of this, 32CMD
 08CMD for gardening, 05CMD for car washings. 31 CMD of the treated water is proposed to be provided to existing bungalows / buildings for the purpose of gardening. The PP has proposed dual plumbing system.

10kgs. of sludge per day will be generated which is proposed be dewatered, dried and mixed with compost for gardening.

n. Solid waste generated -

*During construction phase* - about 1-2 MT /day of debris will be generated.

*During operational phase* - about 298 kgs./day is estimated to be generated which will be segregated at source into wet and dry garbage. Biodegradable waste (50% of the total waste) is proposed to be treated on Organic Waste Convertor (OWC). Space of 200 sq.mts. has been proposed as per the plan for segregation of the non-biodegradable waste and segregated waste is proposed to be disposed-off through scrap dealer for recycling.

o. Power requirement. -

*Construction phase* – 2.5 HP *Operation phase* – 2,124 KVA to be sourced from Goa State Electricity Board. In addition, back-up power through 01 DG sets of 625 KVA capacity.

3. In view of the above and based on the recommendations of the Goa-SEAC; Goa-SEIAA, subsequent to compliances sought to project-specific observations / site-specific clarifications,

has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

- a. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.
- b. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- c. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirements.
- d. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or by collecting water in large polythene tanks thereby saving on utilization of tap water. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures / STP installation, etc.
- e. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- f. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- g. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.

- h. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.
- i. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- j. Considering the existing land use / land cover of the plot area, the PP should necessarily adapt roof-top rainwater harvesting system for optimum utilization of water resources, especially for landscape development and its maintenance.
- 4. Further, the project proponent has been advised as regard to the following:
  - a. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.
  - b. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - c. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.
  - d. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.
  - e. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.
  - f. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
  - g. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.

- h. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within seven days of the receipt of this letter, informing that the project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.
- i. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- j. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- k. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.
- 1. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

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Yours faithfully, Sd./-(Levinson J. Martins) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

EIA-Goa State Secretariat, O/o Goa State Pollution Control Board (GSPCB), 1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/101* 

Date: 22<sup>nd</sup> March 2013

*To,* **M/s Trinitas Developers Pvt. Ltd.,** Level-VIII, Muttha Chambers, - II, Senapati Bapat Marg, Pune – 411 016

## Sub.: Proposed residential project in Survey no. 117/1-A of Sancoale village of Mormugao taluka in South Goa district. – reg.,

Sir,

I am directed to refer to your application dated 12<sup>th</sup> November 2012 seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) on the basis of the documents enclosed with application viz. Form 1 and Form 1A (conceptual plan) as well as in response to the project-specific observations (*i.e. project presentation followed by siteinspection*) considered by the Goa State Expert Appraisal Committee (Goa-SEAC) in its Tenth meeting held on 11<sup>th</sup> December 2012 and Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its Sixth and Seventh meeting held on 7<sup>th</sup> February 2013 and 15<sup>th</sup> March 2013 respectively.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for the construction a **new residential project** (*i.e. 160 flats*) in survey no. 117/1-A of Sancoale village of Mormugao taluka in South Goa district. Project details and salient features of the proposed developmental activity is as under –

- a. Total plot area 8,000 sq. mt.
- b. Deduction for road widening 213 sq.mts.
- c. Effective plot area 7,787 sq. mts.
- d. Open space proposed 1,170 sq. mts.
- e. Proposed built-up area 29,358 sq.mts.
- f. Total proposed covered area 3,071.14 sq. mts. (max. 40%)
  - g. Permissible FAR 200 %
  - h. Floor area permissible 16,000 sq.mts.

- g. Expected total occupancy 720 persons
- h. Parking proposed 188 ECS
- i. Geo-technical soil investigation has been carried out to understand the foundation characteristics through M/s Safe Cores and Tests, Mumbai in June 2006 by analyzing four (04) bore holes ranging in depth from 24 28 mts. Groundwater has been uniformly encountered at a depth of 1.5 mts. Chemical analysis of water indicate that it is aggressive to 'concrete' and corrosive to 'reinforcement steel'.
- j. Water requirement -

*During Construction phase*  $-20 \text{ m}^3/\text{day}$ . (i.e. 18 m<sup>3</sup>/d for construction and 2m<sup>3</sup>/d for domestic usage) to be sourced from private tankers / PWD.

During operational phase – 109.65  $\text{m}^3/\text{d}$  (i.e. 66.6  $\text{m}^3/\text{d}$ -PWD and 43.05  $\text{m}^3/\text{d}$ -recycled water)

- k. Wastewater generated 84.24 m<sup>3</sup>/d to be treated in 92.66 cmd Sewage Plant (STP) with Moving Bed Bio-Reactor (MBBR) technology. It is that recycled water will be used for flushing, car washing / gardening.
- 1. Solid waste generated -

*During construction phase* - 1-2 MT/day– to be used for land-filling within the plot.

*During operational phase* - 306 kgs./day, biodegradable waste to be treated through in-house mechanical composting using Organic Waste Convertor (OWC). While, non-biodegradable waste to be disposed through private contractors for <u>for</u> recycling.

m. Power requirement. -

Construction phase -20 HP Diesel generator. Operation phase -2,673.72 KVA, to be sourced from Goa State Electricity Board.

Back-up power through 02 DG sets of 160 KVA capacity each. (@ 65% load factor). Energy consumption assumed -6.73 W per sq.ft. of built-up area

n. EMP has been prepared.

**34.** In view of the above and based on the recommendations of the Goa-SEAC; Goa-SEIAA, subsequent to compliances sought to project-specific observations / site-specific clarifications, has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

a. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape

development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.

- b. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- c. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirements.
- d. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or by collecting water in large polythene tanks thereby saving on utilization of tap water. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures / STP installation, etc.
- e. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- f. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- g. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- h. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.

- i. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- j. Considering the existing land use / land cover of the plot area, the PP should necessarily adapt roof-top rainwater harvesting system for optimum utilization of water resources, especially for landscape development and its maintenance.
- 4. Further, the project proponent has been advised as regard to the following:
  - a. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.
  - b. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - c. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.
  - d. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.
  - e. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.
  - f. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
  - g. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.
  - h. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within seven days of the receipt of this letter,

informing that the project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.

- i. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- j. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- k. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.
- 1. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully,

Sd./-(Levinson J. Martins) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

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EIA-Goa State Secretariat,

O/o Goa State Pollution Control Board (GSPCB),

1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

No: 3 – 181 – 2010/STE-DIR/ 106

Date: 22<sup>nd</sup> March 2013

*To*, **M/s Prive Reality Pvt. Ltd.,** 302, Aircondition Market, Tardeo, Mumbai.

### Sub.: Proposed construction of residential complex in survey no. 103/1, 103/2 and 104/1 of Bambolim village in Tiswadi taluka of North Goa district – reg.,

Sir,

I am directed to refer to your application dated 16<sup>th</sup> January 2013 seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) on the basis of the documents enclosed with application viz. Form 1 and Form 1A (conceptual plan) as well as in response to the project-specific observations (*i.e. project presentation followed by siteinspection*) considered by the Goa State Expert Appraisal Committee (Goa-SEAC) in its Twelfth Eleventh meeting held on 30<sup>th</sup> January 2013 and Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its Sixth and Seventh meeting held on 7<sup>th</sup> February 2013 and 15<sup>th</sup> March 2013 respectively.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed construction of a residential complex (*i.e.* 16 building blocks including 2BKH flats – 128 nos.) 23 Villas of Type-1, 02 Villas of Type-2, 06 Shops and 01 Clubhouse) in survey no. 103/1, 103/2 and 104/1 of Bambolim village in Tiswadi taluka of North Goa district. Project details and salient features of the proposed developmental activity is as under –

a. Total plot area –76,675 sq. mt.

b. Area under Orchard-zone non-development – 29,675 sq.mts.

c. Area under settlement zone (i.e. effective plot area) – 47,000 sq.mts.

d. Open space required – 7,050 sq.mts.

e. Open space provided – 7,090 sq.mts.

f. Permissible covered area – 18,800 sq.mts.

- g. Approved covered area -2,307 sq.mts.
- h. Total covered area 15,687.61 sq.mts.
- i. Proposed FAR 22,143.83 sq.mts. (as per RP-2021)

j. Approved FAR – 6,040.95 sq.mts.

k. Total F.A.R. – 28,184 sq.mts.

l. Proposed Built-Up-Area – 33,837.2 sq.mts.

m. Approved Built-Up-Area – 9,766.98 sq.mts.

n. Proposed gross built-up area – 43,604.18 sq.mts.

o. Expected total occupancy - 689 users @ 4.5 persons per flat

p. Parking proposed – 196 ECS

q. Geo-technical soil investigation has been conducted.

r. Water requirement – *During Construction phase* – 20CMD to be sourced from proposed open well. *During operational phase* – 142CMD (i.e. 66CMD from PWD and 76CMD from STP-recycled)

s.Wastewater generated – 81 CMD of wastewater to be treated in Sewage Treatment Plant of 85 CMD capacity having Moving Bed Bio-Reactor (MBBR) technology which will generate 76 CMD of treated water. Out of this, 31 CMD for flushing, 35 CMD for gardening, 5 CMD for car washings and 5 CMD for irrigation purposes. As such, dual plumbing system is proposed.

