#### STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

SEAC-2014/CR 571C-1 Environment department, Room No. 217, 2<sup>nd</sup> floor, Mantralaya Annexe, Mumbai- 400 032. Date: 13 54306 2017.

To,
Executive Engineer- City Divison.
Griha Nirman Bhavan,
Kalanagar, Bandra (E),
M.H. & A.D Board, Mumbai- 400 051.

Subject: Environmental Clearance for Proposed "Redevelopment of Bombay Development Directorate (BDD) Chawls" at Survey No. 713, 1/713, 2/713, 714 Naigaon, Dadar – Mumbai, Maharashtra by M/s MHADA M.H. & A.D. Board. Mumbai.

Sir,

This has reference to your communication on the above mentioned subject. The proposal was considered as per the EIA Notification - 2006, by the State Level Expert Appraisal Committee-II, Maharashtra in its 51<sup>st</sup> meeting and recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its 107<sup>th</sup> meeting.

2. It is noted that the proposal is considered by SEAC-II under screening category 8(a) B2 as per EIA Notification 2006.

## Brief Information of the project submitted by you is as-

Name of Project	Redevelopment of Bombay Development Directorate (BDD) Chawls		
	at Naigaon, Dadar-Mumbai, Maharashtra		
Name, Contact Number	•Name: MUMBAI HOUSING AND AREA DEVELOPMENT		
&Address of	BOARD (A regional unit of MHADA)		
Proponents	•Address: Griha Nirman Bhavan, Kalanagar, Bandra (East), Mumbai-		
	400 051		
	•Telephone number: 022-66405000		
	•Email: mhadabddmoef@gmail.com		
Name of Consultants	M/s. Ultra-Tech, Unit No. 206, 224, 225, Jai Commercial Complex,		
	Eastern Express Highway, Opp. Cadbury Factory, Khopat, Thane (W)		
	<del>- 400601</del>		
Type of project:	Redevelopment project, Category 8(B1)		
Location of the Project	Survey No. 713, 1/713, 3/713, 714, Naigaon, Dadar-Mumbai,		
	Maharashtra		
	Municipal Corporation of Greater Mumbai (M.C.G.M.)		
/ Municipal / other area			
Applicability of DCR	DCR 33(9)(B)		
Note on the Initiated	Total constructed work (FSI+ Non FSI): Nil		
Work (If applicable)	Date and area details in the necessary approvals issued by the		

	competent authority (attach scan copies):				
LOI / NOC from	Date and	construction area details mentioned	in the owner 11		
MHADA / Other	Date and construction area details mentioned in the approved letter: State Cabinet has approved the redevelopment proposal on 17th				
approvals (If	March 2016. The Master plan for redevelopment proposal on 17th				
applicable)	March 2016. The Master plan for redevelopment project is				
4.4 ···································	principally approved by Empowered Committee of GOM, in meeting held on 16th September, 2016				
Total Plot Area	neid on 10	our September, 2016			
Deductions	64,559.03				
	13,722.21				
Net Plot area	50,836.82				
Permissible FSI	399700.81	Sq.mt.			
(including TDR etc.)					
Proposed Built-up Area	•FSI area (	(sq. m.): 399700.81Sq.mt.			
(FSI & Non-FSI)	•Non FSI a	area (sq. m.): 365950.20Sq.mt.			
	•Total BU	A area (sq. m.):765651.01Sq.mt.			
Ground-coverage	35,132.76	Sq.mt. (69%)			
Percentage (%)	3,232,70	~4 (07/0)			
Estimated cost of the	Rs. 4000 C	Toras			
project	123. TUUU C	TOTES			
No. of building & its	D :11:				
onfiguration(s)	Building	Number of building &	Flats /Shops/		
omiguration(s)	type	Nomenclature	Linite		
	Redevelop	ment: Total 2 buildings with 20 Wings			
	Building N	o. 1 with Wing 1 to 8			
	Wing 1	3Basements + Ground + Stilt + 23			
	<u> </u>	Floors	j		
	Wing 2	3Basements + Ground + Stilt + 23	7		
		Floors			
	Wing 3	3Basements + Ground + Stilt + 23 Floors			
	Wing 4	3Basements + Ground + Stilt + 23 Floors	Total Residential		
	Wing 5	3Basements + Ground + Stilt + 23 Floors	Units: 3289 Nos.		
	Wing 6	3Basements + Ground + Stilt + 23 Floors	Shops: 55 Nos.		
	Wing 7	3Basements + Ground + Stilt + 23	-		
1	<b>o</b> '	Floors	Stalls: 93 Nos.		
	Wing 8	3Basements + Ground + Stilt + 19	-		
	-0 -	Floors	Society Com		
	Building No	o. 2 With Wing 9 to 20	Society Office: 4		
	Wing 9	3Basements + Ground + Stilt + 23 Floors	Nos.		
	Wing 10	3Basements + Ground + Stilt + 23	1		
		Floors			
	Wing 11	3Basements + Ground + Stilt + 23 Floors			
	Wing 12	3Basements + Ground + Stilt + 23 Floors			
	Wing 13	3Basements + Ground + Stilt + 19 Floors			
F	Wing 14	3Basements + Ground + Stilt + 23			
<b> </b> -	Wine 15	Floors			
ll l	Wing 15	3Basements + Ground + Stilt + 19			
		Floors	1		

