

June 2018

Speed post receipts of submission
of six monthly compliance report
to Regional office of MoEFCC
& CPCB.

Indiabulls Infrastate Ltd.

sairakeshpt@gmail.com

भारतीय डाक
India Post

EM121882388IN IVR:6977121882388
SP KALYAN CITY H.O <421301>
Counter No:1,31/05/2018,14:15
To:KANWARJIT SIN,ADDL PRINCIPAL C
PIN:440001, Nagpur GPO
From:M/S DMK IN,GATE 216
Wt:272gms
Amt:70.80(Cash)Tax:10.80
<Track on www.indiapost.gov.in>

sairakeshpt@gmail.com

भारतीय डाक
India Post

EM121882374IN IVR:6977121882374
SP KALYAN CITY H.O <421301>
Counter No:1,31/05/2018,14:15
To:B R NAIDU,CENTRAL POLLUTI
PIN:390023, Subhanpura S.O
From:M/S DMK IN,GATE 216
Wt:292gms
Amt:70.80(Cash)Tax:10.80
<Track on www.indiapost.gov.in>

Indiabulls REAL ESTATE

Date: 1/6/2018

To,
S.R.O. Mumbai-I
Maharashtra Pollution Control Board,
The Regional officer,
201-202, Raikar Chambers, Govandi Station Road,
Near Jain Temple, Govandi,
Mumbai - 400 088

Subject : Submission of June 2018 Post Environmental Monitoring Report for our "Proposed Redevelopment project at plot bearing C.S No.128,129, & 130, Lower Parel Division, G/S ward, Dr. E. Moses Road, Worli, Mumbai by M/s Indiabulls Intrastate Limited (Joint Development with M/s Oricon Properties Pvt Ltd. On 1st October 2016 vide their agreement no. 5092/6/119)- Environmental Clearance regarding

Reference : Environmental Clearance vide letter no. SEAC-2013/ CR.502/ TC-1 dated 1st December, 2014- point no. 3 General conditions for Post-construction/operation phase - condition no. ix, xi and xii

Respected Sir,

With reference to above mentioned subject and as per the condition stated in Environmental Clearance Letter, we would like to submit the **June 2018 monitoring report** after receipt of Environmental Clearance for above mentioned site.

Hereby we are enclosing Data-Sheet along with annexure in format along with above mentioned Enclosures.

Please find this June 2018 Six monthly monitoring report as per the condition mentioned in received Environmental Clearance along with this letter.

Thanking you,
Yours Sincerely,

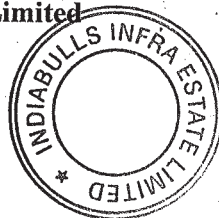
For M/s. Indiabulls Infraestate Limited



AUTHORIZED SIGNATORY

Cc:

1. Ministry of Environment and Forest, Climate Change, Regional office (WCZ), Nagpur
2. Central Pollution Control Board, Vadodara
3. Member Secretary SEIAA, Maharashtra



21/7/18
1/6/18

Indiabulls Infraestate Limited

Corp.off:-Indiabulls Finance Centre, 16th Floor, Tower 1, Elphinstone (W), Mumbai - 400 013.

Regd.office: M - 62 & 63, First Floor, Connaught Place, New Delhi - 110 001.

CIN: U70102DL2007PLC157384

Indiabulls REAL ESTATE

Date: 31/5/2018

To,
State Level Environment Impact Assessment Authority Maharashtra,
Environment Department,
New Administration Building,
15th floor, Mantralaya, Mumbai
State: Maharashtra

Kind Attn : Member Secretary SEIAA

Subject : Submission of June 2018 Post Environmental Monitoring Report for our
"Proposed Redevelopment project at plot bearing C.S No.128,129, & 130,
Lower Parel Division, G/S ward, Dr. E. Moses Road, Worli, Mumbai by M/s
Indiabulls Intrastate Limited (Joint Development with M/s Oricon Properties
Pvt Ltd. On 1st October 2016 vide their agreement no. 5092/6/119)-
Environmental Clearance regarding

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**Hereby we are enclosing Data-Sheet along with annexure in format along with above mentioned
Enclosures.**

Please find this June 2018 six monthly monitoring report as per the condition mentioned in received
Environmental Clearance along with this letter.

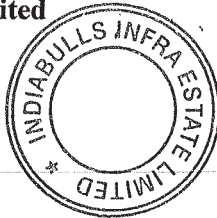
Thanking you,

Yours Sincerely,

For M/s. Indiabulls Infraestate Limited



AUTHORIZED SIGNATORY



Manish
31-5-18
आवक लिपिक
पर्यावरण विभाग
मंत्रालय, मुंबई-३२.

Cc:

1. Ministry of Environment and Forest, Climate Change, Regional office (WCZ), Nagpur
2. Central Pollution Control Board, Vadodara
3. Regional officer, Maharashtra Pollution Control Board, Mumbai, Maharashtra

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CIN: U70102DL2007PLC157384

Point wise compliance status to various stipulations laid down by the Government of India as per the Environmental Clearance issued vide letter no.