10 kgs. of sludge per day will be generated which is proposed be dewatered, dried and mixed with compost for gardening.

*During construction phase* - 1-2 MT per day of construction debris to be used for land-filling within the plot.

During operational phase - 295 kgs./day – proposed to be segregated at source into wet and dry garbage.

u. Power requirement. –

*Construction phase* – 2 HP

*Operation phase* – 3,050 KW to be sourced from Goa State Electricity Board. In addition, back-up power through 02 DG sets of 160 KVA capacity each, totaling to 320 KVA.

v. Energy consumption assumed – 6.73 W per sq.ft. of Built-Up Area (BUA)

w. EMP has been prepared.

3. In view of the above and based on the recommendations of the Goa-SEAC; Goa-SEIAA, subsequent to compliances sought to project-specific observations / site-specific clarifications, has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

t. Solid waste generated -

- a. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.
- b. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- c. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirements.
- d. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or by collecting water in large polythene tanks thereby saving on utilization of tap water. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures / STP installation, etc.
- e. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- f. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- g. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- h. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.

- i. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- j. Considering the existing land use / land cover of the plot area, the PP should necessarily adapt roof-top rainwater harvesting system for optimum utilization of water resources, especially for landscape development and its maintenance.
- 4. Further, the project proponent has been advised as regard to the following:
  - i. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.
  - ii. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - iii. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.
  - iv. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.
  - v. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.
  - vi. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
  - vii. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.
  - viii. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the

Konkani and Marathi language within seven days of the receipt of this letter, informing that the project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.

- ix. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- x. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- xi. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.
- xii. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of* 2010).

Yours faithfully, Sd./-(Levinson J. Martins) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

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#### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,

O/o Goa State Pollution Control Board (GSPCB),

1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/ 108* 

Date:22<sup>nd</sup> March 2013

То,

M/s Raj Housing Development Pvt. Ltd., S-1, Pai House, Above Goa Urban Co-operative Bank Ltd., Ponda, Goa – 403 401

#### Sub.: Proposed construction of a residential project 'Raj Enclave' in P.T. Sheet No. 8 of Chalta No. 01 in Mapusa Municipal Council area of Bardez taluka in North Goa district – reg.,

Sir,

I am directed to refer to your application dated 13<sup>th</sup> July 2012 seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) on the basis of the documents enclosed with application viz. Form 1 and Form 1A (conceptual plan) as well as in response to the project-specific observations of the Goa State Expert Appraisal Committee (Goa-SEAC) in its Seventh meeting held on 24<sup>th</sup> July 2012 and Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its Fourth, Fifth and Sixth meeting held on 10<sup>th</sup> August 2012, 18<sup>th</sup> December 2012 and 7<sup>th</sup> February 2013 respectively.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed construction of a **new residential project 'Raj Enclave'** (*i.e. two buildings – one with G* + 4 and another G + 1 having max. height upto 18 mts., comprising of 235 flats, 11 shops, 01 School) located in

P.T. Sheet No. 8 of Chalta No. 01 of Mapusa Municipal Council area in Bardez taluka of North Goa district. Project details and salient features of the proposed developmental activity is as under –

a. Total plot area – 19,052.00 sq. mt.

- b. Area in road widening 2,178.88 sq. mts.
- c. Effective plot area 16,873.12 sq. mts.
- d. Total built-up area 30,244.17 sq. mt.
- e. Permissible covered area 6,749.25 sq. mts. (40%)
- f. Proposed covered area 5,117. 15 sq. mts. (30.33%)

- g. Proposed open space (including school garden) -2,546.00 sq. Mt.
- h. Expected total occupancy -950 persons
- i. Parking proposed 268 ECS
- j. Hydro-geological study is proposed to be undertaken subject to digging of bore-well.
- k. Water requirement:
  - During Construction phase  $-50 \text{ m}^3/\text{day}$

During operational phase - 150 cmd (70 m<sup>3</sup>/day through PWD supply, 80m<sup>3</sup>/day through recycled water through STP). Additional, 30m<sup>3</sup>/day or recycled water from STP is to be utilized for green-area development. Water demand for fire fighting : 200 m<sup>3</sup>

- 1. Total waste-water generated 200 KLD STP based on Moving Bed Bio-Reactor (MBBR) technology is proposed. Total wastewater is about 120m<sup>3</sup>/day from which  $110m^3/day$  is expected to be generated as treated water (80 m<sup>3</sup> for dual plumbing system and 30m<sup>3</sup> for landscaping).
- m. Total quantity of sludge produced is about 100 kg./month and will be utilized as manure.
- n. RWH initiatives with technical specifications proposed to be adapted may be furnished.
- o. Power requirement:

Construction phase – 100 KVA / Diesel generator. Operation phase - 1,500 KVA, to be sourced from Goa Electricity Dept. Back-up power through DG sets of 100 KVA capacity

p. Municipal Solid waste generated"

50 kg. per day (Construction phase) and about 200 kg./day (on Operation). About 20 kg./month of hazardous wastes during construction and about 10 kg./month during operational phase. Plastic waste -5 kg./day during construction phase.

Demolition waste of about 50 MT is expected to be generated which is proposed to be utilized for land-filling / leveling. While, metal debris to be sold to scrap dealer for recycling.

Organic Waste Convertor (OWC) is proposed for biodegradable waste.

q. EMP has been submitted.

3. In view of the above and based on the recommendations of the Goa-SEAC; Goa-SEIAA, subsequent to clarifications sought to project-specific observations, has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

- a. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.
- b. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- c. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirements.
- d. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or by collecting water in large polythene tanks thereby saving on utilization of tap water. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures / STP installation, etc.
- e. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- f. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- g. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- h. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.

## i. PP should initiate the proposed construction of residential project only after successful completion of a 'School and its premise', as per the undertaken submitted.

- j. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- k. Considering the existing land use / land cover of the plot area, the PP should necessarily adapt roof-top rainwater harvesting system for optimum utilization of water resources, especially for landscape development and its maintenance.
- 4. Further, the project proponent has been advised as regard to the following:
  - a. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.
  - b. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - c. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.
  - d. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.
  - e. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.
  - f. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
  - g. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.

- h. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within seven days of the receipt of this letter, informing that the project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.
- i. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- j. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

## k. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

1. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*)

**5.** This issues with the approval of the Government vide U. O. No.1613-F dated 15<sup>th</sup> February 2013.

Yours faithfully,

Sd/-

(Levinson J. Martins) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

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#### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA – Goa Secretariat,

O/o Goa State Pollution Control Board (GSPCB),

1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001

Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/* 

Date: 16<sup>th</sup> October, 2012

*To*, **M/s Bandekar Brothers Pvt. Ltd.,** Suvarn Bandekar Building, Vasco-da-Gama, Goa.

#### Kind Attention: Mr. Mohan Gajlekar

Sub.: Construction of Iron-ore loading Jetty having a capacity of handling 90,000 tons per month (i.e.

1.08 MT per annum) – reg.,

Ref.: Your letter No. BBPL / PUR / 229 / 2012-13 dated 9th June 2012

Sir,

I am directed to refer your application seeking prior Environmental Clearance (EC) for the above project as mandated under the EIA Notification, 2006. Accordingly and based on the documents enclosed with application (i.e. Form 1) vis-a-vis clarifications sought on certain sitespecific and project-specific observations, the above proposal has been screened under 'Category 7(e)' - Category 7 – Physical Infrastructure including Environmental services (7e) – Ports, harbours, breakwaters, dredging and appraised as Category 'B' project as the proposed ore handling capacity is less than 5MT per annum, by the Goa State Expert Appraisal Committee (Goa-SEAC) in its Seventh meeting held on 24<sup>th</sup> July 2012. Subsequently, the observations as well as recommendations of the Goa-SEAC were approved by the Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its Fourth meeting held on 10<sup>th</sup> August 2012.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for Construction of Iron-ore loading Jetty having a capacity of handling 90,000 tons per month in Survey no. 17/4, in Kotambi village of Bicholim taluka in North Goa district. Proposed project details and salient features of the proposed developmental activity is as under:-

- 1. Size of the platform 15 mt. X 9 mt.
- 2. One time dredging of approx. 3,000 m<sup>3</sup> so as to achieve a minimum draft of 3.5 mts. is proposed with annual de-siltation, if required.

3. The PP has obtained NOC from the Goa State Coastal Zone Management Authority (GCZMA) for the proposed developmental activity.