**L**7

	XX7' 7.5	lon		
	Wing 16	3Basements + Ground + Stilt + 19 Floors		
	Wing 17	3Basements + Ground + Stilt + 23 Floors	1	
	Wing 19		-	
	Wing 18	3Basements + Ground + Stilt + 19 Floors		
	Wing 19	3Basements + Ground + Stilt + 23	1	
		Floors		
	Wing 20	3Basements + Ground + Stilt + 23 Floors		
	Decemination	2 Buildings		
	Building	2 buildings		
	No. 1		Classrooms: 20	
1	Primary &	1 Building:	nos.	
	Secondary	Ground + 5 Floors		
	School		]	
	Building			
	No. 2	1 Building:		
	Welfare	Ground + 2 Floors	ļ	
	centre	2 1 10013		
	Sale: 2 Build			
	Building No.	1 with wing A, B, C and D		
	Wing A	3 Basements + 6 Podium + Stilt + 67 Floors		
	W. D	3 Basements + 6 Podium + Stilt +		
	Wing B	67 Floors	Total Flats: 1892	
	Wing C	3 Basements + 6 Podium + Stilt + 67 Floors	Nos.	
	Wing D	3 Basements + 6 Podium + Stilt + 67 Floors		
	Building No. 2 Commerci	3Basements + Ground + 20 Floors	Offices	
Number of tenants and	Building	Number of building &	Flats /Shops/	
shops	type	Nomenclature	Units	
Shops		ent: Total 2 buildings with 20 Wings	The state of the s	
	Building No.	1 with Wing 1 to 8		
	Wing 1	3Basements + Ground + Stilt + 23	T-4-1	
		Floors	Total	
	Wing 2	3Basements + Ground + Stilt + 23	Residential	
		Floors	Units:	
	Wing 3	3Basements + Ground + Stilt + 23	3289 Nos.	
	Wing J	Floors	Change	
	Wing 4	3Basements + Ground + Stilt + 23	Shops:	
	wing 7	Floors	55 Nos.	
	Wing 5	3Basements + Ground + Stilt + 23	Stalls:	
	,,,,,,,,,,	Floors	93 Nos.	
	Wing 6	3Basements + Ground + Stilt + 23 Floors	Society	
	Wing 7	3Basements + Ground + Stilt + 23	Office: 4 Nos.	
		Floors		
	Wing 8	3Basements + Ground + Stilt + 19		
		Floors		