SEAC-2013 /CR-502/TC-1 dated 1st December 2014

Sr. No.	Condition	Status
General conditions for Pre construction Phase:		
i.	This environment clearance is issued to subject to condition that (a) Fire staircase to be open up on ground level. (b) Revise lift lobby configuration in rehab component. (c) Designate one lift as fire lift.	Compliance submitted Refer Annexure no. 7 attached herewith Acknowledgement copy of compliance submitted. The project has received CFO NOC which is attached as Annexure no. 16.
ii.	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. 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 environmental consideration and it does not mean that State Level Impact Assessment Authority (SEIAA) approved the proposed land use.	Agreed to comply with.
iii.	This environmental clearance is issued subject to obtaining NOC from Forestry & Wild life angle including clearance from the standing committee of 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	Not Applicable as the construction site is not in forest area.
iv.	PP has to abide by the conditions stipulated by	Agreed to comply with.

Sr. No.	Condition	Status
	SEAC & SEIAA.	
v.	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.	Agreed to comply with.
vi.	“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.	We have received Consent to Establish from Maharashtra Pollution Control Board. Refer Annexure no. 3 attached herewith Consent to Establish.
vii.	All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction work at the site.	Agreed to comply with.
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 etc.	Agreed to comply with.
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.	Agreed to comply with.
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	Agreed to comply with.

Sr. No.	Condition	Status
	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.	Agreed to comply with.
v.	Arrangement shall be made that waste water and storm water do not get mixed.	Arrangement of separate pipeline for waste water & laying of separate drain line for storm water will be provided.
vi.	All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.	Top soil will be use in landscape development.
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.	Agreed to comply with.
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.	<p>Landscape is developed as per CPCB guidelines.</p> <ul style="list-style-type: none"> • PG area for School: 668.88 Sq.mt • RG on the ground: 624.85 Sq.mt • Trees to be retain: 1 no. • Trees to be transplant: 4 nos. • Total trees proposed to be planted: 134 Nos. <p>Refer Annexure no. 9 attached herewith Landscape Plan and List of Trees.</p>
ix.	Soil and groundwater samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	Refer Annexure no. 10 attached herewith Monitoring reports.
x.	Construction spoils, including bituminous material and other hazardous materials, must not be allowed	Such types of wastes are not anticipated in this activity. There is no major water body

Sr. No.	Condition	Status
	to contaminate water sources and dumpsites for such material must be secured so that they should not leach into the ground water.	around the project site. However, all possible measures will be taken to avoid contamination of water bodies/streams.
xii.	Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.	We will take care that no hazardous waste will be generated during construction & operation phase.
xii.	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.	We will provide DG set which is of enclosed type & conforms to EPA standards.
xiii.	The diesel required for operating DG sets shall be stored in underground tanks and if required clearances from concern authority shall be taken.	Agreed to comply with.
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.	Agreed to comply with. PUC of vehicles is checked and recorded at site entrance. Refer Annexure no. 18 attached herewith PUC of heavy vehicles visiting the site.
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.	Refer Annexure no. 10 attached herewith Monitoring reports.
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 27 th August, 2003. (The above condition is applicable only if the	Agreed to comply with.

Sr. No.	Condition	Status
	project site is located within the 100Km of Thermal Power Stations.)	
xvii.	Ready mixed concrete must be used in building construction.	Yes, We will use RMC for our all building construction activity when we start the construction activity at site.
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.	The construction will be done as per the structural safety norms under the supervision of certified Structural consultant.
xix.	Storm water control and its re-use as per CGWB and BIS standards for various applications.	Noted.
xx.	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	Noted. We will adopt good construction practices at site.
xxi.	The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.	Refer Annexure no. 10 attached herewith Monitoring reports.
xxii.	The installation of Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Treated effluent emanating from STP shall be recycled, reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated effluent shall conform to the norms and standards of State Pollution Control Board. Necessary measures should be made to mitigate the odor problem from STP.	Agreed to comply with. We will install Sewage Treatment Plant of following capacities. For Redevelopment : 110 KLD For Sale: 120 KLD For School : 40 KLD STP Technology : SAFF Refer Annexure no. 13 attached herewith Location of STP and Details of Proposed 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.	We have received the approval on amended plan from Municipal Corporation of Greater Mumbai is attached as Annexure no. 4. The Amended approved

Sr. No.	Condition	Status
		Layout as per MCGM approval Letter Dated 16.10.2017 is attached as Annexure no. 6.
xxiv.	Separation of gray and black water should be done by the use of dual plumbing line for separation of gray and black water.	Agreed to comply with and we will install STP for treatment of Sewage Water. The sewage generated will be recycled for flushing and Gardening purpose. Refer Annexure no. 13 attached herewith Location of STP and Details of Proposed STP.
xxv.	Fixtures for showers, toilet flushing and drinking should be low flow either by use of aerators or pressure reducing devices or sensor based control.	Agreed to comply with. We have proposed low fixture taps.
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.	Agreed to comply with.
xxvii.	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.	Agreed to comply with.
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/spent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of the solar panels may be done to the extent possible like installing solar street lights, common solar water heater systems. Project proponent should install, after checking feasibility, solar plus hybrid non-conventional energy source	Agreed to comply with. Please refer Annexure no. 14 for details of Energy Conservation measures proposed.

