SPEED POST

BY SPEED POST

J 13011/10/2009-IA.II(T)
Government of India
Ministry of Environment & Forests

Paryavaran Bhawan
CGO Complex, Lodi Road
New Delhi-110 003
Dated: December 04, 2009

To

M/s Dhariwal Infrastructure (P) Ltd.
1008, A-Wing Lokmat Bhawanl,
10th Floor, Nagpur ? 400 012

Sub: *2x300 MW Coal Based Thermal Power Plant in MIDC Industrial Area, at village Tadali, in Distt. Chandrapur, in Maharashtra ? reg. Environmental Clearance (reconsideration).*

Sir,

The undersigned is directed to refer to letters dated 18.08.2009 and 05.10.2009 on the subject mentioned above. The Ministry of Environment & Forests has examined the application.

2. It has been noted that the proposal is for setting up a 2x300 MW Coal Based Thermal Power Plant in MIDC Industrial Area, at village Tadali, in Distt. Chandrapur, in Maharashtra. Land requirement will be 480 acres. Coal requirement will be 11040 TPD and will be sourced from SECL mines. Coal linkage has been obtained from Ministry of Coal. The coordinates of the site are latitude $20^0$00?30? to 20^O 01?20? N and longitude 79^O11?50? to 79^O12?35 E?. Water requirement of 19.272 mcum per annum will be sourced from Wardha River which flows at a distance of 9.3 km from the plant site. Govt. of Maharashtra has accorded permission for water allocation from Wardha River. A Barrage is proposed to be constructed in Wardha River for uninterrupted water supply. There are no national parks, wildlife sanctuary, tiger & elephant reserves, heritage sites etc. within 10 km of the study area. MoU with M/s ACC for consumption of Fly Ash for its Chanda Cement Works is in place. As a contingency measure 65.2 acres of land is proposed for ash storage, which will be properly lined with HDPE. Abandoned mines are being identified within the District for disposal of bottom ash. Bhandak Reserve Forest is located at a distance of 7.8 kms away. Motaghat nallah flows at a distance of 6.2 km away in the east and Sarai Nallah at 5.0 km in South. Cost of the project will be Rs. 3054.00 Crores.

3. The project has been considered in accordance with the provisions of the EIA notification issued by the Ministry of Environment & Forests vide S.O. 1533 (E), dated September 14, 2006.

4. Based on the information submitted by you, as at Para 2 above and others, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA notification dated September 14, 2006, subject to the compliance of the following conditions:

i. No further expansion in capacity shall be permitted for this Power Plant in view of the uncertainty of water in lean season.

ii. The two radial wells shall be constructed maintaining a distance of at least 450 m between them and at least 500 m from the nearest habitations/village boundary.

iii. Water from the radial well(s) shall be utilized only for extreme necessity during lean season and

shall be kept only as standby arrangement during lean season.

iv. Hydro-geological study of the area shall be reviewed annually and results submitted to the Ministry and concerned agency In the State Govt. In case adverse impact on ground water quantity and quality is observed, immediate mitigating steps to contain any adverse impact on ground water shall be undertaken.

v. A Two Bi-Flue stacks of 275 m height shall be provided with continuous online monitoring equipments for SOx, NOx and PM. Exit velocity of flue gases shall not be less than 25 m/sec. Mercury emissions from stack shall also be monitored on periodic basis.

vi. High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm^3.

vii. Adequate dust extraction system such as cyclones/ bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.

viii. Utilisation of 100% Fly Ash generated shall be made from 4th year of operation of the plant. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.

ix. Fly ash shall be collected in dry form and storage facility (silos) shall be provided. 100% fly ash utilization shall be ensured from 4th year onwards. Unutilized fly ash shall be disposed off in the ash pond in the form of slurry form. Mercury and other heavy metals (As,Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed off in low lying area.

x. Ash pond shall be lined with HDP/LDP lining or any other suitable impermeable media suh that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.

xi. For disposal of Bottom Ash in abandoned mines (if proposed to be undertaken) it shall be ensured that the bottom and sides of the mined out areas are adequately lined with clay before Bottom Ash is filled up. The project proponent shall inform the State Pollution Control Board well in advance before undertaking the activity.

xii. Closed cycle cooling system with natural draft cooling towers shall be provided. The Effluents shall be treated as per the prescribed norms.

xiii. The treated effluents conforming to the prescribed standards only shall be discharged. Arrangements shall be made that effluents and storm water do not do not get mixed.

xiv. A sewage treatment plant shall be provided and the treated sewage shall be used for raising greenbelt/plantation.

xv. Rainwater harvesting should be adopted. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three

months from the date of clearance and details shall be furnished.

xvi. Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season. Copy of these measures with full details along with location plant layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry.

xvii. Storage facilities for auxiliary liquid fuel such as LDO and/ HFO/LSHS shall be made in the plant area in consultation with Department of Explosives, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5%. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.

xviii. Regular monitoring of ground water level shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring around the ash pond area shall be carried out particularly for heavy metals (Hg,Cr,As,Pb) and records maintained and submitted to the Regional Office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project.

xix. Green Belt consisting of 3 tiers of plantations of native species around plant and at least 100 m width shall be raised. Wherever 100 m width is not feasible a 50 m width shall be raised and adequate justification shall be submitted to the Ministry. Tree density shall not less than 2500 per ha with survival rate not less than 70 %.

xx. First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.

xxi. Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in the high noise area, requisite personal protective equipment like earplugs/ear muffs etc. shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non noisy/less noisy areas.

xxii. Regular monitoring of ground level concentration of SO_2, NOx, RSPM(PM_{10}/$PM_{2.5}$) and Hg shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company.

xxiii. A good action plan for R&R (if applicable) with package for the project affected persons be submitted and implemented as per prevalent R&R policy within three months form the date of issue of this letter.

xxiv. An amount of Rs 12.0 Crores shall be earmarked as one time capital cost for CSR programme. Subsequently a recurring expenditure of Rs 3.0 Crore per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within one month along with road map for implementation.