	Building No. 2 With Wing 9 to 20			
	Wing 9	3Basements + Ground + Stilt + 23		
		Floors		
	Wing 10	3Basements + Ground + Stilt + 23		
	Wing 10	Floors		
	Wing 11	3Basements + Ground + Stilt + 23	İ	
	Willgii	Floors		
	Wing 12	3Basements + Ground + Stilt + 23		
	Wing 12	Floors		
	W: 12			
	Wing 13	3Basements + Ground + Stilt + 19 Floors		
	Wine 14			
	Wing 14	3Basements + Ground + Stilt + 23 Floors		
	Wing 16			
	Wing 15	3Basements + Ground + Stilt + 19 Floors		
	W: 16			
	Wing 16	3Basements + Ground + Stilt + 19 Floors		
	Win = 17			
	Wing 17	3Basements + Ground + Stilt + 23		
	W. 10	Floors		
	Wing 18	3Basements + Ground + Stilt + 19		
	W. 10	Floors		
	Wing 19	3Basements + Ground + Stilt + 23		
	1777	Floors		
	Wing 20	3Basements + Ground + Stilt + 23		
		Floors		
	Reservation: 2	2 Buildings		
	Building			
	No. 1	1 Building:	Classrooms:	
	Primary &	Ground + 5 Floors	20 nos.	
	Secondary			
	School			
	Building			
	No. 2	1 Building:		
	Welfare			
	13	Ground + 2 Floors		
,	centre			
	centre Sale: 2 Buildi	ngs		
	centre Sale: 2 Buildi	ngs 1 with wing A, B, C and D		
	centre Sale: 2 Buildi	ngs		
	centre Sale: 2 Buildi Building No.	ngs 1 with wing A, B, C and D 3 Basements + 6 Podium + Stilt +	Total Flats:	
	centre Sale: 2 Buildi Building No. Wing A	ngs  1 with wing A, B, C and D  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt +	Total Flats: 1892 Nos.	
	centre Sale: 2 Buildi Building No. Wing A Wing B	ngs  1 with wing A, B, C and D  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt +		
	centre Sale: 2 Buildi Building No. Wing A Wing B Wing C Wing D	ngs 1 with wing A, B, C and D 3 Basements + 6 Podium + Stilt + 67 Floors 3 Basements + 6 Podium + Stilt + 67 Floors 3 Basements + 6 Podium + Stilt + 67 Floors		
	centre Sale: 2 Buildi Building No. Wing A Wing B Wing C Wing D Building	ngs  1 with wing A, B, C and D  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors	1892 Nos.	
	centre Sale: 2 Buildi Building No. Wing A Wing B Wing C Wing D Building No.2Comm	ngs  1 with wing A, B, C and D  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt +		
Number of overseted	centre Sale: 2 Buildi Building No. Wing A Wing B Wing C Wing D Building No.2Comm ercial	ngs  1 with wing A, B, C and D  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors	1892 Nos.	
Number of expected	centre Sale: 2 Buildi Building No. Wing A Wing B Wing C Wing D Building No.2Comm	ngs  1 with wing A, B, C and D  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors	1892 Nos.	
residents / users	centre Sale: 2 Buildi Building No. Wing A Wing B Wing C Wing D Building No.2Comm ercial 29567 Nos.	ngs  1 with wing A, B, C and D  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt +	1892 Nos.	
	centre Sale: 2 Buildi Building No. Wing A Wing B Wing C Wing D Building No.2Comm ercial	ngs  1 with wing A, B, C and D  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt + 67 Floors  3 Basements + 6 Podium + Stilt +	1892 Nos.	