Sr. No.	Condition	Status
	as source of energy.	
xxix.	Diesel power generating sets proposed as source of back-up power for elevators and common area illumination during operation phase should be 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 State Pollution Control Board.	Agreed to comply with.
xxx.	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.	Refer Annexure no. 10 attached herewith Monitoring reports.
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 to public space should be utilized.	Public road and public area are not being used for project activity purpose and are free for smooth traffic movement. Provisions are made for adequate parking facilities within the project complex and no public space will be used for parking of vehicles.
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 aspirational for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.	Agreed to comply with.
xxxiii.	The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.	Agreed to comply with.
xxxiv.	Regular supervision of above and other measures for monitoring should be in place all through the	Regular supervision all through the construction phase will be carried out.

Sr. No.	Condition	Status
	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.	Agreed to comply with.
xxxvi.	Six monthly monitoring reports should be submitted to the Regional office MOEF, Bhopal with copy to this department and MPCB.	June 2018 Monitoring report is attached herewith.
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. 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.	Agreed to comply with.
ii.	Wet Garbage should be treated by Organic Waste Converter and treated waste composting method 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.	Agreed to comply with. Wet garbage will be treated through Organic waste converter & dry sludge will be used as manure for gardening.
iii.	Local body should ensure that no occupation certification is issued prior to operation of STP/MSW site, etc with due permission of MPCB.	Agreed to comply with.
iv.	A complete set of all documents submitted to Department should be forwarded to the Local authority and MPCB.	Agreed to comply with.
v.	In case of any change(s) in the scope of the project, the project would require a fresh appraisal by this	Agreed to comply with.

Sr. No.	Condition	Status
	Department.	
vi.	A separate environmental management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	Agreed to comply with. The structure of Environment Management Cell structure is attached as Annexure no. 20.
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 shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department.	The project has proposed separate funds specifically allotted for Environmental Management which is attached as Annexure no. 21 for Budgetary allocation made for EMP.
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 the clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.mahahrashtra.gov.in	Agreed to comply with. Refer annexure no. 19 for Advertisement in local newspaper in Marathi and English
ix.	Project management should submit half yearly compliance reports in respect of the stipulated prior environmental clearance terms & conditions in hard & soft copies to the MPCB & this Department, on 1 st June & 1 st December of each calendar year.	Yes. This is our June 2018 Environmental Monitoring report.
x.	A copy of 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	Agreed to comply with.

Sr. No.	Condition	Status
	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 ₂ , 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.	Agreed to comply with.
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.	Agreed to comply with. This is our June 2018 compliance report.
xiii.	The environmental statement for each financial year ending 31 st 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.	Agreed to comply with.
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	Noted.

Sr. No.	Condition	Status
	whatever decision under EP act or of the Hon'ble court will be binding on the project proponent hence this clearance does not give any 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 noncompliance 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.	Noted.
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.	Noted.
7.	Validity of Environmental Clearance: the environmental clearance accorded shall be valid for a period of 5 years.	Noted.
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.	Noted.
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, 1986 and rules there under. Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.	Agreed to comply with.

Annexure List

Annexure No.		Details
1.	:	Current Status of Work
2.	:	Environment Clearance
3.	:	Consent to Establish
4.	:	Amended Plan approval Letter by MCGM
5.	:	Commencement Certificate
6.	:	Amended approved Layout as per MCGM approval Letter Dated 16.10.2017
7.	:	Acknowledge copy of Compliance submitted
8.	:	Approved Layout Plan as per previous EC dated 1 st December 2014
9.	:	Landscape Plan and List of Trees
10.	:	Monitoring Report and Photographs
11.	:	Debris Disposal NOC
12.	:	RWH Plan
13.	:	Location of STP and Details of Proposed STP
14.	:	Energy Conservation measures
15.	:	MHADA NOC
16.	:	CFO NOC
17.	:	Civil Aviation NOC
18.	:	PUC of heavy vehicles visiting the site
19.	:	Advertisement in local newspaper in Marathi and English
20.	:	Environment Management Cell structure
21.	:	Budgetary allocation and expenditure done up till now for Environment Management Plan.
22.	:	Data Sheet with Annexure A, B

Annexure No. 10 : Monitoring Report & Photographs



GREEN CIRCLE, INC.

Integrated HSEQR Consulting Engineers, Scientists & Trainers
(Recognised By Ministry of Environment and Forests, New Delhi Under EPA 1986)
(No. Q - 1508 / 32 / 2007 - CPW)
(ISO 9001:2008, 14001:2004, OHSAS 18001:2007 & NABL/ISO/IEC 17025 : 2005 Certified Organisation)

Report No: - GCI/V/Lab/EM/G0210/16-SP/18-19/May-00/0227

Date: 28/05/2018

ANALYSIS REPORT

Client Details		Sample Details	
Name	M/s. Oricon Properties Pvt. Ltd.	Sample Code	GCI/V/18/E4/IBI/AA1
Address	C.S. No. 128, 129 & 130 Lower Parel Division, G/S Ward, Dr. E. Moses Road, Worli, Mumbai.	Location	Near Blue Annex Building
		Date of Sampling	24/05/2018
Sampling Done By	Mr. Pragnesh	Sampling Instrument	RDS, FPS
Analysis Started Date	25/05/2018	Sampling Method	IS 5182 : Part 5 : 1975
Analysis Completion Date	28/05/2018	Sample Received Date	25/05/2018