-4-

xxv. As part of CSR programme the company shall conduct need based assessment for the nearby villages to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the

people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes. This will be in addition to vocational training for individuals imparted to take up self employment and jobs.

xxvi. 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 etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

xxvii. The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution Control Board/Committee and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in.

xxviii. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad / Municipal Corporation, urban local Body and the Local NGO, if any, from whom suggestions/representations, if any, received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.

xxix. A separate Environment Management Cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.

xxx. 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(PM_{10}/$PM_{2.5}$), SO2, NOx (ambient levels as well as stack emissions)shall be displayed at a convenient location near the main gate of the company in the public domain.

xxxi. 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 by e- mail) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB.

xxxii. The environment statement for each financial year ending 31st 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 the Ministry by e-mail.

xxxiii. The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of

Environment and Forests, its Regional Office, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environment of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of

xxxiv. Regional Office of the Ministry of Environment & Forests will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. Project proponent will up-load the compliance status in their website and up-date the same from time to time at least six monthly basis. Criteria pollutants levels including NOx (from stack & ambient air) shall be displayed at the main gate of the power plant.

xxxv. Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-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 be reported to the Ministry.

xxxvi. The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.

xxxvii. Full cooperation shall be extended to the Scientists/Officers from the Ministry / Regional Office of the Ministry at Bangalore / CPCB/ SPCB who would be monitoring the compliance of environmental status.

5. The Ministry of Environment and Forests reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry. The Ministry may also impose additional environmental conditions or modify the existing ones, if necessary.

6. The environmental clearance accorded shall be valid for a period of 5 years to start operations by the power plant.

7. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

8. In case of any deviation or alteration in the project proposed including coal transportation system from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition(s) imposed and to add 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 Environment Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.

(LALIT KAPUR)

BY SPEED POST

DIRECTOR

Copy to:-

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001.
2. The Secretary (Environment), Forests and Environment Department Government of Maharashtra.
3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
4. The Chairman, Maharashtra Pradesh State Pollution Control Board, Kalpataru Point, 3rd & 4th Floors, Sion Matunga Scheme Road No. 6, Opp. cine Planet, Sion Circle, Sion (E), Mumbai ? 400 022
5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi- 110032.
6. The Chief Conservator of Forests, Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, Arera Colony, Ravishankar Nagar, Bhopal - 462016.
7. The District Collector, Chandrapur District, Govt. of Maharashtra.
8. The Director (EI), MOEF.
9. Guard file.
10. Monitoring file.

(LALIT KAPUR)
DIRECTOR

O/C

RP - Sanjiv Goenka Group
Growing Legacies

Dhariwal Infrastructure Limited
CIN : U70109WB2006PLC111457
E-mail : dhariwalinfrastructure@rp-sg.in

Date: 29/11/2018

Ref. No.: DIL/HSE/F-09/18-19/52

To,
The APCCF (C),
Ministry of Environment and Forest, Climate Change,
Regional Office (WCZ) Ground Floor,
East Wing, New Secretariat Building,
Civil Line,
NAGPUR – 440001 (MH)

Sub. : Half Yearly Compliance Report of the Environmental Clearance (1st April 2018 to 30th September 2018)

Ref.: MoEF, Govt. of India Environmental Clearance No. J-13011/10/2009-IA. II (T) dated 04-12-2009

Dear Sir,
We are operating 2 x 300 MW Thermal Power Plant at MIDC, Tadali Industrial Area, Chandrapur (M.S.) as per Environment Clearance under reference.

We are submitting herewith Half Yearly Compliance Report for the period from 1st April 2018 to 30th September 2018 in hard as well as soft copy (compact disc) in respect of the terms and conditions stipulated in Environmental Clearance.

We assure you of taking every feasible step towards preservation of environment.

Thanking you,
Yours faithfully,
For **DHARIWAL INFRASTRUCTURE LTD.**

(Biplab Kanti Kar)
Head O & M

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Ministry of Environment, Forest & Climate Change
क्षेत्रीय कार्यालय (पश्चिम मध्य क्षेत्र)
Regional Office (Western Central Zone)
भू-तल, पूर्व खंड / Ground Floor, East Wing

Encl.: As above

CC:

1. **The Incharge,**
Central Pollution Control Board,
Western Zonal Office, Parivesh Bhawan,
Opp. VMC Ward Office No.10,
Subhanpara, Vadodara,
Gujarat-390023.

2. **Member Secretary,**
Maharashtra Pollution Control Board,
Kalpataru Point, 4th Floor,
Matunga Road-08, Sion-(E),
Sion Circle,
Mumbai-400022.

3. **The Regional Officer,**
Maharashtra Pollution Control Board,
1st Floor, Udyog Bhavan,
Near Bus Stand, Chandrapur-442406.

4. **The Sub Regional Officer,**
Maharashtra Pollution Control Board,
1st Floor, Udyog Bhavan,
Near Bus Stand, Chandrapur-442406.

Regd. Office : CESC Limited, CESC House, Chowringhee Square, Kolkata - 700 001, India. Tel: +91 33 2225 6040 Fax: +91 33 2225 6003
Site Office: C-6 Tadali Growth Center, M.I.D.C Tadali, District: Chandrapur, Maharashtra 442406. Tel: +91 7172 645911/645912/645913, Fax: +91 7172 237992
(A Subsidiary of CESC Limited)

RP - Sanjiv Goenka Group
Growing Legacies

DHARIWAL INFRASTRUCTURE LIMITED

Dhariwal Infrastructure Limited

CIN : U70109WB2006PLC111457
E-mail : dhariwalinfrastructure@rp-sg.in

Date: 29/11/2018

Ref. No.: DIL/HSE/F-09/18-19/52

To,
The APCCF (C),
Ministry of Environment and Forest, Climate Change,
Regional Office (WCZ) Ground Floor,
East Wing, New Secretariat Building,
Civil Line,
NAGPUR – 440001 (MH)

Sub. : Half Yearly Compliance Report of the Environmental Clearance (1st April 2018 to 30th September 2018)

Ref.: MoEF, Govt. of India Environmental Clearance No. J-13011/10/2009-IA. II (T) dated 04-12-2009

Dear Sir,
We are operating 2 x 300 MW Thermal Power Plant at MIDC, Tadali Industrial Area, Chandrapur (M.S.) as per Environment Clearance under reference.

We are submitting herewith Half Yearly Compliance Report for the period from 1st April 2018 to 30th September 2018 in hard as well as soft copy (compact disc) in respect of the terms and conditions stipulated in Environmental Clearance.

We assure you of taking every feasible step towards preservation of environment.