Height of the building(s)	Building type	Number of building & Nomenclature	Height of		
6(-)	Redevelopmer	nt: Total 2 buildings with 20 Wings	building		
	Building No. 1	with Wing 1 to 8			
	Wing 1	3Basements + Ground + Stilt + 23 Floors	69.75 m		
	Wing 2	3Basements + Ground + Stilt + 23 Floors	69.75 m		
	Wing 3	3Basements + Ground + Stilt + 23 Floors	69.75 m		
	Wing 4	3Basements + Ground + Stilt + 23 Floors	69.75 m		
	Wing 5	3Basements + Ground + Stilt + 23 Floors	69.75 m		
	Wing 6	3Basements + Ground + Stilt + 23 Floors	69.75 m		
	Wing 7	3Basements + Ground + Stilt + 23 Floors	69.75 m		
	Wing 8	3Basements + Ground + Stilt + 19 Floors	58.75 m		
		With Wing 9 to 20	1 00.70 11		
	Wing 9	3Basements + Ground + Stilt + 23 Floors	69.75 m		
	Wing 10	3Basements + Ground + Stilt + 23 Floors	69.75 m		
	Wing 11	3Basements + Ground + Stilt + 23 Floors	69.75 m		
	Wing 12	3Basements + Ground + Stilt + 23 Floors	69.75 m		
	Wing 13	3Basements + Ground + Stilt + 19 Floors	58.75 m		
	Wing 14	3Basements + Ground + Stilt + 23 Floors	69.75 m		
	Wing 15	3Basements + Ground + Stilt + 19 Floors	58.75 m		
	Wing 16	3Basements + Ground + Stilt + 19 Floors	58.75 m		
	Wing 17	3Basements + Ground + Stilt + 23 Floors	69.75 m		
	Wing 18	3Basements + Ground + Stilt + 19 Floors	58.75 m		
	Wing 19	3Basements + Ground + Stilt + 23 Floors	69.75 m		
	Wing 20	3Basements + Ground + Stilt + 23 Floors	69.75 m		
	Reservation: 2 Building No.	Buildings	21.75 m		
	1 Primary &	1 Building: Ground + 5 Floors			
	Secondary School	Ground + 5 Floors			
	Building No.  2 Welfare	1 Building: Ground + 2 Floors	10.95m		
	centre	•			
	Sale: 2 Building				
	Building No. 1	with wing A, B, C and D			
	Wing A	3 Basements + 6 Podium + Stilt + 67 Floors	240 m		
	Wing B	3 Basements + 6 Podium + Stilt + 67 Floors	240 m		
	Wing C	3 Basements + 6 Podium + Stilt + 67 Floors	240 m		
	Wing D	3 Basements + 6 Podium + Stilt + 67 Floors	240 m		
	Building No. 2 Commercial	3Basements + Ground + 20 Floors	69.75 m		
Right of way	S S Wagh Marg	(13.0 m wide)			
<i>5</i> j	G Kani Marg (1				
urning radius	7.5mt.	J.J III WILLE)			
Existing structure(s)		2 nos of Chavels et Naiss : Ti	600		
and su uciuic(s)	years old and in	There are total 42 nos. of Chawls at Naigaon site. These are of 90 years old and in dilapidated conditions. These Chawls are of Ground			
***	+ 3 floors with 2	20 flats on each floor.			