AMBIENT AIR ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS) amended 2009	Reference Method
1.	Particulate Matter(PM ₁₀)	µg/m ³	74.8	100	IS 5182 : Part 23 : 2006
2.	Particulate Matter(PM _{2.5})	µg/m ³	30.2	60	NAAQS Guidelines
3.	Sulfur dioxide(SO ₂)	µg/m ³	8.0	80	IS 5182 : Part 2 : 2001
4.	Oxides of Nitrogen(NO _x)	µg/m ³	13.6	80	IS 5182 : Part 6 : 1975

Remark: results are within limit as per National Ambient Air Quality Standards (NAAQS) amended 2009

Authorized Signatory

- Analysis is subject to the condition In Which the Sample Is received at our Laboratory.
- Reports cannot be used as evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

CORP. OFFICE & R & D MUMBAI : Green Empire (Anupushpam), Above Axis Bank, Nr. Yash Complex, Gotri Road, **Vadodara** - 390 021 (Gujarat), India.
Tel. : 0265-2371269, Cell : 093285 83835 E-mail : info@greencircleinc.com. Website : www.greencircleinc.com
: 6, Ground Floor, Shakuntala Niwas, M.G. Road, Opp. G.H. School, Borivali (E) **Mumbai** - 400 066 India.
Cell : 099875 49920 Tel. : 022-28943090/60

: ALSO AT :

NEW DELHI GOA PUNE BENGALURU RUDRAPUR HYDERABAD KOLKATA

: OVERSEAS :

AUSTRALIA OMAN KUWAIT AFRICA VIETNAM UAE



GREEN CIRCLE, INC.

Integrated HSEQR Consulting Engineers, Scientists & Trainers
(Recognised By Ministry of Environment and Forests, New Delhi Under EPA 1986)
(No. Q - 1508 / 32 / 2007 - CPW)

(ISO 9001:2008, 14001:2004, OHSAS 18001:2007 & NABL/ISO/IEC 17025 : 2005 Certified Organisation)

Report No: - GCI/V/Lab/EM/G0210/16-SP/18-19/May-00/0227

Date: 28/05/2018

ANALYSIS REPORT

Client Details		Sample Details	
Name	M/s. Orion Properties Pvt. Ltd.	Sample Code	GCI/V/18/E4/IB/AA2
Address	C.S. No. 128, 129 & 130 Lower Parel Division, G/S Ward, Dr. E. Moses Road, Worli, Mumbai.	Location	Near Main Gate
		Date of Sampling	24/05/2018
Sampling Done By	Mr. Pragnesh	Sampling Instrument	RDS, FPS
Analysis Started Date	25/05/2018	Sampling Method	IS 5182 : Part 5 : 1975
Analysis Completion Date	28/05/2018	Sample Received Date	25/05/2018

AMBIENT AIR ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS) amended 2009	Reference Method
1.	Particulate Matter(PM ₁₀)	µg/m ³	80.1	100	IS 5182 : Part 23 : 2006
2.	Particulate Matter(PM _{2.5})	µg/m ³	32.1	60	NAAQS Guidelines
3.	Sulfur dioxide(SO ₂)	µg/m ³	6.3	80	IS 5182 : Part 2 : 2001
4.	Oxides of Nitrogen(NO _x)	µg/m ³	10.1	80	IS 5182 : Part 6 : 1975

Remark: results are within limit as per National Ambient Air Quality Standards (NAAQS) amended 2009

Authorized Signatory

- Analysis is subject to the condition in which the sample is received at our laboratory.
- Reports cannot be used as evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

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R & D Tel. : 0265-2371269, Cell : 093285 83835 E-mail : info@greencircleinc.com, Website : www.greencircleinc.com
MUMBAI : 6, Ground Floor, Shakuntala Nivas, M.G. Road, Opp. G.H. School, Borivali (E) Mumbai - 400 066 India.
Cell : 099875 49920 Tel. : 022-28943090/60

: ALSO AT :

NEW DELHI GOA PUNE BENGALURU RUDRAPUR HYDERABAD KOLKATA

: OVERSEAS :

AUSTRALIA OMAN KUWAIT AFRICA VIETNAM UAE



GREEN CIRCLE, INC.

Integrated HSEQR Consulting Engineers, Scientists & Trainers
(Recognised By Ministry of Environment and Forests, New Delhi Under EPA 1986)
(No. Q - 1508 / 32 / 2007 - CPW)

(ISO 9001:2008, 14001:2004, OHSAS 18001:2007 & NABL/ISO/IEC 17025 : 2005 Certified Organisation)

Report No: - GCI/V/Lab/EM/G0210/16-SP/18-19/May-00/0227

Date: 28/05/2018

ANALYSIS REPORT

Client Details		Sample Details	
Name	M/s. Oricon Properties Pvt. Ltd.	Sample Code	GCI/V/18/E4/IBI /DWI
Address	C.S. No. 128, 129 & 130 Lower Parel Division, G/S Ward, Dr. E. Moses Road, Worli, Mumbai.	Location	Labor camp 3 rd Floor Tower(D)
		Quantity	1000 ml
		Date of Sampling	24/05/2018
Sampling Done By	Mr. Pramit	Date of Sample Received	25/05/2018
Analysis Started Date	25/05/2018	Sampling Instrument	Manual Sampler
Analysis Completion Date	28/05/2018	Sampling Method	APHA 1060