Thanking you,
Yours faithfully,
For **DHARIWAL INFRASTRUCTURE LTD.**

(Biplab Kanti Kar)
Head O & M

Encl.: As above

CC:

1. **The Incharge**,
Central Pollution Control Board,
Western Zonal Office, Parivesh Bhawan,
Opp. VMC Ward Office No.10,
Subhanpara, Vadodara,
Gujarat-390023.

2. **Member Secretary**,
Maharashtra Pollution Control Board,
Kalpataru Point, 4th Floor,
Matunga Road-08, Sion-(E),
Sion Circle,
Mumbai-400022.

3. **The Regional Officer**,
Maharashtra Pollution Control Board,
1st Floor, Udyog Bhavan,
Near Bus Stand, Chandrapur-442406.

4. **The Sub Regional Officer**,
Maharashtra Pollution Control Board,
1st Floor, Udyog Bhavan,
Near Bus Stand, Chandrapur-442406.

Regd. Office : CESC Limited, CESC House, Chowringhee Square, Kolkata - 700 001, India. Tel: +91 33 2225 6040 Fax: +91 33 2225 6003
Site Office: C-6 Tadali Growth Center, M.I.D.C Tadali, District: Chandrapur, Maharashtra 442406. Tel: +91 7172 645911/645912/645913, Fax: +91 7172 237992
(A Subsidiary of CESC Limited)

Environmental Compliance Report
for
the Period From
1st April 2018 to 30th September 2018

Of

M/s. DHARIWAL INFRASTRUCTURE LTD.
Plot No. C-6, C-7 & C-8,
Tadali Industrial Area,
MIDC, Village – Tadali,
Dist. - Chandrapur

Submitted to

Ministry of Environment, Forest and Climate Change
Regional Office (WCZ), Ground Floor, East Wing
New Secretariat Building
Civil Line, Nagpur – 440001 (MH)

1.0 PREAMBLE

Dhariwal Infrastructure Ltd has been granted MoEF Environmental Clearance for 2 x 300 MW Thermal Power Plant vide no. J-13011/10/2009-IA. II (T) dated 04-12-2009

Both Unit -1 & 2 (2 x 300 MW) of Thermal Power Plant are installed and commissioned in October 2013 and June 2014 respectively. The MPCB Consent to Operate is granted to both units for the period valid up to 31-12-2018.

All the environmental Protection & Conservation works including air pollution control systems, effluent treatment plant, sewage treatment plant, rain water harvesting pond, greenbelt development activities etc are completed. The present compliance status is given below.

2.0 COMPLIANCE STATUS

The conditions stipulated in MoEF Environmental Clearance are followed scrupulously. Compliance is reported here under for the period from 1st April 2018 to 30th September 2018 in serial order of Environmental Clearance Letter as delineated below.

Sr. No.	Conditions	Compliance
(i)	No further expansion shall be permitted for this power plant in view of the uncertainty of water in lean season.	Further expansion will not be carried out in view of the uncertainty of water in lean season.
(ii)	The two radial wells shall be constructed maintaining a distance of at least 450 m between them and at least 500 m from the nearest habitations/village boundary.	Yes, radial well is constructed away from the nearest habitation (more than 500 m)
(iii)	Water from the radial well(s) shall be utilized only for extreme necessity during lean season and shall be kept only as standby arrangement during lean season.	Water from the radial well(s) is utilized only for extreme necessity during lean season and kept only as standby arrangement during lean season.
(iv)	Hydro-geological study of the area shall be reviewed annually and results submitted to the Ministry and concerned agency in the State Govt. In case adverse impact on ground water quantity and quality is observed, immediate mitigating steps to contain any adverse impact on ground water shall be undertaken.	Hydro-geological status of the area is reviewed regularly. Ground water level measurement reports (April 2018 to September 2018) are enclosed herewith as **Enclosure-1.** There is no adverse impact on ground water quantity and quality is observed. Ground water quality in the study area is regularly analyzed and reports (April 2018 to September 2018) are enclosed herewith as **Enclosure -2**
(v)	Two Bi-Flue stacks of 275 m height shall be provided with continuous online monitoring equipments for SOx, NOx and PM. Exit velocity of flue gases shall not be less than 25 m/sec. Mercury emissions from stack shall also be monitored on periodic basis.	Yes, two Bi-Flue stacks of 275 m height are provided with continuous online monitoring equipments for SOx, NOx and PM. Mercury in outgoing emissions from stack is also being monitored on periodic basis
(vi)	High Efficiency Electrostatic Precipitators (ESPs) shall be installed to	Yes, High Efficiency Electrostatic Precipitator (ESP) for unit 1& 2 are

	ensure that particulate emission does not exceed 50 mg/Nm^3.	commissioned and in operation. Both ESP's are designed to ensure that particulate emission does not exceed 50 mg/Nm^3. The analysis reports of stack emission monitoring for both units are enclosed as **Enclosure-3**
(vii)	Adequate dust extraction system such as cyclones/ bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.	Yes, cyclones/ bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas are provided and all stipulated norms are complied.
(viii)	Utilization of 100% Fly Ash generated shall be made from 4th year of operation of the plant. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.	Yes, 100% Fly Ash generated is being taken by nearby cement plants for cement manufacturing.
(ix)	Fly ash shall be collected in dry form and storage facility (silos) shall be provided 100% fly ash utilization shall be ensured from 4th year onwards, Unutilized fly ash shall be disposed off in the ash pond in the form of slurry form. Mercury and other heavy metals (As, Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond No ash shall be disposed off in low lying area.	Yes, fly ash silo & handling plant for direct loading to bulkers is in operation. The condition is fully complied. Please refer **Enclosure-4**
(x)	Ash pond shall be lined with HDP/LDP lining or any other suitable impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.	Yes, Ash pond is lined with HDP/LDP lining such that no leachate takes place at any point of time. Adequate safety measures are also implemented to protect the ash dyke from getting breached.
(xi)	For disposal of Bottom Ash in abandoned mines (if proposed to be undertaken) it shall be ensured that the bottom and sides of the mined out areas are adequately lined with clay before Bottom Ash is filled up. The project proponent shall inform the Slate Pollution Control Board well In advance before undertaking the activity.	All appropriate precaution will be taken whenever Bottom Ash is planned to disposed off in abandoned mines. At present we have agreement with 10 Brick manufacturers and giving to them.
(xii)	As par revised EC dated 09/09/2010 closed cycle cooling tower with Induced draft cooling towers shall be provided. The Effluents shall be treated as per the prescribed norms.	Closed cycle cooling system with Induced draft cooling towers is provided. The effluents are treated as per the prescribed norms and for bottom ash handling & also for horticulture purpose. Refer **Enclosure-4**