Details of the	Demolition of evicting Charletinia 1 1			
demolition with	Demolition of existing Chawls is involved.			
disposal (If applicable)	Demolition debris and Excavation material shall be partly reused &			
disposai (ii applicable)	remaining shall be disposed to the authorized landfill site with prior permission of MCGM.			
Total Water				
Requirement	Dry season:			
Requirement	• Fresh water (CMD):2409 KLD			
	For Domestic: 2401 KLD(From M.C.G.M	)		
	For Swimming pool: 8 KLD (From Tanker	Water of potable quality)		
	• Recycled water (CMD):1261 KLD			
	Flushing = 1255 KLD			
	Gardening =54 KLD			
	Cooling Tower make up = 167 KLD			
	•Swimming pool make up (Cum): As ment	ioned above		
	• Total Water Requirement (CMD):3			
	• Fire fighting (Cum):500 KL (One ti	ime requirement)		
	Wet Season:			
·	• Fresh water (CMD):2332 KLD			
	Domestic: 2324 KLD (From M.C.G.M.)			
	From RWH tanks = 77 KLD)			
	For Swimming pool: 8 KLD (From Tanker	Water of potable quality)		
	• Recycled water (CMD):1355 KLD	manus or position quantity)		
	Flushing = 1255 KLD			
	Cooling Tower make up = 100 KLD			
	•Swimming pool make up (Cum): As mentioned above  Total Water Requirement (CMD):3764 KLD			
	• Fire fighting (CMD):500 KL (One time requirement)			
Rain Water Harvesting	•Level of the Ground water table: 1 m to 4 m (Generally observed in			
(RWH)	the area nearby to Site.)			
	•Size and no. of RWH tank(s) and Quantity:			
	Buildings	RWH Tanks (KL)		
	Redevelopment wing 1 to 8	108		
	Redevelopment wing 9 to 20	151		
	Sale – Residential	110		
	Sale Commercial	25		
	Reservation School and welfare centre	20		
	•Location of the RWH tank(s): Basement &	1 — -		
	Size, no. of recharge pits and Quantity: Nil			
	Budgetary allocation (Capital cost and O&M cost):			
	Capital cost: Rs.59.40 Lacs	10031).		
	O & M cost: Rs.2.40 Lacs/annum			
UGT tanks	Location(s) of the UGT tank(s): 3rd basement level and			
	underground			
Storm water drainage	Natural water drainage pattern			
	The storm water collected through the storm water drains of adequate			
	capacity will be discharged in to the externa	al drain		
	•Quantity of storm water: 1.81 m3/sec			
	•Size of SWD: 3.13 m3/sec			
Sewage and Waste	• Sewage generation (CMD):			
water		ntity of Sewage (KLD)		
	Redevelopment Wing 1 to 8 822	J == = = (ILD)		
	1022			

Redevelopment Wing 9 to 20	1121
Reservation Building (School and Welfare centre)	45
Sale Building – Residential	1107
Sale Building – Commercial	81

• STP technology: MBBR (Moving Bed Bio Reactor)

• Capacity of STP(CMD):

Details	STP
	Capacity (KL)
Redevelopment Wing 1 to 8	900
Redevelopment Wing 9 to 20	1200
Reservation Building (School and Welfare centre)	50
Sale Building – Residential	1200
Sale Building – Commercial	85

• Location of the STP: 1st basement and underground

•DG sets (during emergency):

(Total DG capacity of the project including load of STP)

8 DG set of 500kVA capacity each

•Budgetary allocation (Capital cost and O&M cost)

Capital cost: Rs. 483.00 Lacs

O & M cost: Rs. 96.74 Lacs/annum

## Solid Waste Management

Waste generation in the Pre Construction and Construction phase:

• Waste generation:

Demolition debris and Excavation material shall be partly reused & remaining shall be disposed to the authorized landfill site with prior permission of MCGM.

•Disposal of the construction waste debris:

Construction waste generated during construction activity shall be partly reused and remaining shall be disposed to authorized landfill site

Waste generation in the operation Phase:

Dry waste (Kg/day): 3785

Wet waste (Kg/day): 8404

E - waste (Kg/month):171.25

Hazardous waste (Kg/month):--

Biomedical waste (Kg/month) (If applicable): Not Applicable

STP Sludge (Dry sludge) (Kg/day):178

Mode of Disposal of waste:

· Dry waste:

Non recyclable: To M.C.G.M.