**3.** In view of the above and based on the recommendations of the Goa-SEAC; Goa-SEIAA has decided to accord prior environmental clearance to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

- a. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- b. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirement, wherever feasible.
- c. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management, as applicable, especially during the construction phase.
- d. PP should not disturb the natural drainage and as far as possible maintain the original topography. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- e. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.
- f. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- 4. In addition, the PP has to comply with the following "Specific Condition" :
  - a. PP should carry out proposed desiltation activity (*during the construction phase as well as annual basis, as applicable*) in a controlled manner with minimum disturbance to aquatic ecosystem. Accordingly, it is recommended to conduct site-specific bathymetric mapping / hydro-dynamic study of the estuarine portion within close proximity of the proposed site so as to understand the sediment hydrodynamics / sediment movement characteristics.
- 5. Further, the project proponent has been advised as regard to the following:
  - a. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEIAA.

- b. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
- c. Project proponent shall not make any change in the Layout Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.
- d. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided.
- e. Project proponent shall make suitable provisions for storm water flow.
- f. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi / Konkani language within seven days of the receipt of this letter, informing that the project has been accorded prior environmental clearance (EC) and the copies of the clearance letter are available on the DST&E website.
- g. The environmental clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- h. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- i. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.
- j. Any appeal against this prior Environmental Clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (Central Act 19 of 2010).
- 6. These issues with the approval of the Government vide U. O. No. 7902/F dated 27<sup>th</sup> September 2012.

Yours faithfully,

Sd./-

(Michael M. D'Souza) Director / ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

#### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA – Goa Secretariat,

O/o Goa State Pollution Control Board (GSPCB),

1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goaseac@gmail.com

*No: 3 – 181 – 2010/STE-DIR/* 2012

Date: 16<sup>th</sup> October,

*To*, **M/s Berger Paints (India) Ltd.,** Plot Nos. 316 & 317, Kundaim Industrial Estate, Kundaim, Ponda

#### Kind Attention: Mr. Prasenjit Chakrabarty, GM (Works)

Sub.: Proposed expansion in the production capacity of water-based emulsion paints from existing 1,800

KL/month to 8,00 KL/month and distemper paints from existing 750 MT/month to 3,000 MT/month -

reg.,

Ref.: Your letter No. Nil dated 7th July 2012

Sir,

In continuation to this office letter of even no. dated  $7^{\text{th}}$  May 2012 as well as in response to your submission, the matter was discussed in detail during the fourth Goa-SEIAA meeting held on  $10^{\text{th}}$  August 2012.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed expansion in production capacities of water-based emulsion and distemper paints at a unit located in plot nos. 316 & 317, Kundaim Industrial Estate, Kundaim. Further, project details and salient features of the proposed expansion activity is as under:-

4. Total plot area is  $33,837 \text{ m}^2$ . Greenbelt / plantation area within the site will be 46.64% even after considering the proposed expansion.

7. In view of the above, Goa-SEIAA has decided to accord prior environmental clearance to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

g. Nutrient-rich topsoil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation.

- h. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- i. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirement.
- j. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or modus-operandi towards optimum groundwater recharge.
- k. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottomtop approach.
- 1. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- m. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- n. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.
- o. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- 8. Further, the project proponent has been advised as regard to the following:
  - a. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA. The Project Proponent (PP) should also obtain HPCC approval for the proposed expansion activity, if applicable.
  - b. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - c. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s)

in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.

- d. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.
- e. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.
- f. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- g. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi / Konkani language within seven days of the receipt of this letter, informing that the project has been accorded prior environmental clearance (EC) and the copies of the clearance letter are available on the DST&E website.
- h. The environmental clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- i. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- j. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.
- k. Any appeal against this prior Environmental Clearance shall lie with National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (Central Act 19 of 2010).
- **9.** This issues with the approval of the Government vide U. O. No. 7902/F dated 27<sup>th</sup> September 2012.

Yours faithfully,

Sd./-

(Michael M. D'Souza) Director / ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

#### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

(Goa-SEIAA) Secretariat, O/o Goa State Pollution Control Board (GSPCB), 1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goapcb@rediffmail.com

*No: 3 – 181 – 2010/STE-DIR/07* 

*Date:* 30<sup>th</sup> April, 2012.

То,

M/s Susheela Homes Properties Pvt. Ltd., Ground Floor, Hotel Manish Building, F. L. Gomes Road, Vasco-da-Gama Goa – 403 802

Sub.: Proposed expansion of the Group Housing project "Sea Winds" in Vaddem village of

Vasco-da-Gama in Mormugao taluka of South Goa district - reg.,

Sir,

I am directed to refer to your application seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) on the basis of the documents enclosed with application viz. Form 1 and Form 1A (conceptual plan) as well as in response to the observations of the Goa State Expert Appraisal Committee (Goa-SEAC) in its Fifth Meeting held on 19<sup>th</sup> August 2011 and Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its Second Meeting held on 24<sup>th</sup> October 2011.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed expansion of a Group Housing project in Chalta No. 26(Part) of P.T. Sheet No. 69 & Plot Nos. 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 of Chalta No. 2 of P. T. Sheet No. 68 in Vaddem village of Vasco-da-Gama. Project details and salient features of the proposed developmental activity is as under :-

a.	Total plot area – 25,252 sq. mt.		
b.	Effective Plot area	- 16,9	92.39 sq. mt.
c.	F.A.R. permissible	- 31,0	54.88 sq. mt
d.	F.A.R. proposed	- 29,5	10.60 sq. mt.
	Existi	ng	– 17,734.96 sq. mt.
	Propo	sed	– 11,775.64 sq. mt.

e.	Built-up area –	Existing	- 26,110 sq. mt. (240 apartments)
		Proposed	– 18,688.41 sq. mt.

f.	Permissible ground coverage	e - 6796.25 sq. mt. (40%)

g.	Proposed ground coverage	– 4303 sq. mt. (25.32%)
	Existing	– 3,803.11 sq. mt.
	Proposed	– 500.85 sq. mt.

h.	Total green area proposed	- 5343.16 sq. mt. (21.15%)	)
•	<b>TT</b> 7 . <b>1</b>		DIII

i. Water requirement -256 KLD to be sourced from PWD.

j. Construction of bore – well proposed.

k. Total waste-water generated – 202 KLD to be disposed through municipal sewerage to be treated through 14 MLD STP located at Kate-Baina.

l. Power requirement – 1520 KW to be sourced from Electricity Dept., Two D.G. seta of total 165 KVA capacity (i.e. 82.5 KVA each) with low sulphur diesel is proposed to be installed as a back-up facility.

m. Solid waste generated (residential-cum-floating) – 884 kg. per day to be dispose off through vendors for recycling.

Phase	Present stage of construction	Built-up area approved earlier	Additional built- up area proposed	Total Built-up area
I A	Complete	2521.55 sq mtrs	-	2521.55 sq mtrs
ΙB	Complete	2687.10 sq mtrs	-	2687.10 sq mtrs
III A	Complete	1795.25 sq mtrs	1075.35 sq mtrs	2870.60 sq mtrs
III B	Complete	1795.25 sq mtrs	1075.35 sq mtrs	2870.60 sq mtrs
III C	Complete	1795.25 sq mtrs	1075.35 sq mtrs	2870.60 sq mtrs
IV	In progress	3768.30 sq mtrs	3115.44 sq mtrs	6883.74 sq mtrs
V	Foundation	1201.75 sq mtrs	722.25 sq mtrs	1924.00 sq mtrs
VI	50% complete	4593.00 sq mtrs	3777.07 sq mtrs	8370.07 sq mtrs
Parking		5952.55 sq mtrs	7847.60 sq mtrs	13800.15 sq mtrs
		26110.00 sq mtrs	18688.41 sq mtrs	44798.41 sq mtrs

10. Based on the site-specific observations vis-à-vis project details submitted by the Project Proponent (PP), the Authority has noted that the said project was first approved and sanctioned by MoEF vide letter No. 21-356/2008/IA.III dated  $22^{nd}$  March 2010 for 240 apartments (2 level stilts + 5 floors) with a total built up area of 26,110 sq mt. During the course of construction, the outline development for Vasco was revised by the Mormugao Planning and Development Authority (MPDA), published in the Official Gazette, Series III Number 45 dated 05/02/2009, wherein the zone of said property was changed from S1 to C1. As a result of this, the PP was

permitted to construct three (3) additional floors on all buildings except building I A & I B. This proposal was approved by order no. MPDA/1-D-237/Vol II/09-10/1028 dated 02/09/2009. The built up area were approved as follows:

Further, since the construction of Phase I A & I B, & Phase III A, III B, III C has already been completed, while half (50%) of Phase VI was under construction, the local authorities concerned allowed to complete construction of these buildings till the 8<sup>th</sup> floor, as the work could not be stopped in-between. In spite of this, the total built-up area of these buildings (IA, IB, III A, III B, III C, and VI 50%) has not exceeded 26,110 sq m, for which prior EC has been obtained from the MoEF. Accordingly, the Authority has understood that the **PP is seeking prior EC for construction of additional built-up area of 18,688.41 sq. mts**.