(xiii)	The treated effluents conforming to the prescribed standards only shall be discharged. Arrangements shall be made that effluents and storm water do not get mixed.	The treated effluents conforming to the prescribed standards are used for green belt development. Arrangements are made such that effluents and storm water do not get mixed. Please refer **Enclosure-4**
(xiv)	A sewage treatment plant shall be provided and the treated sewage shall be used for raising greenbelt/plantation.	Sewage treatment plant is provided and the treated sewage is used for raising greenbelt/plantation.
(xv)	Rainwater harvesting should be adopted Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months from the date of clearance and details shall be furnished.	Rain water harvesting pond is developed and through natural drains, rain water is regularly collected.
(xvi)	Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season. Copy of these measures with full details along with location plant layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry.	Provision of adequate safety measures in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season is made. Water sprinkler have been provided around coal stock yard and are kept in regular operation.
(xvii)	Storage facilities for auxiliary liquid fuel such as LDO and/ HFO/LSHS shall be made in the plant area in consultation with Department of Explosives, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5%. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.	Facilities for storage of auxiliary liquid fuel such as LDO and HSD are provided in the plant areas are under approval of DOE. Disaster Management Plan is prepared to meet any eventuality in case of an accident may be taken place due to storage of oil.
(xviii)	Regular monitoring of ground water level shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring around the ash pond area shall be carried out particularly for heavy metals (Hg, Cr, As, Pb) and records maintained and submitted to the Regional Office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project.	Regular monitoring of ground water level is done in and surrounding areas. It is observed that there is no adverse impact in the area. The ground water quality in the study area is also regularly analyzed for heavy metals and reports are submitted.
(xix)	Green Belt consisting of 3 tiers of plantations of native species around plant and at least 100 m width shall be raised. Wherever 100 m width is not feasible a 50 m width shall be raised and adequate	As on date about 1,22,500 trees are existing. The major existing trees (57,500) are Akeshiya, Imli, Karanj, Mahaneem,

	justification shall be submitted to the Ministry. Tree density shall not less than 2500 per ha with survival rate not less than 70 %.	Neem, Nilgiri, Peltoforam, Sisam and Casia,casurina,Eucalyptus etc. The other existing trees (65,000) are Aapta, Amla, Anjeer, Arcka Palm, Aerial Palm, Arjun ,Ashoka, Bargad, Badam, Banana, Boganvel, Chikku, Coconut, Flower tree, Ficus benjamina, Goldan Bambu, Green Bambu, Gulmohar, Jambhul Jaswant, Kadam, Kanher ,Kawat, Mahagani, Mango, Mogra Mosambi, Nimbu , Pipal, Rain Tree, Red Rose, Royal Palm, Ornamental Plants, Saru ,Simal, Spindal Palm, Silver oke , Swastik, Vel (Kourav & Pandava), Vidya, X-mas tree, Yellow Bell, Bakul, Papaya, Sitaphal, Bel, Shahtut ,Anar, Sevga, Amrud,Ber, Kher etc. .
(xx)	First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	Construction phase is over. First Aid and sanitation arrangements for the drivers and other contract workers are available. Regular first aid training is given to drivers & contract workers.
(xxi)	Noise level emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dB(A). For people working in the high noise area, requisite personal protective equipment like earplugs/ear muffs etc. shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc. shall be periodically examined to maintain audiometric record and any hearing loss including shifting to non noisy/less noisy areas.	Noise level emanating from turbines is controlled such that the noise in the work zone is limited to 75 dB (A). For people working in the high noise area, requisite personal protective equipment like earplugs/ear muffs etc. are provided. Workers engaged in noisy areas such as turbine area, air compressors etc. are periodically examined & maintaining audiometric record and any hearing loss including shifting to non noisy/less noisy areas. The workzone noise quality results are enclosed herewith as **Enclosure-5.**
(xxii)	Regular monitoring of ground level concentration of SO_2, NOx, RSPM (PM_{10}/$PM_{2.5}$) and Hg shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of the Ministry. The data shall also be put	Yes, regular ambient air quality monitoring at six locations is carried out and reports (April 2018 to September 2018) are enclosed herewith as **Enclosure -6**.Data are connected with MPCB/CPCB Website.

	on the website of the company.	
(xxiii)	A good action plan for R&R (if applicable) with package for the project affected persons be submitted and implemented as per prevalent R&R policy within three months form the date of issue of this letter.	Not Applicable.
(xxiv)	An amount of Rs. 12.0 Crores shall be earmarked as one time capital cost for CSR programme. Subsequently a recurring expenditure of Rs. 3.0 Crore per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within month along with road map for implementation.	Road map is worked out for implementation of CSR activities. A partnership along with Zila Parishad, Chandrapur & UNICEF for improving water & sanitation facilities in ten Grampanchayat, Schools and Anganwadis is done and work is under progress. Please refer **Enclosure-7**
(xxv)	As par of CSR programme the company shall conduct need based assessment for the nearby villages to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generating programs. This will be in addition to vocational training for individuals imparted to take up self employment and jobs.	A need based survey is carried out by Social Action for Rural Development (SARDA) in nearby areas to assess the social and economic status of the people based on which a comprehensive document is prepared to deal with need based CSR activities. The implementation of following CSR activities undertaken in the aforesaid period. 1.Training on Health & Sanitation in nearby nine no. of villages. 2.Swachh Bharat Abhiyan in Nine villages. 3.Training to Adolescent girls 4.Training to villagers of nine villages for Digital villages. 5.Agriculture Projects in nearby villages. 6.Educational Programs in nearby villages. 7.Training to six nos. of SHG(Self Help Groups) for self employment. Please refer **Enclosure-7**
(xxvi)	Provision shall be made for the housing of construction labors 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 etc The housing may	Yes, Construction phase is already completed and demolition of temporary structures of construction phase is under progress.