DRINKING WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible limit as per IS-10500-2012 for Drinking Water	Reference Method
1.	pH	-	7.24	6.5-8.5	APHA 4500
2.	Turbidity	NTU	<1	5.0	APHA 2130
3.	Odour	--	Agreeable	Agreeable	APHA 2150
4.	Taste	-	Agreeable	Agreeable	APHA 2160
5.	Colour	Hazen	<5	15	APHA 2120
6.	Oil & Grease	mg/L	<0.5	-	APHA 5520
7.	Chloride as Cl	mg/L	15.7	1000	APHA 4500 - Cl-
8.	Sulphate	mg/L	2.7	400	APHA 4500 SO ₄ - E
9.	Total Hardness as CaCO ₃	mg/L	148	600	APHA 2340 C
10.	Residual Free Chlorine	mg/L	<0.1	1	APHA 4500 - Cl
11.	Iron as Fe	mg/L	0.10	0.3	APHA 3111 - B

Remark: This Sample is fit for drinking purpose as per IS-10500:2012

Authorized Signatory

- Analysis is subject to the condition in which the sample is received at our laboratory.
- Reports cannot be used as evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

CORP. OFFICE & R & D MUMBAI : Green Empire (Anupushpam), Above Axis Bank, Nr. Yash Complex, Gotri Road, Vadodara - 390 021 (Gujarat), India.
Tel. : 0265-2371269, Cell : 093285 83835 E-mail : info@greencircleinc.com, Website : www.greencircleinc.com
: 6, Ground Floor, Shakuntala Niwas, M.G. Road, Opp. G.H. School, Borivali (E) Mumbai - 400 066 India.
Cell : 099875 49920 Tel. : 022-28943090/60

: ALSO AT :

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Report No: - GCI/V/Lab/EM/G0210/16-SP/18-19/May-00/0227

Date: 28/05/2018

ANALYSIS REPORT

Client Details		Sample Details	
Name	M/s. Oricon Properties Pvt. Ltd.	Sample Code	GCI/V/18/E4/N1 to N4
Address	C.S. No. 128, 129 & 130 Lower Parel Division, G/S Ward, Dr. E. Moses Road, Worli, Mumbai.	Location	As per table
		Quantity	NA
		Date of Sampling	24/05/2018
Sampling Done By	Mr. Pramit	Sampling Instrument	Sound Level Meter (HTC/SL-1352)
Analysis Completion Date	28/05/2018	Sampling Method	HTC/SL-1352 Inst. Manual

NOISE MONITORING RESULTS

Sr. No.	Location Name	Day Time dB (A)	
		Results	MPCB Permissible Limit
1.	Near Blue Annex Building	59.8	75.0
2.	Near Main Gate	68.7	75.0
3.	Near Club House	61.7	75.0
4.	Near Tower (D)	69.8	75.0

Remark: Results are within limit as per Maharashtra Pollution Control Board.

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Report No: - GCI/V/Lab/EM/G0210/16-SP/18-19/May-00/0227

Date: 28/05/2018

ANALYSIS REPORT

Client details		Sample Details	
Name	M/s. Oricon Properties Pvt. Ltd.	Sample Code	GCI/V/18/E4/ IBI/S1
Address	C.S. No. 128, 129 & 130 Lower Parel Division, G/S Ward, Dr. E. Moses Road, Worli, Mumbai.	Sample Location	Near Blue Annex Building
		Quantity	1000 gm
Sampling Done By	Mr. Pragnesh	Date of Sampling	24/05/2018
Analysis Started Date	25/05/2018	Date of Sample Received	25/05/2018
Analysis Completion Date	28/05/2018	Sampling Instrument	Auger

SOIL ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Reference Method
1.	pH (10 % Suspension)	-	7.74	IS 2720 – Part – 26
2.	Organic Matter	%	0.28	IS 2720 – Part – 22
3.	Moisture	%	3.9	IS 2720 – Part – 2
4.	Organic Carbon	%	0.46	IS 2720 – Part – 22
5.	Zinc	mg/kg	149	APHA 3111 – B
6.	Chromium	mg/kg	10.2	APHA 3500 – B
7.	Iron	mg/kg	995	APHA 3111 – B

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Monitoring Photographs:



Annexure no. 22 : Data Sheet with Annexure A & B

**Monitoring the Implementation of Environmental Safeguards
Ministry of Environment & Forests
Regional Office (W), Nagpur
Monitoring Report**