**11.** In view of the above and based on the recommendations of the Goa-SEAC; Goa-SEIAA has decided to accord prior environmental clearance to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

- a. Nutrient-rich topsoil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.
- b. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- c. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirement.
- d. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or by collecting water in large polythene tanks thereby saving on utilization of tap water. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures / STP installation, etc.

- e. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- f. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- g. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- h. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.
- i. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.
- **12.** Further, the project proponent has been advised as regard to the following:
  - a. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.
  - b. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - c. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.
  - d. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.
  - e. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.
  - f. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.

- g. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.
- h. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi / Konkani language within seven days of the receipt of this letter, informing that the project has been accorded prior environmental clearance (EC) and the copies of the clearance letter are available on the DST&E website.
- i. The environmental clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- j. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- k. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.
- 1. Any appeal against this prior Environmental Clearance shall lie with the National Environmental Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of the National Environmental Appellate Act, 1997 (Central Act 22 of 1997); or before the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (Central Act 19 of 2010).
- **13.** This issues with the approval of the Government vide U. O. No.1151-F dated 28<sup>th</sup> March 2012.

Yours faithfully, Sd. -(Michael M. D'Souza) Director / ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

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#### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

(Goa-SEIAA) Secretariat,

**O/o Goa State Pollution Control Board (GSPCB),** 1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goapcb@rediffmail.com

*No:* 3 – 181 – 2010/STE-DIR/ 06

*Date:* 30<sup>th</sup> April, 2012.

*To,* **M/s Sattva Builders Pvt. Ltd.,** #3, 4<sup>th</sup> Floor, Salarpuria Windsor, Ulsoor Road, Bengaluru – 560 042

## Sub.: Proposed construction of a residential building 'Sattva Water's Edge' Survey no. 199/2 of Sancoale village in Mormugao taluka, South Goa district – reg.,

Sir,

I am directed to refer to your application seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) on the basis of the documents enclosed with application viz. Form 1 and Form 1A (conceptual plan) as well as in response to the observations of the Goa State Expert Appraisal Committee (Goa-SEAC) in its Fifth Meeting held on 19<sup>th</sup> August 2011 and Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its Second Meeting held on 24<sup>th</sup> October 2011.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for the proposed construction of a residential building 'Sattva Water's Edge' in Survey no. 199/2 of Sancoale village in Mormugao taluka, South Goa district. Project details and salient features of the proposed developmental activity is as under –

a.	Total plot area – 19,125 sq. mt.				
b.	Effective Plot area – 18,573 sq.	mt. (595 sq. mt. for road widening			
c.	Total Built-up area – 24,700 sq.	mt. (pre-revised)			
	22,786.42	sq. mt. (revised) and			
includes $-(18,913.30 + 1,633.95 + 92 - \text{club house} \text{ area}) + 347.17 (utilities) + 1,800$					
(podiu	(podium)				
d.	Total green area proposed	- 5,696 sq. mt. (30.74%)			
e.	Total area covered by building	– 4,909 sq. mt.			
f.	Total soil to be excavated	$-3,700 \text{ m}^3$ (1200 m <sup>3</sup> to be used for			
landso	landscape development)				

g. Manpower required during construction phase – 150 max.

- h. Cost of the project -30.96 crores
- i. Parking facility 106 cars

j. Total nos. of trees to be cut - 21 (relevant NOC obtained)

k. Rainwater harvesting – (a) 12 recharge wells for effective groundwater recharge (b) Roof-top harvesting is proposed to be stored (about 207  $m^3$ ) to be treated through Water Treatment Plant. Treated water shall be pumped to 09 overhead tanks of 12.6  $m^3$  capacity as well as fire fighting purpose.

1. Water requirement -25 KLD - during construction phase to be sourced through tankers. During operational phase 96 KLD - to be sourced from Municipal supply and recycled treated sewage.

m. Sewage Treatment Plant - 90 KLD STP is proposed to be installed to generate 78 KLD of treated water to be utilized for flushing, gardening as well as floor / vehicle washing. It will also generate 4.5 kgs. /day of sludge to be used as manure for landscape area.

n. Power requirement – Two D.G. seta (a) during construction – one of 50 KVA and (b) during operation – Normal supply of 1241 KVA and Max. demand of 931 KVA is to be sourced from Goa Electricity Dept. (GED). Further, one of 160 KVA and two of 220 KVA to be installed as a back-up facility.

o. Solid waste generated (residential-cum-floating) - 285 kgs./day (173 kgs. of organic & 114 kgs. of inorganic garbage). Organic Waste Converter is proposed to be installed to convert wet waste into manure. While, inorganic waste is to be disposed through Municipal Authorities.

p. Environment Management Plan (EMP) provides recurring cost of 6.60 lakhs per year.

**35.** In view of the above and based on the recommendations of the Goa-SEAC; Goa-SEIAA has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

gggg. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.

hhhh. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.

iiii. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirement.

jjjj. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or by collecting water in large polythene tanks thereby saving on utilization of tap water. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures / STP installation, etc.

kkkk. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.

llll. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.

mmmm. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.

nnnn. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.

oooo. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.

4. In addition, certain **"Specific Conditions"** to be complied with by the project proponent are as under:-

k. The PP should take precautionary measure not to disturb the near-vertical cliff portion within the plot area, instead, strengthen the said portion / hill slope to maintain the inherent slope-stability.

1. Considering the existing land use / land cover of the plot area, the PP should necessarily adapt roof-top rainwater harvesting system for optimum utilization of water resources, especially for landscape development and its maintenance.

5. Further, the project proponent has been advised as regard to the following:

mmmmmm. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.

nnnnnn. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.

ooooooo. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.

pppppp. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.

qqqqqqq. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.

rrrrrr. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.

ssssss. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.

tttttt. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani and Marathi language within seven days of the receipt of this letter, informing that the project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter are available on the DST&E website.

uuuuuu. The Environmental Clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.

vvvvvv. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

wwwwww. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

xxxxxx. Any appeal against this prior environmental clearance shall lie with the National Environmental Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of the National Environmental Appellate Act, 1997 (Central Act 22 of

1997); or before the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (Central Act 19 of 2010)

6. This issues with the approval of the Government vide U. O. No.1151-F dated 28<sup>th</sup> March 2012.

Yours faithfully, Sd. -(Michael M. D'Souza) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

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#### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

(Goa-SEIAA) Secretariat,

O/o Goa State Pollution Control Board (GSPCB),

1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goapcb@rediffmail.com

*No: 3 – 181 – 2010/STE-DIR/05* 

Date: 30<sup>th</sup> April, 2012.

*To,* **M/s Prithvi Consultants Pvt. Ltd.,** Diya Enclave, A/2, 1<sup>st</sup> Floor, Law College Road, Miramar, Panaji, Goa – 403 001

# Sub.: Proposed construction of a residential-cum-commercial complex in Survey no. 20/1 (part), Sub. Div. No. 1(P) of Bainguinim village in Tiswadi taluka of North Goa district – reg.,

Sir,

I am directed to refer to your application seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) on the basis of the documents enclosed with application viz. Form 1 and Form 1A (conceptual plan) as well as in response to the observations of the Goa State Expert Appraisal Committee (Goa-SEAC) in its Sixth Meeting held on 7<sup>th</sup> December 2011 and Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its Third Meeting held on 5<sup>th</sup> April 2012.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for the proposed construction of a residential-cum-commercial complex in Survey no. 20/1 (part), Sub. Div. No. 1(P) in Bainguinim village in Tiswadi taluka in North Goa district. Project details and salient features of the proposed developmental activity is as under – ,

a. Total plot area $-20,914.87$ sq. mt.				
b. FAR Permissible $-22,500.00$ sq.mt. (0.8%)				
c. FAR Proposed / consumed – 21,211.74 sq.mt. (0.799%)				
d. Total Built-up area $-32,185.85$ sq.mt.				
e. Internal Road Layout for traffic management has been designed.				
f. Total covered area – 11,341.99 sq. km.				
Open space (a) Required $-5655$ sq. km.				
(b) Proposed $-6000$ sq. km.				
g. Geo-technical investigations have been carried out.				
h. Parking facility –218 vehicles.				
i. Rainwater harvesting is proposed primarily to recharge groundwater.				

j. Water requirement –

(i) Construction phase – 50 cmd (40 cmd for construction and 10 cmd for domestic use) – to be sourced from PWD.