	be in this form of temporary structures to be removed after the completion of the project.	
(xxvii)	The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution Control Board/ Committee and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in	Yes, it is already complied.
(xxviii)	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad / Municipal Corporation, urban local body and the local NGO, if any, from whom suggestions/representations, if any, received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	Yes, it is complied.
(xxix)	A separate Environment Management Cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	Yes, separate Environment Management Cell with qualified staff is set up for implementation & maintaining the stipulated environmental safeguards.
(xxx)	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 (PM_{10}/$PM_{2.5}$) SO_2 NOx (ambient levels as well as stack emissions) shall be displayed at a convenient location near the main gate of the company in the public domain.	Yes, it is complied. Status of compliance has been uploaded on company's website, i.e. www.dilenergy.co.in Reports are already sent to Regional office of MoEF, the respective Zonal office of CPCB and the SPCB. The criteria pollutant levels namely: SPM, RSPM (PM10/PM 2.5) So2, and NOx (ambient levels are displayed at the main gate of the company in the public domain.
(xxxi)	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 by e-mail) to the respective Regional Office of	Yes, six monthly reports are regularly submitted since beginning about the status of compliance of the stipulated EC conditions including results of monitored to the respective Regional office of MoEF, the respective Zonal

	MoEF, the respective Zonal Office of CPCB and the SPCB.	office of CPCB and the SPCB.
(xxxii)	The environment statement for each financial /year ending 31st 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 off the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail.	Yes, Environment Statement for financial /year ending 31st March 2018 is complied and submitted to MPCB. Acknowledged letter copy is enclosed herewith as **Enclosure -9.** Copy of the same has been uploaded on company's website, i.e. www.dilenergy.co.in.
(xxxiii)	The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environment of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forests.	Yes, six monthly reports are regularly submitted since beginning about the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests Regional office, Central Pollution Control Board and State Pollution Control Board. Copy of the same has been uploaded on company's website, i.e. www.dilenergy.co.in.
	Regional Office of the Ministry of Environment & Forests will monitor the implementation of the stipulated conditions A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. Project proponent will up-load the compliance status in their website and up-date the same from time to time at least six monthly basis. Criteria pollutants levels including NOx (from slack & ambient air) shall be displayed at the main gate of the power plant.	Yes, will be complied time to time. Compliance status has been uploaded on company's website, i.e. www.dilenergy.co.in.
(xxxiv)	Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. These cost shall be included as part of the project cost. The funds	Yes, separate funds are allocated for implementation of environmental protection measures. Total Expenses from 1st April.18 to 30th September 2018 were **314.5 lakhs** for Environment

	earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.	control measures.
(xxxv)	The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.	Plant is in running condition.COD for unit #1 was on dated 11 Feb. 2014 & for unit #2 was 02th Aug. 2014. Information has been given to the authorities.
(xxxvi)	Full cooperation shall be extended to the Scientists/Officers from the Ministry/Regional Office of the Ministry at Bhopal/CPCB/SPCB who would be monitoring the compliance of environmental status.	Agreed.

Yours faithfully,
For **DHARIWAL INFRASTRUCTURE LTD.**

(Biplab Kanti Kar)
Head O & M

Encl. : As above

ENCLOSURE – 1

GROUND WATER LEVEL STATUS

May - 2018

Sr. No. of Villages	Village Name	Details of Locations	Field Code No.	Date of Measurement	Internal Diameter in mtr. (m)	Total Depth from measuring point in mtr.(depth in mbmp)	Static Water Level from Measuring Point in mtr.(level in mbmp)	Measuring Point i.e. MP distance above ground level in mtr. (magl)	Water Level below ground level (level in mbmp - magl = mbgl)
1.	**Village- Pandharkwada**	Dugwell of Shri Pandari Zitraji Wadai Farm	DIL 1	15-05-2018	2.55	9.5	8.90	0.8	8.1
2.	**Village- Sonegaon**	Grampanchayat Dugwell,Near Hanuman Mandir	DIL 2	15-05-2018	4.10	9.8	8.10	0.8	7.3
3.	**Village- Sonegaon**	Borewell of Shri Kundlik Vishwanath Urkude,	DIL 3	15-05-2018	0.16	80.0	7.20	0.1	7.1
4.	**Village- Yerur**	Dugwell of Shri Ravindra Pandurangji Balki	DIL 4	15-05-2018	6.0	9.5	8.30	0.1	8.20
5.	**Village- Wandhari**	Dugwell of Shri Anandrao Vithoba Kawarashe Farm	DIL 5	15-05-2018	5.0	10.3	8.20	0.2	8.0

6.	**Village- Yerur**	Grampanchayat Dugwell near Primary School	DIL 6	15-05-2018	4.95	11.0	9.10	0.7	8.40
7.	**Village- Ghodpeth**	Dugwell of Shiv Mandir	DIL 7	15-05-2018	4.50	9.0	7.40	0.6	6.8
8.	**Village- Tadali**	Grampanchayat Dugwell Near Z. P. Primary School	DIL 8	15-05-2018	3.65	12.35	9.80	0.8	9.0
9.	**Village- Morwa**	Dugwell near Jagnath Baba Mandir	DIL 9	15-05-2018	2.40	14.80	7.70	0.8	6.9
10.	**Village- Mursa**	Grampanchayat. Dugwell near Z.P. Primary School	DIL 10	15-05-2018	7.0	10.8	9.10	4.4	4.7
11.	**MIDC,Tadali**	Piezometer Well No.5 near Chimney Area	DIL 11	15-05-2018	0.1	15.0	10.2	0.2	10.0
12.	**MIDC,Tadali**	Piezometer Well No.4 behind Site Office near Cooling Tower, DIL	DIL 12	15-05-2018	0.1	15.0	9.80	0.1	9.7
13	**Village- Wadha**	Intake Well	DIL 12	15-05-2018	11.0	21.8	15.3	2.20	31.1
Note: All the above Ground Water Level Analysis were done by MOEF Approved 3rd party M/s Earth care Pvt. Ltd.									