PART – I

DATA SHEET

Date: 1st June 2018

1.	Project type: River - valley/ Mining / Industry / Thermal / Nuclear / Other (specify)		:	Redevelopment project at Worli Mumbai
2.	Name of the project		:	Proposed redevelopment at plot C.S. No. 128, 129, & 130, Lower Parel Division , G/S ward, Dr. E. Moses Road , Worli, Mumbai by M/s Oricon Properties P L.
3.	Clearance letter (s) / OM No. and Date		:	Environmental Clearance vide letter no. SEAC-2013/CR-50/TC-1 dated 1st December, 2014.
4.	Location		:	
	a.	District (S)	:	Mumbai
	b.	State (S)	:	Maharashtra
	c.	Latitude/ Longitude	:	19°00'03.45" N Latitude 72°48'28.05" E Longitude
5.	Address for correspondence		:	Mr. Purav Acharya M/s. Indiabulls Infraestate Ltd. 16 th floor, Indiabulls Finance Centre, Elphinstone Mills Compound, 612 - 613, Senapati Bapat Marg, Elphinstone (West), Mumbai- 400 013. Email id: purav.acharya@indiabulls.com Mobile No.: 9004468173
	a.	Address of Concerned Project Chief Engineer (with pin code & Telephone / telex / fax numbers)	:	Col. S.S. Kadyan (Retd.) M/s. Indiabulls Infraestate Ltd. Site Office address: Tower D: 2 nd floor, Indiabulls BLU Opposite to Shriram Mills, C.S. No. 131,132 & 1/132, Ganpatrao Kadam Marg, Near Worli Naka, Lower Parel, Mumbai- 400 013. Email id: SSKadyan@indiabulls.com

	b.	Address of Executive Project: Engineer/Manager (with pincode/ Fax numbers)	:	Mr. Arvind Vishwakarma M/s. Indiabulls Infraestate Ltd. Site Office address: Tower D: 2nd floor, Indiabulls BLU Opposite to Shriram Mills, C.S. No. 131,132 & 1/132, Ganpatrao Kadam Marg, Near Worli Naka, Lower Parel, Mumbai- 400 013. Email id: arvishwakarma@indiabulls.com Mobile No.:9004057015
6.		Salient features	:	
	a.	of the project	:	Annexure A
	b.	of the environmental management plans	:	EMP Cost Total Cost for Construction Phase : 73.62 lakhs Total Cost for Operation Phase : Capital cost : 209.15 lakhs Operational & Maintenance : 65.31 lakhs O& M of EMF for 3 years after getting possession (65.31 X 3years) : 195.92 lakhs
7.		Breakup of the project area	:	
	a.	submergence area forest & non-forest	:	Project site is not a forest area
	b.	Others	:	Annexure - A
8.		Breakup of the project affected Population with enumeration of Those losing houses/dwelling units Only agricultural land only, both Dwelling units & agricultural Land & landless labourers/artisan	:	There were existing buildings on site which has been demolished.
	a.	SC, ST/Adivasis	:	Not Applicable
	b.	Others (Please indicate whether these Figures are based on any scientific And systematic survey carried out Or only provisional figures, it a Survey is carried out give details And years of survey)	:	Not Applicable

9.	Financial details	:	
	a. Project cost as originally planned and subsequent revised estimates and the year of price reference	:	Rs. 164.58 Crores
	b. Allocation made for environmental management plans with item wise and year wise Break-up.	:	Refer Annexure B
	c. Benefit cost ratio/Internal rate of Return and the year of assessment	:	-
	d. Whether (c) includes the Cost of environmental management as shown in the above.	:	-
	e. Actual expenditure incurred on the environmental management plans so far	:	Rs. 3.0 Lakhs
10.	Forest land requirement	:	
	a. The status of approval for diversion of forest land for non-forestry use	:	Not Applicable as project does not involve forest land
	b. The status of clearing felling	:	Not Applicable
	c. The status of compensatory afforestation, if any	:	Not Applicable
	d. Comments on the viability & sustainability of compensatory afforestation program in the light of actual field experience so far	:	Not Applicable
11.	The status of clear felling in Non-forest areas (such as submergence area of reservoir, approach roads), if any with quantitative information	:	Not Applicable
12.	Status of construction	:	
	a. Date of commencement (Actual and/or planned)	:	1 April 2018
	b. Date of completion (Actual and/of planned)	:	Not Anticipated yet.
13.	Reasons for the delay if the Project is yet to start	:	NA
14	Dates of site visits	:	NA
	a. The dates on which the project was monitored by the Regional Office on	:	20 March 2018

		previous Occasions, if any		
	b.	Date of site visit for this monitoring report	:	June 2018 at the time of Monitoring.
15.	Details of correspondence with Project authorities for obtaining Action plans/information on Status of compliance to safeguards Other than the routine letters for Logistic support for site visits		:	Not Applicable
	(The first monitoring report may contain the details of all the Letters issued so far, but the Later reports may cover only the Letters issued subsequently.)		:	-

Annexure - A

1. PROJECT DETAILS

Name & Location	:	Proposed redevelopment at plot C.S. No. 128, 129, & 130, Lower Parel Division , G/S ward, Dr. E. Moses Road , Worli, Mumbai by M/s Oricon Properties Pvt. Ltd.		
Total no. of workers to be employed during the construction phase.	:	Peak: 200 Nos. Average : 250 Nos.		
Total Project cost	:	Rs.164.58 Crores		
Project infrastructure	:	Redevelopment (Building 1)	Sale (Building 2)	Reservation secondary school (Building 3)
		Gr (shops) + Service floor + 12 upper floor Flats: 163 Nos. Shops: 29 Nos.	Gr + 8 Podia + 9 + 32 upper floors + 33 rd (part floor) Flats: 177 Nos	Basement + Ground + 8 floors.
Area Statement	:	Total Plot Area: 7,810.24 Sq. mt. Net Plot Area: 7,810.24 Sq. mt. FSI area (including Fungible FSI): 29,670.25 Sq. mt. Total Construction area: 6, 8907.13 Sq. mt. R. G. Area on the ground: 624.85 Sq. mt. Total Ground coverage area : 3,661.92 Sq. mt.		