Recyclable: To recyclers

- Wet waste: Composting in organic waste convertor
- E waste: To Authorized recyclers
- Hazardous waste: --
- Biomedical waste (If applicable):Not Applicable
- STP Sludge (Dry sludge): As manure

Area requirement:

Location(s) and total area provided for the storage and treatment of the solid waste: Location: ground, Area: 570 Sq.mt. Budgetary allocation (Capital cost and O&M cost) Capital cost: Rs. 100.00 Lacs (Cost for treatment of biodegradable garbage by organic waste convertor) O & M cost: Rs. 82.00 Lacs/annum (Cost for treatment of biodegradable garbage by organic waste convertor) Green Belt Total RG area: Development RG area other than green belt (Please specify for playground, etc.) -PG area for School -: 437.81 Sq.mt. RG area under green belt (sq. m.): RG on the ground (Sq.mt.): Designated Layout RG-10088.41 sq.mt. Additional open Space-5083.68 sq.mt. RG on the podium (Sq.mt.): Nil Plantation: Number and list of trees species to be planted in the ground RG: 867 nos. Common Name **Botanical Name** Supari Areca chatechu Bakul Mimusops elengi Neem Azadirachta indica Bahava Cassia fistula Casuarina equisetifolia Suru Tamhan Lagestroemia flosregianae Son Champa Magnolia champaca Kamini Murraya paniculata Kadamba Neolamarkia cadamba Chapha Plumeria alba Sita Ashok Saraca asoca Gulmohar Delonix regia Copper Pod Peltophorum pterocarpum Retained trees: 178 Nos. Budgetary allocation (Capital cost and O&M cost) Capital cost: Rs.94.53 Lacs O & M cost: Rs.1.20 Lacs/annum Energy Power supply: •Connected Load: 111 MW •Maximum Demand: 44 MW Source: BEST Energy saving by non-conventional method:

Energy savings measures:

Provision of Solar Panels for external Lighting

Provision of Solar Water Heating

Use of High Efficiency Motors

Provision of LED lights for Common area lighting

Using motors with VDF control

•Detail calculations & % of saving: 18 %

•Compliance of the ECBC guidelines: (Yes / No) (If yes then submit compliance in tabular form): Yes

•Budgetary allocation (Capital cost and O&M cost):

Capital cost: Rs. 1214.71 Lacs (Solar system)

O & M cost: Rs.60.74 Lacs/annum (Solar system)

#### DG Set:

•Number and capacity of the DG sets to be used:

For emergency back up during power failure

8 DG sets of 500 kVA each

•Type of fuel used: Diesel

## Environmental Management Plan Budgetary Allocation

Construction phase (with Break-up):

Capital cost

•O & M cost (Please ensure manpower and other details)

Total cost incurred for EMP

No.	Component	Description	Total Cost (Rs. In Lacs)	
1	Air	Dust suppression		57.60
	Environment	Air &	On site sensors	#10.00
		monitoring	By outside MOEF Approved Laboratory	8.80
		Batching Plant monitoring		1.88
2	Water Environment	Drinking water analysis		7.20
3	Land Environment	Site Sanitation		20.00
4	Health &	Disinfection- Pest Control		9.60
	Hygiene	Health Check up of workers		96.00
5	Cost towards Disaster management			16086.00
	Total Cost			16297.08

# Maintenance Cost for air and Noise quality Sensors: Rs. 50,000/

Operation Phase (with Break-up) -

	apital cost &M cost (l	Please ensu	re manpowe	r and other	details)	
N o.	Component		Description		Capital cost Rs. In Lacs.	Operational and Maintenance cost (Rs. in Lacs/yr)
1	Air and N	oise	Cost for Ga	rdening	94.53	1.20
	Environment		Cost for An quality & N Monitoring	nbient Air	*No set up cost is involved	0.22
			Cost for Co Stack Exhan Monitoring		*No set up cost is involved	0.38
			Cost for Air System		300.00	15.00
<u> </u>	Water	hv74-	Noise barrie		75.00	0.04
2	Water Environm	Waste	Cost for Sev Treatment P	_	393.00	91.60
		treatment	Cost for water and	On site sensors	90.00	5.00
			water Monitoring	By outside MOEF Approved Laboratory	up cost is	0.14
		Water	Cost for RW		<del></del>	2.07
		on	Cost for trea for Rain Wa	tment unit		0.06
		(Rain Water Harvesting System)	Cost for Rai Monitoring		*No set up cost is involved	0.27
	Land Environment (Solid Waste		Cost for Tre biodegradab	le garbage	100.00	80.00
	Management)		Cost for Ma Costing		*No set up cost is involved	2.00
4	Energy Co	nservation	Cost for Sol	ar	1214.71	60.74
ı	Cost toward management	ds disaster nt			1824.84	100.16
	al Cost				4151.48	
*N	o set up co	st is involv	ed as monito			