August – 2018

Sr. No. of Villages	Village Name	Details of Locations	Field Code No.	Date of Measurement	Internal Diameter in mtr. (m)	Total Depth from measuring point in mtr.(depth in mbmp)	Static Water Level from Measuring Point in mtr.(level in mbmp)	Measuring Point i.e. MP distance above ground level in mtr. (magl)	Water Level below ground level (level in mbmp - magl = mbgl)
1.	**Village- Pandharkwada**	Dugwell of Shri Pandari Zitraji Wadai Farm	DIL 1	08-08-2018	2.55	9.5	6.9	0.8	6.1
2.	**Village- Sonegaon**	Grampanchayat Dugwell,Near Hanuman Mandir	DIL 2	08-08-2018	4.10	9.8	5.80	0.8	5.0
3.	**Village- Sonegaon**	Borewell of Shri Kundlik Vishwanath Urkude,	DIL 3	08-08-2018	0.16	30.0	4.50	0.1	3.5
4.	**Village- Yerur**	Dugwell of Shri Ravindra Pandurangji Balki	DIL 4	08-08-2018	6.0	9.5	5.30	0.1	5.2
5.	**Village- Wandhari**	Dugwell of Shri Anandrao Vithoba Kawarashe Farm	DIL 5	08-08-2018	5.0	10.3	3.50	0.2	3.3
6.	**Village- Yerur**	Grampanchayat Dugwell near Primary School	DIL 6	08-08-2018	4.95	11.0	6.80	0.7	6.1
7.	**Village- Ghodpeth**	Dugwell of Shiv Mandir	DIL 7	08-08-2018	4.50	9.0	3.10	0.6	2.5
8.	**Village- Tadali**	Grampanchayat Dugwell Near Z. P. Primary School	DIL 8	08-08-2018	3.65	12.35	3.20	0.8	2.4
9.	**Village- Morwa**	Dugwell near Jagnath Baba Mandir	DIL 9	08-08-2018	2.40	14.80	2.80	0.8	2.0

Sr. No. of Villages	Village Name	Details of Locations	Field Code No.	Date of Measurement	Internal Diameter in mtr. (m)	Total Depth from measuring point in mtr.(depth in mbmp)	Static Water Level from Measuring Point in mtr.(level in mbmp)	Measuring Point i.e. MP distance above ground level in mtr. (magl)	Water Level below ground level (level in mbmp - magl = mbgl)
10.	**Village- Mursa**	Grampanchayat. Dugwell near Z.P. Primary School	DIL 10	08-08-2018	7.0	10.8	4.40	4.4	0.2
11.	**MIDC,Tadali**	Piezometer Well No.5 near Chimney Area	DIL 11	08-08-2018	0.1	15.0	25.0	0.2	24.8
12.	**MIDC,Tadali**	Piezometer Well No.4 behind Site Office near Cooling Tower, DIL	DIL 12	08-08-2018	0.1	15.0	-	0.1	-
13	**Village- Wadha**	Intake Well	DIL 12	08-08-2018	11.0	21.8	14.0	2.20	11.8
Note: All the above Ground Water Level Analysis were done by MOEF Approved 3rd party M/s Earth care Pvt. Ltd.									

ENCLOSURE -2

WATER QUALITY STATUS

Sr. No.	Parameters	Acceptable / Permissible Limit (IS 10500: 2012)	Concentration			
			Location			
			Dugwell Water (Mr. Pandari Zitraji Wadai Farm, Village- Pandharkawda)	Borewell Water (Gram Panchayat Borewell near Hanuman Mandir, Village- Sonegaon)	Borewell Water (Mr. Kundlik Vishwanath Urkude Farm, Village- Sonegaon)	Dugwell Water (Mr. Ravindra Pandurang Bulki Farm, Village- Yerur)
			15-05-2018	15-05-2018	15-05-2018	15-05-2018
1.	Colour, Hazen units	5/15	1.0	1.0	1.0	1.0
2.	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3.	pH value	6.5 to 8.5	7.57	7.50	7.63	8.34
4.	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5.	Turbidity, NTU	1/5	<0.1	<0.1	<0.1	0.2
6.	Total dissolved solids, mg/l	500/2000	1909	1282.0	432.0	559.0
7.	Boron (as B) mg/l	0.5/1.0	0.193	0.142	0.021	0.024
8.	Calcium (as Ca) ,mg/l	75/200	296.0	158.4	70.4	50.4
9.	Chloride (as Cl), mg/l	250/1000	349.9	199.9	18.9	16.5
10.	Copper (as Cu), mg/l	0.05/1.5	0.09	0.08	<0.006	<0.006
11.	Fluoride (as F), mg/l	1.0/1.5	0.35	0.563	0.99	1.48
12.	Free Residual Chlorine, mg/l	0.2/1.0	<0.1	<0.1	<0.1	<0.1

13	Iron (as Fe), mg/l	0.3	0.143	0.125	0.07	0.043
14	Magnesium (as Mg), mg/l	30/100	32.4	14.6	16.6	0.97
15	Manganese (as Mn), mg/l	0.1/0.3	<0.003	<0.003	<0.003	<0.003
16	Nitrate (as NO_3), mg/l	45	3.48	2.31	0.51	0.47
17	Sulphate (as SO_4), mg/l	200/400	144.2	85.4	27.2	49.9
18	Total Alkalinity (as $CaCO_3$) mg/l	200/600	343.4	252.5	297.9	308.1
19	Total Hardness(as $CaCO_3$) mg/l	300/600	872.0	456.0	244.0	130.0
20	Zinc (as Zn) mg/l	5/15	0.22	0.21	0.09	0.063
21	Lead (as Pb) mg/l	0.01	<0.01	<0.01	<0.01	<0.01
22	Mercury (as Hg) mg/l	0.05	<0.001	<0.001	<0.001	<0.001
23	Total Arsenic (as As) mg/l	0.01	<0.01	<0.01	<0.01	<0.01
24	Total Chromium (as Cr) mg/l	0.05	0.051	0.027	<0.005	<0.005
25.	Total Coliform Bacteria, (CFU /100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	2.0
26.	Thermotolerant Coliform Bacteria/E. Coli (CFU /100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected

Note: 1) All the above Ground Water Quality Analysis were done by MOEF Approved 3rd party M/s Earth care Pvt. Ltd.

2) Information given to local panchayat through DIL CSR team for the necessary treatment & assistance.