(ii) Operation phase – 187 cmd (fresh water – 103 cmd and 84 cmd as recycled STP water)

k. Waste water treatment -136 cmd of total sewage is expected to be generated which would generate about 129 cmd of treated water. Out of this, about 84 cmd water is to be used for flushing and gardening while, 45 cmd is to be released into the public sewer. As such, Dual Plumbing System is proposed. 10 kg per day of sludge is expected to be generated due to STP treatment

l. Power requirement –

(a) During construction phase – 50 KW

(b) During operation phase -5 MW – to be sourced from Goa State Electricity Board D.G. sets as back-up power supply is proposed – 40% Residential and 100% for commercial usage.

m. Solid waste generated –

(a) Construction phase -1-2 MT per day

(b) Operation phase – 0.5 TPD with equal volume of biodegradable and nonbiodegradable. Biodegradable waste to be treated with OWC of appropriate capacity. n. Environment Management Plan (EMP) has been prepared.

**3.** In view of the above and based on the recommendations of the Goa-SEAC; Goa-SEIAA has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

- i. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.
- ii. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- iii. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirement.
- iv. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or by collecting water in large polythene tanks thereby saving on utilization of tap water. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits which would recharge the

groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures / STP installation, etc.

- v. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- vi. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- vii. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- viii. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.
  - ix. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.

**4.** In addition, certain **"Specific Conditions"** to be complied with by the project proponent are as under:-

a. The PP has been advised to adopt Water Harvesting initiatives in the form of storage tanks rather than to recharge the groundwater.

b. The PP should sustainably utilize the STP-treated water instead of releasing it through public sewer. Alternatively, the treated water may be supplied to nearby village community for gardening, landscaping, and construction purposes.

5. Further, the project proponent has been advised as regard to the following:

1. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.

2. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.

3. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the

scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.

4. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.

5. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.

6. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.

7. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.

8. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani / Marathi language within seven days of the receipt of this letter, informing that the project has been accorded prior environmental clearance (EC) and the copies of the clearance letter are available on the DST&E website.

9. The environmental clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.

10. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

11. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

12. Any appeal against this prior environmental clearance shall lie with the National Environmental Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of the National Environmental Appellate Act, 1997 (Central Act 22 of 1997); or before the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (Central Act 19 of 2010)

6. This issues with the approval of the Government vide U. O. No.2243-F dated 23<sup>rd</sup> April 2012.

Yours faithfully, Sd. -(Michael M. D'Souza) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

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#### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (Goa-SEIAA) Secretariat, O/o Goa State Pollution Control Board (GSPCB), 1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goapcb@rediffmail.com

*No: 3 – 181 – 2010/STE-DIR/04* 

*Date:* 30<sup>th</sup> April, 2012.

*To,* **M/s Four Seasons Shelters,** Diya Enclave, A/2, 1<sup>st</sup> Floor, Law College Road, Miramar, Panaji, Goa – 403 001

## Sub.: Proposed construction of residential buildings (12 nos.) in Survey no. 20/1 (part), Sub. Div. No. 1(P) in Bainguinim village in Tiswadi taluka in North Goa district – reg.,

Sir,

I am directed to refer to your application seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) on the basis of the documents enclosed with application viz. Form 1 and Form 1A (conceptual plan) as well as in response to the observations of the Goa State Expert Appraisal Committee (Goa-SEAC) in its Sixth Meeting held on 7<sup>th</sup> December 2011 and Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its Third Meeting held on 5<sup>th</sup> April 2012.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for the proposed construction of residential complex in Survey no. 20/1 (part), Sub. Div. No. 1(P) in Bainguinim village in Tiswadi taluka in North Goa district. Project details and salient features of the proposed developmental activity is as under –

- a. Total plot area 17,565.00 sq. mt.
- b. Internal Road Layout for traffic management has been designed.
- c. Total Built-up area 20,914.87 sq.mt.
- d. Total covered area 4200.14 sq. km.
  - Net Floor area 14,012 sq. km.
  - Open space required 2634.75 sq. km.
  - Open space provided 2646.00 sq. km.
- e. Quantity of substratum will be used for creation/refilling of basement.
- f. Geo-technical investigations have been carried out.
- g. Parking facility provided for 210 vehicles.
- h. Water requirement -

- (a) Construction phase 50 cmd to be sourced from bore well (domestic 10 and construction 40)
- (b) Operation phase 182 cmd to be sourced from PWD (83 cmd) as well as treated STP water 99 cmd).
- i. Waste water treatment 111 cmd of sewage will be generated. 125 CMD capacity STP is proposed with MBBR technology. Recycled water (105 cmd) is intended to be used for gardening, flushing as well as car/road washings. Balance water (i.e. 6 cmd) will be sent to public sewer.
- p. Power requirement
  - (a) Construction phase 20 HP

(b) Operation phase – 1126 KW sourced through Goa State Electricity Board /Department. Energy efficient electrical and HVAC installations for energy conservation. Back-up power through 500 KVA D. G. set with 65% load factor

- q. Solid waste generated: During construction -1 2 MT per day. While, debris generated will be used for foundation and basement. During operation phase total waste -0.4 TPD (biodegradable -0.2 TPD and Non-biodegradable -0.2 TPD). Biodegradable waste will be treated in mechanical composting units (i.e. installation of OWC having suitable treatment capacity) within the complex. Non-biodegradable waste is expected to be disposed-off at suitable disposal site.
- r. Environment Management Plan (EMP) has been prepared.

3. In view of the above and based on the recommendations of the Goa-SEAC; Goa-SEIAA

has decided to accord prior Environmental Clearance (EC) to the said project under the provision

of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the

#### following "General Conditions":-

a. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.

b. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.

c. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirement.

d. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or by collecting water in large polythene tanks thereby saving on utilization of tap water. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be

proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures / STP installation, etc.

e. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.

f. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.

g. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. Varieties of *acacia* should not be used either as avenue plantations or as live-fencing rather indigenous species should be planted.

h. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.

i. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.

**4.** In addition, certain **"Specific Conditions"** to be complied with by the project proponent are as under:-

a. The PP has been advised to adopt Water Harvesting initiatives in the form of storage tanks rather than to recharge the groundwater. PP may like to recharge the existing bore-well by directing the storm drain water through properly devised filter mechanism.

b. The PP should sustainably utilize the STP-treated water to minimize the demand from PWD water supply. Alternatively, the treated water may be supplied to nearby village community for gardening, landscaping, and construction purposes.

5. Further, the project proponent has been advised as regard to the following:

1. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.

2. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.

3. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.

4. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.

5. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.

6. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.

7. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.

8. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi / Konkani language within seven days of the receipt of this letter, informing that the project has been accorded prior environmental clearance (EC) and the copies of the clearance letter are available on the DST&E website.

9. The environmental clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.

10. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

11. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

12. Any appeal against this prior environmental clearance shall lie with the National Environmental Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of the National Environmental Appellate Act, 1997 (Central Act 22 of 1997); or before the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (Central Act 19 of 2010).

6. This issues with the approval of the Government vide U. O. No.2243-F dated 23<sup>rd</sup> April 2012.

Yours faithfully, Sd. -

(Michael M. D'Souza) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

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#### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (Goa-SEIAA) Secretariat, O/o Goa State Pollution Control Board (GSPCB), 1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goapcb@rediffmail.com

*No: 3 – 181 – 2010/STE-DIR/03* 

*Date:* 30<sup>th</sup> April, 2012.

То,

M/s Commonwealth Developers Pvt. Ltd., Laxmi Building, Below Cine Lata, Margao – 403 601

# Sub.: Proposed construction of residential-cum-commercial complex in Chalta no. 3 (Sub. Div. 1 & 2) / P.T. sheet no. 118, Chalta no. 4(P), 5(P) / P.T. sheet no. 118, Chalta No. 1 (Sub. Div. 13(P) & 18(P)) / P.T. sheet no. 119 in village Gogol, near Margao city, Salcete taluka, South Goa district. – reg.,

Sir,

I am directed to refer to your application seeking prior environmental clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) on the basis of the documents enclosed with application viz. Form 1 and Form 1A (conceptual plan) as well as in response to the observations of the Goa State Expert Appraisal Committee (Goa-SEAC) in its Sixth Meeting held on 7<sup>th</sup> December 2011 and Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its Third Meeting held on 5<sup>th</sup> April 2012.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for the proposed construction of residential-cum-commercial complex in Chalta no. 3 (Sub. Div. 1 & 2) / P.T. sheet no. 118, Chalta no. 4(P), 5(P) / P.T. sheet no. 118, Chalta No. 1 (Sub. Div. 13(P) & 18(P)) / P.T. sheet no. 119 in village Gogol, near Margao city, Salcete taluka, South Goa district. Project details and salient features of the proposed developmental activity is as under –

	Total plot area Total Built-up area	- 10,004 se - 36,013 se	q. mt. (2 Acres – 18.8 Guntas) q.mt.
c.	Total ground coverage -	allowed	- 3,777.60 sq. mt. (40%)
d.	Total FAR –	pro allowed Proposed	posed -3,773.10 sq. mt. (37.71%) -20,008.00 sq. mts. (200%) -20,006.87 sq. mt. (199.99%)
	Total estimated $cost - $ Green belt area $-3,315$ s	50.3 crores	20,000.07 by mil (199.9970)

- g. Quantity of substratum / earth material proposed to be excavated is about 22,969 m<sup>3</sup>. Out of this, about 4,569 m<sup>3</sup> will be used backfilling on the back side of the retaining walls, under-ground sumps. While, 1,326 m<sup>3</sup> of top soil is to be reused for landscaping. 17,074 m<sup>3</sup> to be dumped on other client's site. Further, 36.01m<sup>3</sup> is construction debris.
- h. Geo-technical soil investigations have been carried out.
- i. Parking facility provided for 291 ECS.
- j. Water requirement
  - 1. Construction phase -45 KLD to be sourced from PWD
  - 2. Operation phase -161.54 KLD to be sourced from PWD.
- k. Waste water treatment Total sewage generated is expected to be 136.39 m<sup>3</sup> per day. About 6.8 kgs. of sludge per day will be generated and will be used as manure for landscaping. 136 KLD capacity STP is proposed. Recycled water is intended to be used for landscaping (10 KLD), flushing (62.971 KLD) and excess water (63.419) to be discharged to existing sewer line.
- 1. Power requirement –

1. Construction phase – 100 KVA to be sourced, temporarily, from Goa Electricity Department (GED). Also 63 KVA D.G. set is proposed as stand-by mode power supply.