Water Requirement and Sources	<p>: <u>Dry Season :</u></p> <ul style="list-style-type: none"> • Fresh water (CMD) =181 Domestic from MCGM =173 Swimming pool makeup :From water tanker of potable quality = 8 • Recycled water(CMD) = 105 (STP Treated sewage) Flushing = 101 Gardening =4 • Total Water Requirement(CMD) = 286 Swimming pool(CMD)= As mentioned above • Fire Fighting (Cum) : Redevelopment: 150 (One time required) Sale: 350 (One time required) School : 100 (One time required) <p><u>Wet Season :</u></p> <ul style="list-style-type: none"> • Fresh water (CMD) =181 Domestic from MCGM =127 From RWH tanks = 46 Swimming pool makeup :From water tanker of potable quality = 8 • Recycled water(CMD) = 101 (STP Treated sewage for flushing) • Total Water Requirement (CMD) = 282 • Swimming pool (CMD)= As mentioned above • Fire Fighting (CMD) : Redevelopment: 150 (One time required) Sale: 350 (One time required) School : 100 (One time required)
Sewage and waste water	<p>: • Sewage generation(CMD): Redevelopment : 99 KL Sale : 104 KL School: 36 KL</p> <ul style="list-style-type: none"> • STP technology : Submerged Aerated Fixed Film Reactor(SAFF) • Capacity of STP(CMD) Redevelopment : 110 KL Sale : 120 KL School: 40 KL • Location of STP : Redevelopment & Sale : Underground School: Basement floor

Power	<p>:</p> <p>Power supply:</p> <ul style="list-style-type: none"> • Maximum demand: Redevelopment : 771KW Sale:1607 KW School:69 KW Total : 2447 KW • Connected load: Redevelopment : 2306 KW Sale: 4855 KW School: 88 KW Total :7249 KW • DG set (during emergency): for essential back-up (Total DG capacity of the project including load of STP) Redevelopment: 1 DG set of 160 KVA Sale : 1 DG set of 725 KVA School: 1 DG set of 100 KVA • Budgetary allocation: Capital cost : Rs. 109.96 lacs O & M cost : Rs. 29.24 Lacs/annum
Gaseous emissions	<p>:</p> <ul style="list-style-type: none"> • Vehicle carrying materials to be transported must have PUC certificate. • Heavy vehicle movement will be allowed only during night time. • Construction equipment's with idling control technologies will be used. • Regular maintenance of the equipment's will be carried out.
<p>Solid waste from :</p> <p>Garbage:</p> <p>1. Wet</p> <p>2. Dry</p>	<p>:</p> <ul style="list-style-type: none"> • Waste generation in operation phase Dry waste : 306 Kg/day Wet waste : 556 Kg/day STP sludge (Dry sludge) : 36 Kg/day • Mode of Disposal of waste Dry waste : Non-recyclable : To M.C.G.M Recyclable: To recyclers Wet waste : Organic Waste Converter (OWC) STP sludge (Dry Sludge) : As manure.

Annexure B

EMP For Construction Phase

Sr. no.	Environmental Component	Activity	Impacts	Precautionary measures
1	Ambient Air Quality & Noise level	<ul style="list-style-type: none"> • Site Clearance • Excavation • Construction of Structures • Heavy vehicle traffic • Use of DG Set • Open burning of waste 	<ul style="list-style-type: none"> • Increased level of dust & other air pollutants • Increased Noise level. 	<p>For controlling air pollution :</p> <ul style="list-style-type: none"> • Water Sprinkling • Cover on trucks • Use of RMC • Vehicles with valid PUC • Maintaining smooth traffic flow • DG sets: As per CPCB norms, Proper Maintenance, Use of Low sulphur fuel. Restricting open burning of solid waste <p>For controlling noise pollution :</p> <ul style="list-style-type: none"> • Barricades along the periphery of the site. • Ear Plugs for Labourers • D.G. sets with acoustic Enclosures. • No noise polluting work in night shifts. • Using electrically operated construction equipment.
2	Water	<ul style="list-style-type: none"> • Use of fresh water for Construction activity / labours • Wastewater generation • Disposal of site Run off into SWD • Water logging 	<ul style="list-style-type: none"> • Strain on the water supply in the vicinity • Sedimentation, • Pollution of nearby water courses. • Unhygienic condition for surrounding residents. 	<ul style="list-style-type: none"> • Use of tanker water for construction. No burden on municipal supply • Provision of temporary toilets and bathing facilities. • Provision of septic tanks and soak pits. • Construction water will be channelized properly and silt traps will be provided before disposal into natural drain. • Disposal of logged water periodically.
3	Soil	<ul style="list-style-type: none"> • Preconstruction and excavation 	<ul style="list-style-type: none"> • Loss of good fertile soil 	<ul style="list-style-type: none"> • Recycle of Debris as far as possible in