Sr. No.	Parameters	Acceptable / Permissible Limit (IS 10500: 2012)	Concentration			
			Location			
			Dugwell Water of Hanuman Mandir , Village- Wandhri	Dugwell Water (Near Jagnath Baba Mandir, Morwa)	Dugwell Water (Shiv Mandir , Village – Ghodpeth)	Dugwell Water (Grampanchyat Dugwell Near ZP Primary School, Village – Tadali)
			15-05-2018	15-05-2013	15-05-2018	15-05-2018
1.	Colour, Hazen units	5/15	1.0	3.0	1.0	1.0
2.	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3.	pH value	6.5 to 8.5	7.30	7.60	7.48	7.20
4.	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5.	Turbidity, NTU	1/5	<0.1	0.3	<0.1	<0.1
6.	Total dissolved solids, mg/l	500/2000	1643.0	561.0	532.0	
7.	Boron (as B) mg/l	0.5/1.0	0.12	0.062	0.042	0.219
8.	Calcium (as Ca) ,mg/l	75/200	230.4	89.6	88.0	Nil
9.	Chloride (as Cl), mg/l	250/1000	214.9	37.9	36.5	
10.	Copper (as Cu), mg/l	0.05/1.5	0.021	0.021	<0.006	0.32
11.	Fluoride (as F), mg/l	1.0/1.5	1.11	0.586	0.60	0.35
12.	Free Residual Chlorine, mg/l	0.2/1.0	<0.1	<0.1	<0.1	7.41

13	Iron (as Fe), mg/l	0.3	0.125	0.07	0.062	0.13
14	Magnesium (as Mg), mg/l	30/100	70.1	15.6	12.7	5.84
15	Manganese (as Mn), mg/l	0.1/0.3	<0.003	<0.003	<0.003	0.06
16	Nitrate (as NO_3), mg/l	45	3.86	0.31	0.24	<0.2
17	Sulphate (as SO_4), mg/l	200/400	127.4	36.3	33.8	120.3
18	Total Alkalinity (as $CaCO_3$) mg/l	200/600	455.0	328.3	313.1	429.3
19	Total Hardness (as $CaCO_3$) mg/l	300/600	288.0	288.0	272.0	24.0
20	Zinc (as Zn) mg/l	5/15	0.192	0.212	0.126	0.214
21	Lead (as Pb) mg/l	0.01	<0.1	<0.01	<0.01	<0.01
22	Mercury (as Hg) mg/l	0.05	<0.001	<0.001	<0.001	<0.001
23	Total Arsenic (as As) mg/l	0.01	<0.1	<0.01	<0.01	<0.01
24	Total Chromium (as Cr) mg/l	0.05	0.005	<0.005	<0.005	0.007
25.	Total Coliform Bacteria, (CFU /100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
26.	Thermotolerant Coliform Bacteria/E. Coli (CFU /100 ml)	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected

Note: 1) All the above Ground Water Quality Analysis were done by MOEF Approved 3rd party M/s Earth care Pvt. Ltd.

2) Information given to local panchayat through DIL CSR team for the necessary treatment & assistance.

Sr. No.	Parameters	Acccptablc / Permissible Limit (IS 10500: 2012)	Ground Water from Intake Well near Wadha Village
			15-05-2018
1.	Colour, Hazen units	5/15	2.0
2.	Odour	Agreeable	Agreeable
3.	pH value	6.5 to 8.5	8.18
4.	Taste	Agreeable	Agreeable
5.	Turbidity, NTU	1/5	<0.1
6.	Total dissolved solids, mg/l	500/2000	507.0
7.	Boron (as B) mg/l	0.5/1.0	0.021
8.	Calcium (as Ca) ,mg/l	75/200	76.8
9.	Chloride (as Cl), mg/l	250/1000	34.9
10.	Copper (as Cu), mg/l	0.05/1.5	<0.006
11.	Fluoride (as F), mg/l	1.0/1.5	0.58
12.	Free Residual Chlorine, mg/l	0.2/1.0	0.1
13	Iron (as Fe), mg/l	0.3	0.072
14	Magnesium (as Mg), mg/l	30/100	38.9
15	Manganese (as Mn), mg/l	0.1/0.3	<0.003
16	Nitrate (as NO3), mg/l	45	0.38
17	Sulphate (as SO4), mg/l	200/400	95.4
18	Total Alkalinity (as CaCO3) mg/l	200/600	131.3
19	Total Hardness (as CaCO3) mg/l	300/600	352.0
20	Zinc (as Zn) mg/l	5/15	0.09
21	Lead (as Pb) mg/l	0.01	<0.01
22	Mercury (as Hg) mg/l	0.05	<0.001
23	Total Arsenic (as As) mg/l	0.01	<0.01
24	Total Chromium (as Cr) mg/l	0.05	<0.005
25	Total Coliform Bacteria, (CFU /100 ml)	Shall not be Detectable	Not Detected
26	Thermotolerant Coliform Bacteria/E. Coli (CFU /100 ml)	Shall not be Detectable	Not Detected

Note: 1) All the above Ground Water Quality Analysis were done by MOEF Approved 3rd party M/s Earth care Pvt. Ltd.

2) Information given to local panchayat through DIL CSR team for the necessary treatment & assistance.

Sr. No.	Parameters	Acceptable / Permissible Limit (IS 10500: 2012)	Concentration			
			Location			
			Dugwell Water (Mr. Pandar Zitraji Wadai Farm, Village- Pandharkawda)	Borewell Water (Gram Panchayat Borewell near Hanuman Mandir, Village- Sonegaon)	Borewell Water (Mr. Kundlik Vishwanath Urkude Farm, Village- Sonegaon)	Dugwell Water (Mr. Ravindra Pandurang Bulki Farm, Village- Yerur)
			08-08-2018	**08-08-2018**	**08-08-2018**	**08-08-2018**
1.	Colour, Hazen units	5/15	1.0	5.00	2.00	5.0
2.	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3.	pH value	6.5 to 8.5	7.21	7.04	8.09	8.13
4.	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5.	Turbidity, NTU	1/5	0.34	4.83	1.53	1.21
6.	Total dissolved solids, mg/l	500/2000	1834.0	1646.0	540.0	553.0
7.	Boron (as B) mg/l	0.5/1.0	<0.02	<0.02	<0.02	<0.02
8.	Calcium (as Ca) ,mg/l	75/200	192.0	176.0	38.4	41.6
9.	Chloride (as Cl), mg/l	250/1000	384.9	242.4	34.9	34.9
10.	Copper (as Cu), mg/l	0.05/1.5	<0.006	<0.006	<0.006	<0.006
11.	Fluoride (as F), mg/l	1.0/1.5	3.40	0 747	1.19	1.09
12.	Free Residual Chlorine, mg/l	0.2/1.0	<0.1	<0.1	<0.1	<0.1