Private MoEF Approved Laboratory

MUMBAI HOUSING AND AREA DEVELOPMENT BOARD (A -10-

<sup>•</sup> Generation of Corpus fund and Commitment:

	regional unit of MHADA) shall operate and maintain EMF for 5 years after giving possession and shall also generate corpus fund during 5			
	years for O & M.			
	A Corpus fund shall be created by the Planning Authority as directed by the Empowered Committee, which will be utilized for maintenance of the rehabilitation buildings for a period of 10 years.			
	• Responsibility for further O &M:			
	Corpus fund shall be handed over to the society. While handing over			
	Environmental Management Facilities M.O.U. shall be made with			
	society to accept responsibility of further O & M of EMF.			
Traffic Management	Nos. of the junction to the main road & design of confluence::			
·	3 Entry/Exit			
	Parking details:			
	•Number and area of basement:3 Basements			
	•Number and area of podia:6 Podia for parking			
	•Total Parking area: 141715.00 Sq.mt.			
	•Area per car: As per NBC			
	•4-Wheeler: 4727 Nos.			
	2- Wheeler:			
	•Public Transport: Nil			
	Width of all internal roads (m):Minimum 6.0 m			

3. The proposal has been considered by SEIAA in its 107<sup>th</sup> meeting & decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions:

### General Conditions for Pre-construction phase: -

- (i) This environment clearance is issued for the total built up area of **765651.01 Sq.m** as approved by Local Planning Authority.
- This environmental clearance is issued subject to land use verification. Local (ii) authority / planning authority should ensure this with respect to Rules, Regulations, Notifications, Government Resolutions, Circulars, issued Judgments/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 concern SEAC and SEIAA. If any discrepancy found in the plans submitted or details provided in the above para may be reported to environment department. This environmental clearance issued with respect to the environmental consideration and it does not mean that State Level Impact Assessment Authority (SEIAA) approved the proposed land use.
- (iii) E-waste shall be disposed through Authorized vendor as per E-waste (Management and Handling) Rules, 2016.
- (iv) This environmental clearance is issued subject to obtaining NOC from Forestry & Wild life angle including clearance from the standing committee of the National Board for Wild life as if applicable & this environment clearance does not necessarily implies that Forestry & Wild life clearance granted to the project which will be considered separately on merit.
- (v) PP has to abide by the conditions stipulated by SEAC & SEIAA.

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- (vi) 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 & 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.
- (vii) "Consent for Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.
- (viii) All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.

#### **General Conditions for Construction Phase-**

- (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
- (ii) 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 wastewater and solid wastes generated during the construction phase should be ensured.
- (iii) The solid waste generated should be properly collected and segregated. dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- (iv) Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- (v) Arrangement shall be made that waste water and storm water do not get mixed.
- (vi) All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
- (vii) Additional soil for leveling 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.
- (viii) Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/Agriculture Dept.
- (ix) 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.
- (x) Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach into the ground water.
- (xi) Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board.
- (xii) The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.
- (xiii) The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.