		<p>debris</p> <ul style="list-style-type: none"> • Storage of construction material / chemicals • Transportation of hazardous material • Residual paints Solvents/ bituminous material etc. operation / maintenance • Generation of garbage by labourers 	<ul style="list-style-type: none"> • Soil erosion, • Soil contamination due to mixing of construction material/ accidental spillage of chemicals /oils 	<p>construction area</p> <ul style="list-style-type: none"> • Disposal of debris to authorized sites/ recognized landfill sites • Proper and Separate storage of construction material • Storage of all petroleum products on impervious layers viz. concrete. • Transportation, storage and handling, disposal of HW as per their guidelines and handing it over to authorized agencies. • Use of electrically operated machinery. • Segregation of waste at Source
	Even after taking precautions if soil is found to be contaminated, it shall be removed and disposed off to authorized site.			
4	Ecology	<ul style="list-style-type: none"> • Site clearance, Construction of structures 	<ul style="list-style-type: none"> • Disturbing natural flora and fauna • Loss of vegetation from chemical spills from vehicles 	<ul style="list-style-type: none"> • Plantation of local tree species. • Plantation of trees • Regulation of vehicular trips and speed and proper maintenance of machinery.
5	Safety & Hygienic Measure	Construction work Labour	<ul style="list-style-type: none"> • Positive impact : Employment generation • Safety and hygiene at site may be affected during construction 	<ul style="list-style-type: none"> • Adequate drinking water, toilet and bathing facilities. • Regular analysis of drinking water. • Personal protective and safety equipment will be provided. • First aid facility. • Regular health check up • Regular pest control at site. • Educational and awareness programme for safety measures.

EMP for Operation Phase:

Sr. no.	Environmental Component	Activity	Impacts	Precautionary measures
1	Ambient Air Quality & Noise level	Increased vehicular trips, Use of DG sets	<ul style="list-style-type: none"> • Traffic congestion , • Air Pollution • Increase in noise level 	<ul style="list-style-type: none"> • Adequate Parking provision; well organized traffic management plan for smooth flow of vehicles. • Regular PUC check-up for vehicles. • DG sets : As per CPCB norms, Proper Maintenance, Use of Low Sulphur fuel. • Acoustic Enclosures for DG sets • Plantation of trees will reduce air pollution and also act as noise buffer.
2	Water	<ul style="list-style-type: none"> • Increased demand of natural water, • Generation of waste water • Increased paved structure 	<ul style="list-style-type: none"> • Stress on existing water supply • Pollution of water bodies • Increased run off from site. 	<ul style="list-style-type: none"> • Use of water saving practices • Adoption of dual flush system • Rain water harvesting and use of rain water • Plantation of less water consuming trees. • STP is planned and treated sewage will be used for secondary requirement like flushing and gardening.
3	Land	<ul style="list-style-type: none"> • Solid waste generation, • Transportation of hazardous material • Increased paved structure 	<ul style="list-style-type: none"> • Improper disposal of waste, • accidental spillage of hazardous chemicals leads to soil contamination • Increased run off from site. 	<ul style="list-style-type: none"> • Waste minimization recovery and reuse • Segregation at source for all solid waste streams • Recycling of non-biodegradable garbage. • Treatment of biodegradable garbage by OWC for Sale building and its use as manure • Use of dried STP sludge as manure • Transportation, storage and handling, disposal of HW / E waste as per their guidelines and handing it over to authorized agencies. • Storm water drainage of adequate Capacities.
	Even after taking precautions if soil is found to be contaminated, it shall be removed and disposed off to authorized site			

4	Ecology	Introduction of new tree species	<ul style="list-style-type: none"> • Disturbing natural flora and fauna • Increased Exposure to anthropogenic activities. 	<ul style="list-style-type: none"> • Plantation of local tree species.
5	Safety & Hygienic Measure	influx of people	<ul style="list-style-type: none"> • Stress on all utilities, risk and danger due to natural and manmade disaster • Positive impact : Employment generation 	<ul style="list-style-type: none"> • Emergency preparedness plan and Disaster management plan will be Prepared and explained with the help of local NGO's and surrounding people and authority.

HAZARDOUS WASTE MANAGEMENT PLAN

Construction Phase:

Environmental Management Plan for Hazardous Waste Generation

Sr. No.	Source of Hazardous Waste Generation	Mitigation Measures
1	Leakages and spillage oil or fuel	<ul style="list-style-type: none"> * Contaminated soil if any shall be disposed off to Authorized Disposal Site. * Bituminous materials /any other chemicals shall not be allowed to leach into the soil.
2	Residual Paints/Solvents	--do--

Other hazardous wastes, if any, shall also be handled in the similar way through authorized dealers only.

Operational Phase:

Sr. No.	Source of Hazardous Waste Generation	Mitigation Measures	Disposal
1.	Waste Oil from D.G Sets	-	Waste oil will be handed over to authorized recyclers.