2. Operation phase – 1950 KVA to be sourced through GED. In addition, Back-up power is proposed to be sourced from 2 nos. of D. G. sets of 200 KVA each.

- m. Solid waste generated:
  - (a) During construction -30 kgs. per day to be treated through vermicomposting.

(b) During operation phase total waste -567.5 kgs. per day which is proposed to be segregated into organic (340.5 kgs.) and inorganic waste (227 kgs.). Organic waste to be treated by vermicomposting and inorganic waste to be disposed off through authorized recycler.

n. Environment Management Plan (EMP) has been prepared.

**3.** In view of the above and based on the recommendations of the Goa-SEAC; Goa-SEIAA has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

a. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.

b. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.

c. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirement.

d. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or by collecting water in large polythene tanks thereby saving on utilization of tap water. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures / STP installation, etc.

e. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach. f. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.

g. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. Varieties of *acacia* should not be used either as avenue plantations or as live-fencing rather indigenous species should be planted.

h. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.

i. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.

4. In addition, certain **"Specific Conditions"** to be complied with by the project proponent are as under-

are as under:-

**1.** As the area is low-lying, the PP has been advised to sustainably adopt appropriate Rainwater Water Harvesting initiatives subject to its site-specific feasibility. Efforts should be made towards optimally recharge the groundwater.

**2.** The PP intends to utilize the existing municipal sewer line. In addition, it should sustainably utilize the STP-treated water instead of releasing it through public sewer. Alternatively, the treated water may be supplied to nearby user community / municipality for gardening, landscaping, and small-scale construction purposes.

5. Further, the project proponent has been advised as regard to the following:

a. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.

b. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.

c.Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.

d. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.

e.Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.

f. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.

g. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.

h. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi / Konkani language within seven days of the receipt of this letter, informing that the project has been accorded prior environmental clearance (EC) and the copies of the clearance letter are available on the DST&E website.

i. The environmental clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.

j. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

k. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

1. Any appeal against this prior environmental clearance shall lie with the National Environmental Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of the National Environmental Appellate Act, 1997 (Central Act 22 of 1997); or before the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (Central Act 19 of 2010).

6. This issues with the approval of the Government vide U. O. No.2243-F dated 23<sup>rd</sup> April 2012.

Yours faithfully,

Sd. -(Michael M. D'Souza) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

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#### GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (Goa-SEIAA) Secretariat, O/o Goa State Pollution Control Board (GSPCB), 1<sup>st</sup> Floor, Dempo Towers, Patto, Panaji, Goa – 403 001

Phone nos.: 2438528 Fax. no.: 2438567

e-mail: goapcb@rediffmail.com

*No:* 3 – 181 – 2010/STE-DIR/02

*Date:* 30<sup>th</sup> April, 2012.

#### То,

**M/s Nanu Estates Pvt. Ltd.,** "Nanu House", Varde Valaulikar Road, P.O. Box No. 125, Margao, Goa – 403 601

# Sub.: Proposed construction of commercial-cum-residential complex in Chalta no. 27 of P.T. sheet no. 245 and Chalta no. 100 of P.T. sheet no. 225 of Aquem village near Margao city in Salcete taluka of South Goa district. – reg.,

Sir,

I am directed to refer to your application seeking prior environmental clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) on the basis of the documents enclosed with application viz. Form 1 and Form 1A (conceptual plan) as well as in response to the observations of the Goa State Expert Appraisal Committee (Goa-SEAC) in its Sixth Meeting held on 7<sup>th</sup> December 2011 and Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its Third Meeting held on 5<sup>th</sup> April 2012.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for the proposed construction of residential-cum-commercial complex in Chalta no. 27 of P.T. sheet no. 245 and Chalta no. 100 of P.T. sheet no. 225 of Aquem village near Margao city in Salcete taluka of South Goa district. Project details and salient features of the proposed developmental activity is as under –

a. Total plot area	- 14,484.00 sq. mt. (3 Acres, 22.8 Guntas)	
b. Total Built-up area – 49,087.80 sq.mt.		
c. Total ground coverage -	allowed	- 4,819.20 sq. mt. (40%)
	proposed	– 4,557.98 sq. mt. (38%)
d. Total FAR –	allowed	– 28,968.00 sq. mts. (200%)
	proposed	– 28,362.49 sq. mt. (196.2%)
e. Total estimated cost – 35 crores		

f. Green belt / landscape area -3,948 sq. mts. (32.76 %)

g. Total dwelling population -1512 + 82 nos. as floating population

h. Quantity of substratum / earth material proposed to be excavated is about 12,536 m<sup>3</sup>. Out of this, about 2,758 m<sup>3</sup> will be used backfilling on the back side of the retaining walls, under-ground sumps. While, 2,717 m<sup>3</sup> of top soil is to be reused for landscaping. 7,061 m<sup>3</sup> is to be utilized for filling up of low-lying area. Further, 49.14 m<sup>3</sup> is construction debris.

j. Geo-technical soil investigations have been carried out.

k. Parking facility provided for 439 ECS.

l. Water requirement

a. Construction phase – 45 KLD to be sourced through PWD tankers

b. Operation phase – 218.22 KLD to be sourced from PWD.

m. Wastewater treatment – Total sewage / wastewater generated is expected to be 157.12 KLD (total – 196.4 KLD & diversity factor of 80%). About 8 kgs. of sludge per day will be generated and will be used as manure for landscaping. 160 KLD capacity STP is proposed. Recycled water is intended to be used for landscaping (15 KLD), flushing (70.09 KLD), car washing & road cleaning (40 KLD) and excess water (24.17 KLD) to be discharged to existing sewer line.

n. Power requirement -

(a) Construction phase – 30 KW & 1,200 KVA to be sourced, temporarily, from Goa Electricity Department (GED) by installing 02 nos. of 750 KVA transformers.

(b) Operation phase – 1200 KVA to be sourced through GED. In addition, Backup power is proposed to be sourced from one D. G. sets of 125 KVA.

o. Solid waste generated:

(a) During construction -20.4 kgs. per day and proposed to be disposed to Municipal Authority.

(b) During operation phase total waste -700.9 kgs. per day which is proposed to be segregated into organic (420.54 kgs.) and inorganic waste (280.36 kgs.). Organic waste to be treated by vermicomposting and inorganic waste to be disposed off through authorized recycler.

p. Environment Management Plan (EMP) has been prepared.

**3.** In view of the above and based on the recommendations of the Goa-SEAC; Goa-SEIAA has decided to accord prior Environmental Clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

a. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.

b. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.

c. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirement.

d. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or by collecting water in large polythene tanks thereby saving on utilization of tap water. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits, which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures / STP installation, etc.

e. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.

f. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.

g. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. Varieties of *acacia* should not be used either as avenue plantations or as live-fencing rather indigenous species should be planted.

h. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.

i. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.

**4.** In addition, certain **"Specific Conditions"** to be complied with by the project proponent are as under:-

a. As the area is low-lying, the PP has been advised to sustainably adopt appropriate Rainwater Water Harvesting initiatives subject to its site-specific feasibility. Efforts should be made towards optimally recharge the groundwater.

b. The PP intends to utilize the existing municipal sewer line. In addition, it should sustainably utilize the STP-treated water instead of releasing it through public sewer.

Alternatively, the treated water may be supplied to nearby user community / municipality for gardening, landscaping, and small-scale construction purposes.

5. Further, the project proponent has been advised as regard to the following:

a. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA.

b. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.

c. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.

d. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.

e. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.

f. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.

g. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.

h. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi / Konkani language within seven days of the receipt of this letter, informing that the project has been accorded prior environmental clearance (EC) and the copies of the clearance letter are available on the DST&E website.

i. The environmental clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.

j. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.

k. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.