- (xiv) 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 standards and should be operated only during non-peak hours.
- (xv) Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads 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 during construction phase, so as to conform to the stipulated standards by CPCB/MPCB.
- (xvi) Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September 1999 and amended as on 27th August, 2003. (The above condition is applicable only if the project site is located within the 100Km of Thermal Power Stations).
- (xvii) Ready mixed concrete must be used in building construction.
- (xviii) The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquake, adequacy of firefighting equipment's etc. as per National Building Code including measures from lighting.
- (xix) Storm water control and its re-use as per CGWB and BIS standards for various applications.
- (xx) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- (xxi) The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.
- (xxii) 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 MPCB and Environment department before the project is commissioned for operation. Discharge of this unused treated affluent, if any should be discharge in the sewer line. Treated effluent emanating from STP shall be recycled/refused to the maximum extent possible. Discharge of this unused treated affluent, if any should be discharge in the sewer line. Treatment of 100% gray water by decentralized treatment should be done. Necessary measures should be made to mitigate the odour problem from STP.
- (xxiii) 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.
- (xxiv) Separation of gray and black water should be done by the use of dual plumbing line for separation of gray and black water.
- (xxv) 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.
- (xxvi) Use of glass may be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality double glass with special reflective coating in windows.
- (xxvii) Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.
- (xxviii)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 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 heaters system. Project proponent should install, after checking feasibility, solar plus hybrid non-conventional energy source as source of energy.

- (xxix) 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 combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with Maharashtra Pollution Control Board.
- (xxx) Noise should be controlled to ensure that it does not exceed the prescribed standards. During nighttime the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- (xxxi) 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.
- (xxxii) Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code, which is proposed to be mandatory for all air-conditioned spaces while it is aspiration for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.
- (xxxiii) The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
- (xxxiv)Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.
- (xxxv) Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.
- (xxxvi)Six monthly monitoring reports should be submitted to the Regional office MoEF, Bhopal with copy to this department and MPCB.

# General Conditions for Post-construction/operation phase-

- (i) Project proponent shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. As agreed during the SEIAA meeting, PP to explore possibility of utilizing excess treated water in the adjacent area for gardening before discharging it into sewer line No physical occupation or allotment will be given unless all above said environmental infrastructure is installed and made functional including water requirement in Para 2. Prior certification from appropriate authority shall be obtained.
- (ii) Wet garbage should be treated by Organic Waste Converter and treated waste (manure) should be utilized in the existing premises for 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 MPCB.
- (iv) A complete set of all the documents submitted to Department should be forwarded to the Local authority and MPCB.
- (v) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.
- (vi) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
- (vii) Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures

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- shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department.
- (viii) The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at <a href="http://ec.maharashtra.gov.in">http://ec.maharashtra.gov.in</a>.
- (ix) Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1<sup>st</sup> June & 1<sup>st</sup> December of each calendar year.
- (x) A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
- (xi) The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored 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 CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM. SO<sub>2</sub>, NOx (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.
- (xii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.
- (xiii) The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board 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 compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.
- 4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any 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 under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.
- 5. In case of submission of false document and non-compliance of stipulated conditions, Authority/ Environment Department will revoke or suspend the Environmental Clearance without any intimation and initiate appropriate legal action under Environmental Protection Act, 1986.
- 6. The Environment department reserves the right to add any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.
- 7. Validity of Environment Clearance: The environmental clearance accorded shall be valid for a period of 7 years as per MoEF&CC Notification dated 29<sup>th</sup> April, 2015.

- 8. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.
- 9. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.
- 10. Any appeal against this environmental clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune), New Administrative Building, 1<sup>st</sup> Floor, D-, Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Member Secretary, SEIAA

#### Copy to:

- Shri. Johny Joseph, Chairman, IAS (Retd.). SEAC-II, office of the Lokayukta and New Up- Lokayukta, New Administrative Building, 1<sup>st</sup> floor, Madam Cama Road, Mumbai.
- 2. Additional Secretary, MOEF, 'MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
- 3. Regional Office (WCZ), Ministry of Environment, Forest and Climate Change, Nagpur
- **4.** IA- Division, Monitoring Cell, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
- 5. Managing Director, MSEDCL, MG Road, Fort, Mumbai
- 6. Collector, Mumbai.
- 7. Commissioner, Municipal Corporation Greater Mumbai (MCGM)
- **8.** Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.

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- 9. Regional Office, MPCB, Mumbai.
- 10. Select file (TC-3)

(EC uploaded on 13.06.2017