1. Any appeal against this prior environmental clearance shall lie with the National Environmental Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of the National Environmental Appellate Act, 1997 (Central Act 22 of 1997); or before the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (Central Act 19 of 2010).

**6.** This issues with the approval of the Government vide U. O. No.2243-F dated 23<sup>rd</sup> April 2012.

Yours faithfully, Sd. -(Michael M. D'Souza) Director/ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

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## No. 3/181/2010/STE-DIR/208 Goa State Environment Impact Assessment Authority (Goa-SEIAA), O/o Department of Science, Technology & Environment (DST&E), (Government of Goa) Opposite Saligao Seminary, Saligao, Bardez, Goa – 403 511

Date: 19th May 2011

*To,* **M/s Buildmore Infrastructure India Pvt. Ltd.,** A/6, Skylark Apartments, Menezes Braganza Road, Panaji, Goa – 403 001

#### Sub.: Proposed construction of Residential-cum-Commercial complex at Khorlim near Mapusa in Bardez taluka of North Goa district – reg.,

Sir,

I am directed to refer to your application seeking prior environmental clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) on the basis of the documents enclosed with application viz. Form 1, Form 1A and Conceptual Plan as well as observations made by the Goa State Expert Appraisal Committee (Goa-SEAC) in its first meeting held on 5<sup>th</sup> January 2011 and Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its first meeting held on 24<sup>th</sup> February 2011.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed construction of residential-cum-commercial complex in Survey Nos. 5/1 and 5/2 of P. T. Sheet no. 144 of Khorlim area near Mapusa in Bardez taluka. Project details and salient features of the proposed developmental activity is as under –

- a. Total plot area 9,416 sq. mt.
- b. Total built-up area 27,267.49 sq. mt.
- c. Proposed open space 1521 sq. mt. (more than 15%)
- d. Proposed coverage 3185 sq. mt. (less than 40%)
- e. FAR consumed 18,826 sq. mt.

f. Expected total occupancy - 1509 (combined)

- g. Geotechnical soil investigation as carried out through 03 boreholes (max. depth 12 mt.). Groundwater is encountered at about 2.5 mt. below ground level.
- h. Amount of earth excavation about 16,000  $\text{m}^3$  of earth would be removed / excavated.
- i. Spread foundation is proposed at an average depth of 1.5 mt. -2.5 mt. with a net allowable bearing capacity of 17 to 35T/sq.mt. (with max. settlement between 30 mm -70 mm.). Alternatively, Raft foundation is proposed at 1.5 mt. depth with net allowable  $\$  bearing capacity of 12T/sq. mt.
- j. Heating Ventilation Air Conditioning (HVAC) system is proposed.
- k. Water requirement During Construction phase 9 cmd (2 for domestic use and 7 for construction purpose)
  - During operational phase 147 cmd (79.6 through PWD supply, 67.4 through recycled water)
- Total waste-water generated 122 cmd. from which 117 cmd is expected to be generated as treated water. STP of treating capacity of 130 cmd based on Moving Bed Bio-Reactor (MBBR) technology is proposed – Treated water (about 67.4 cmd) to be utilized for landscaping and flushing and remaining (49.8 cmd) to be discharged into municipal sewer. STP would generate about 5 kg./day of sludge.

m. Power requirement (to be sourced from Goa Electricity Dept.)

- Construction phase – 200 KVA

- Operation phase – 5 KVA

Back-up power through DG sets of 250 KVA capacity

n. Solid waste generated - 1 - 3 MT./day (Construction)

 491 kg/day (on Operation)
 Organic Waste Convertor (OWC) is proposed to treat and dispose-off biodegradable waste.

o. Environment Management Plan (EMP) has been proposed.

**3.** Further and based on the recommendations of the Goa-SEAC; Goa-SEIAA has decided to accord prior environmental clearance to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

s. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to

be excavated along with the plan indicating the location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.

- t. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- u. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirement.
- v. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or by collecting water in large polythene tanks thereby saving on utilization of tap water. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures / STP installation, etc.
- w. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- x. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- y. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- z. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.
- aa. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.

5. In addition, certain "Specific Conditions" to be complied with by the project proponent are as under:-

- a. PP should opt for additional provision towards storage of optimum quantity of rainwater to be utilized during fair-weather season, considering the post-project usage of water.
- b. The bore well drilled to carry out geotechnical soil investigation be recharged suitably and be utilized in case of need-based urgency.
- 6. Further, the project proponent has been advised as regard to the following :
  - a. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA, before start of any construction work at site.
  - b. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - c. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.
  - d. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.
  - e. Residential-cum-commercial complex, if independent units, should have adequate distance between them to allow movement of fresh air and passage of light to the residential premises.
  - f. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.
  - g. Necessary permission/consent/approval, as the case may be, shall be obtained from the State Fire Department for providing safety measures before allotment of premises for residential purpose in the complex.

- h. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- i. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.
- j. These stipulations would be enforced among others under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability (Insurance) Act, 1991.
- k. The PP shall enter into Memorandum of Understanding (MoU) with all buyers of the property, if any, to ensure operation and maintenance of the STP and other assets.
- 1. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi / Konkani language within seven days of the receipt of this letter, informing that the project has been accorded prior environmental clearance (EC) and the copies of the clearance letter are available on the DST&E website.
- m. The environmental clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.
- n. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- o. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.
- p. Any appeal against this prior environmental clearance shall lie with the National Environmental Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of the National Environmental Appellate Act, 1997 (Central Act 22 of 1997); or before the National Green Tribunal, if preferred, within 30 days as

prescribed under Section 16 of the National Green Tribunal Act, 2010 (Central Act 19 of 2010)

Yours faithfully, Sd. /-(Michael M. D'Souza) Director/Ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

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#### No. 3/181/2010/STE-DIR/206 Goa State Environment Impact Assessment Authority (Goa-SEIAA), O/o Department of Science, Technology & Environment (DST&E), (Government of Goa) Opposite Saligao Seminary, Saligao, Bardez, Goa – 403 511

Date: 19th May 2011

*To,* M/s ALCON Constructions (Goa) Pvt. Ltd., Sukerkar Mansion, 1<sup>st</sup> Floor, M. G. Road, Panaji, Goa – 403 001

# Sub.: Proposed construction of 250-bedded hospital-cum-42-rooms hotel (G + 05 floors & Basement) at Taleigao of Tiswadi taluka North Goa district – reg.,

Sir,

I am directed to refer to your application seeking prior environmental clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a) on the basis of the documents enclosed with application viz. Form 1 and Form 1A (without conceptual plan) as well as in response to the observations made by the Goa State Expert Appraisal Committee (Goa-SEAC) in its first meeting held on 5<sup>th</sup> January 2011 and Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its first meeting held on 24<sup>th</sup> February 2011.

2. It is noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed construction of Hospital-cum-Hotel in Survey Nos. 112/1, 112/1(part) in Taleigao village of Tiswadi taluka by M/s. ALCON Constructions (Goa) Pvt. Ltd., Project details and salient features of the proposed developmental activity is as under –

- a. Total plot area 11,988.67 sq. mt. (effective 10,245.53 sq. mt.)
- b. Total built-up area 27,958.90 sq. mt. (upto 5<sup>th</sup> floor)
- c. Proposed open space 1,542.38 sq. mt. (15.05%)
- d. Proposed ground coverage 3,618 sq. mt. (35.32%)
- e. Proposed FAR 21,837.64 sq. mt.

f. Excavation proposed - about  $30,393 \text{ m}^3$  of earth would be removed / excavated.

- g. Raft foundation is proposed with safe bearing capacity of 10 T/sq.mt.
- h. Heating Ventilation Air Conditioning (HVAC) system is proposed.
- i. Internal road with 10 mt. width and parking space proposed for 420 nos. of vehicles. Well-engineered storm-water drainage system is proposed. 60 trees are proposed to be Planted.
- j. Intermediate STP with Moving Bed Bio-Reactor (MBBR) technology is proposed part treated sewage to transfer to authorized STP to St.inez total treated sewage is 235 cmd, 209 cmd to be reuded for gardening, flushing, AC-cooling. 26 cmd to disposed into sewers.
- k. Water requirement 9 cmd (Construction) 452 cmd (operation)
- 1. Total waste-water generated 1.6 (Construction) 247 cmd (Operation)

m. Power requirement - 25 KW (Construction)
- 780 KW (Operation)
Back-up power through diesel generator of 750 KVA.

n. Solid waste generated – 1 – 3 MT/d (Construction) Operation phase - 63 kg/d – Biomedical and 570 kg.d – domestic waste. Organic Waste Convertor (OWC) is proposed for biodegradable waste.

o. Environment Management Plan (EMP) has been proposed.

**3.** Further and based on the recommendations of the Goa-SEAC; Goa-SEIAA has decided to accord prior environmental clearance to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

- bb. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.
- cc. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- dd. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirement.

- ee. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or by collecting water in large polythene tanks thereby saving on utilization of tap water. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits which would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures / STP installation, etc.
- ff. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- gg. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- hh. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. No any varieties of *acacia* be used either as avenue plantations or as live-fencing.
- ii. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.
- jj. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.

7. In addition, certain **"Specific Conditions"** to be complied with by the project proponent are as under:-

- a. The proposed plot area, being an abandoned waste dumping site, 5 to 6 m of top material is organic-rich fertile soil and should be utilized for landscaping development in non-construction areas.
- b. The project proponent (PP) must ensure that the effluents / waste water in the adjoining St. Inez nallah should not infiltrate within the project site and contaminate the groundwater quality as *E. Coli* concentration and Fe content is reported to be higher in the bore-well water. Accordingly, PP should indicate the modus operandi / technological intervention to be adopted to tackle high bacteriological concentration in water, as it is likely to contaminate operation theatre (OT) and other sensitive zones.

- c. PP, on priority, should beautify the St.Inez nallah and its surrounding as well as sufficiently widen the approach road to the site.
- d. The proposed site, being very low-lying area, bears a sandy aquifer regime and as such, it is advisable to built individual sump rather than soak pits to treat waste-water effectively.
- 8. Further, the project proponent has been advised as regard to the following :
  - a. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA, before start of any construction work at site.
  - b. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - c. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.
  - d. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized for the same.
  - e. Project proponent shall make suitable provisions for waste water treatment and storm water disposal independently.
  - f. The diesel generator sets to be used during construction / after commissioning should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
  - g. The installation of the Sewage Treatment Plant (STP) should be certified by the Goa State Pollution Control Board (GSPCB) and a report in this regard should be submitted to the Authority before the project is commissioned for operation.
  - h. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi / Konkani language within seven days of the receipt of this letter, informing that the project has been accorded prior environmental clearance (EC) and the copies of the clearance letter are available on the DST&E website.
  - i. The environmental clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble

Court will be binding on the project proponent. Hence, this EC does not give immunity to the project proponent in the case filed against it.

- j. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- k. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.
- 1. Any appeal against this prior environmental clearance shall lie with the National Environmental Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of the National Environmental Appellate Act, 1997 (Central Act 22 of 1997); or before the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (Central Act 19 of 2010)

Yours faithfully, Sd./-(Michael M. D'Souza) Director/Ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA

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## 2011 No. 3/181/2010/STE-DIR/ Goa State Environment Impact Assessment Authority (Goa-SEIAA), O/o Department of Science, Technology & Environment (DST&E), (Government of Goa) Opposite Saligao Seminary, Saligao, Bardez, Goa – 403 511

Date: 25<sup>th</sup> March, 2011

*To,* **M/s Goa Cricket Association (GCA)**, Rizvi Sadan, 2<sup>nd</sup> Floor, Near Municipal Market, Panaji, Goa – 403 001

# Sub.: Proposed construction of international cricket stadium in 32 acres of land in Acoi village near Thivim in Bardez taluka of North Goa district – reg.,

Sir / Madam,

I am directed to refer to your application seeking prior environmental clearance (EC) for the above project under the EIA Notification, 2006. Accordingly, the above proposed has been screened and appraised under Category 8 (a), on the basis of the documents enclosed with application viz. Form 1, Form 1A, Conceptual plan as well as additional clarifications furnished in response to the observations made by the Goa State Expert Appraisal Committee (Goa-SEAC) in its first meeting held on 5<sup>th</sup> January 2011 and Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its first meeting held on 24<sup>th</sup> February 2011.

**2.** It is noted that the proposal is for grant of prior Environmental Clearance (EC) for proposed construction of international cricket stadium at Thivim in Bardez taluka by M/s Goa Cricket Association (GCA). Project details and salient features of the proposed developmental activity is as under –

- (i) Total plot area -1,30,328 sq. mt. (32 acres)
- (ii) Total built-up area 45,087.59 sq. mt. (35%)
- (iii) Proposed ground coverage 32,183 sq. mt. (22%)
- (iv) Total parking area -24,911 sq. mts.
- (v) Total green area 1,00,352.56 sq. mt.(77%)
- (vi) Estimated cost 160 crores

- (vii) Seating capacity 46, 575 seats
- (viii) Total parking (open and enclosed) 668 cars, 198 two-wheelers
- (ix) Water requirement 1221 KLD during Games

493 KLD – during normal days

- (x) Total waste-water generated 1050 KLD to be treated using 1260 KLD Sewage Treatment Plant (STP) on SAFF (Submerged Aerated Fixed Film) technology which will generate 840 KLD of treated water to be used for flushing and landscape.
- (xi) Rainwater Harvesting (RWH) initiatives (1) 32 rainwater harvesting pits are proposed for artificial rainwater recharge. (2) Desilting tanks and Recharge wells are proposed
- (xii) Power requirement 3223 KVA to be sourced through Electricity Department, Government of Goa. During emergency, proposed to be backed up with 3 DG sets of 1250 KVA each.
- (xiii) Solid waste generated 6835 kg/day (during games) and 963 kg/day (during normal days)

**3.** Further and based on the recommendations of the Goa-SEAC; Goa-SEIAA has decided to accord prior environmental clearance to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following "General Conditions":-

- kk. Nutrient-rich top soil excavated during the construction phase be separately dumped/stored within the project area and be utilized during landscape development instead of using the same as filling material/reclamation. Accordingly, Project Proponent (PP) should estimate approximate tonnage / volume of top soil required to be excavated along with the plan indicating the location where such topsoil is proposed to be stockpiled as well as indicate/furnish proposed plan for its utilization towards landscaping.
- 11. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- mm. The Project Proponent (PP) should necessarily explore the possibility of energy conservation by tapping solar-based or hybrid energy sources towards power requirement.
- nn. PP should adopt roof-top rainwater harvesting / conservation measures in the form of storing the harvested water so as to optimally utilize the water availability by constructing sumps for collection of rainwater or by collecting water in large polythene tanks thereby saving on utilization of tap water. Accordingly, PP should furnish approximate quantity of the water proposed to be stored / conserved which should be proportionate with the available rainfall within the developmental area. This should be in addition to structures, proposed if any, namely recharge-pits which

would recharge the groundwater aquifers. Thus, PP should submit a plan demarcating the areas for water storage / bore well location & groundwater recharge structures / STP installation, etc.

- oo. As a Corporate Social Responsibility (CSR), the PP should establish / assist in establishing a non-project based infrastructure facility for nearby society / community / local authority and set-up a precedent for other competitors so as to achieve bottom-top approach.
- pp. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
- qq. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. No any varieties of acacia be used either as avenue plantations or as live-fencing.
- rr. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/zoning.
- ss. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the O/o the Goa-SEAC and Goa-SEIAA for the period upto project completion so as to enable project monitoring during the construction phase.

**9.** In addition, certain **"Specific Conditions"** to be complied with by the project proponent are as under:-

- b. Compliance to the High Court directives in the matter related to the Writ Petition No. 321/2010 and PIL W. P. No. 14/2010 filed in the Hon'ble High Court of Goa at Bombay by M/s Goa Foundation as well as other Writ Petitions filed, if any.
- c. Compliance to the approvals/clearances from Statutory Authorities concerned in the Government of Goa, Ministry of Environment & Forests (MoEF) or Government of India.
- d. Submission of the Geotechnical soil analysis/report to ascertain the soil characteristics as well as groundwater status and its recharge potential.
- e. Provision for an alternate exit-road / secondary road along the north-east periphery of the plot boundary to minimize traffic congestion / vehicular movement.
- f. Submission of location-specific details of the proposed bore well as well as 32 numbers of rainwater harvesting pits, superimposed on the contour map of the proposed plot area on a decipherable scale (1:500).

- g. Provision for exclusive fire-escape routes / staircase to avoid stampede during unforeseen eventualities.
- **10.** Further, the project proponent has been advised as regard to the following :
  - a. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the O/o the Goa-SEAC and Goa-SEIAA, before start of any construction work at site.
  - b. Permission to draw groundwater, if any, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction/ operation of the project.
  - c. Project proponent shall not make any change in the Layout Plan / Master Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the competent authority, as applicable.
  - d. The project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi / Konkani language within seven days of the receipt of this letter, informing that the project has been accorded prior environmental clearance (EC) and the copies of the clearance letter are available on the DST&E website.
  - e. The environmental clearance is being issued without prejudice to the court case pending in the Court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble Court will be binding on the project proponent. Hence this EC does not give immunity to the project proponent in the case filed against it.
  - f. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
  - g. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of its issue.
  - h. Any appeal against this prior environmental clearance shall lie with the National Environmental Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of the National Environmental Appellate Act, 1997 (Central Act 22 of 1997); or before the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (Central Act 19 of 2010)

Yours faithfully, Sd/-(Michael M. D'Souza) Director/Ex-officio Jt. Secy. (STE) & Member Secretary, Goa-SEIAA