13	Iron (as Fe), mg/l	0.3	0.180	<0.02	<0.02	0.160
14	Magnesium (as Mg), mg/l	30/100	92.5	34.1	14.6	11.7
15	Manganese (as Mn), mg/l	0.1/0.3	0.005	0.02	0.003	0.003
16	Nitrate (as NO_3), mg/l	45	9.30	8.12	4.12	4.88
17	Sulphate (as SO_4), mg/l	200/400	217.3	143.9	57.5	55.3
18	Total Alkalinity (as $CaCO_3$) mg/l	200/600	345.0	300.0	255.0	280.0
19	Total Hardness(as $CaCO_3$) mg/l	300/600	960.0	580.0	156.0	152.0
20	Zinc (as Zn) mg/l	5/15	<0.03	<0.03	<0.03	<0.03
21	Lead (as Pb) mg/l	0.01	<0.01	<0.01	<0.01	<0.01
22	Mercury (as Hg) mg/l	0.05	<0.001	<0.001	<0.001	<0.001
23	Total Arsenic (as As) mg/l	0.01	<0.01	<0.01	<0.01	<0.01
24	Total Chromium (as Cr) mg/l	0.05	<0.005	<0.005	<0.005	<0.005
25.	Total Coliform Bacteria, (CFU /100 ml)	Not Detected	6	Not Detected	Not Detected	16
26.	Thermotolerant Coliform Bacteria-E. Coli (CFU /100 ml)	Not Detected	1	Not Detected	Not Detected	2
Note: 1) All the above Ground Water Quality Analysis were done by MOEF Approved 3rd party M/s Earth care Pvt. Ltd. **2) Information given to local panchayat through DIL CSR team for the necessary treatment & assistance.**						

Sr. No.	Parameters	Acceptable / Permissible Limit (IS 10500: 2012)	Concentration			
			Location			
			Dugwell Water of Hanuman Mandir , Village- Wandhri	Dugwell Water (Near Jagnath Baba Mandir, Morwa)	Dugwell Water (Shiv Mandir , Village – Ghodpeth)	Dugwell Water (Grampanchyat Dugwell Near ZP Primary School, Village – Tadali)
			08-08-2018	08-08-2018	08-08-2018	08-08-2018
1.	Colour, Hazen units	5/15	1.0		1.0	5.00
2.	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3.	pH value	6.5 to 8.5	7.10	7.50	7.47	7.72
4.	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5.	Turbidity, NTU	1/5	0.94		0.59	0.80
6.	Total dissolved solids, mg/l	500/2000	1952.0	656.0	543.0	813.0
7.	Boron (as B) mg/l	0.5/1.0	<0.02	<0.02	<0.02	<0.02
8.	Calcium (as Ca) ,mg/l	75/200	152.0	88.0	73.6	104.0
9.	Chloride (as Cl), mg/l	250/1000	212.4	89.9	59.9	124.9
10.	Copper (as Cu), mg/l	0.05/1.5	0.016	0.009	<0.006	<0.006
11.	Fluoride (as F), mg/l	1.0/1.5	1.26	0.617	1.11	0.816
12.	Free Residual Chlorine, mg/l	0.2/1.0	<0.1	<0.1	<0.1	<0.1

13	Iron (as Fe), mg/l	0.3	0.85	0.088	<0.02	0.381
14	Magnesium (as Mg), mg/l	30/100	48.7	34.0	22.4	73.1
15	Manganese (as Mn), mg/l	0.1/0.3	0.077	0.022	<0.003	0.015
16	Nitrate (as NO_3), mg/l	45	7.6	0.38	2.83	8.22
17	Sulphate (as SO_4), mg/l	200/400	178.4	49.1	134.5	91.3
18	Total Alkalinity (as $CaCO_3$) mg/l	200/600	425.0	350.0	240.0	275.0
19	Total Hardness (as $CaCO_3$) mg/l	300/600	580.0	360.0	376.0	560.0
20	Zinc (as Zn) mg/l	5/15	0.259	0.539	<0.03	0.251
21	Lead (as Pb) mg/l	0.01	<0.01	<0.01	<0.01	<0.01
22	Mercury (as Hg) mg/l	0.05	<0.001	<0.001	<0.001	<0.001
23	Total Arsenic (as As) mg/l	0.01	<0.01	<0.01	<0.01	<0.01
24	Total Chromium (as Cr) mg/l	0.05	<0.005	<0.005	<0.005	<0.005
25.	Total Coliform Bacteria, (CFU /100 ml)	Not Detected	Not Detected	20	6	5
26.	Thermotolerant Coliform Bacteria/E. Coli (CFU /100 ml)	Not Detected	Not Detected	4	2	3

Note: 1) All the above Ground Water Quality Analysis were done by MOEF Approved 3rd party M/s Earth care Pvt Ltd.

2) Information given to local panchayat through DIL CSR team for the necessary treatment & assistance.

Sr. No.	Parameters	Acceptable / Permissible Limit (IS 10500: 2012)	Ground Water from Intake Well near Wadha Village
			08-08-2018
1.	Colour, Hazen units	5/15	4.0
2.	Ödour	Agreeable	Agreeable
3.	pH value	6.5 to 8.5	7.54
4.	Taste	Agreeable	Agreeable
5.	Turbidity, NTU	1/5	2.42
6.	Total dissolved solids, mg/l	500/2000	342.0
7.	Boron (as B) mg/l	0.5/1.0	<0.02
8.	Calcium (as Ca) ,mg/l	75/200	56.0
9.	Chloride (as Cl), mg/l	250/1000	89.9
10.	Copper (as Cu), mg/l	0.05/1.5	<0.006
11.	Fluoride (as F), mg/l	1.0/1.5	0.347
12.	Free Residual Chlorine, mg/l	0.2/1.0	<0.1
13	Iron (as Fe), mg/l	0.3	0.020
14	Magnesium (as Mg), mg/l	30/100	9.74
15	Manganese (as Mn), mg/l	0.1/0.3	0.029
16	Nitrate (as NO3), mg/l	45	3.16
17	Sulphate (as SO4), mg/l	200/400	28.4
18	Total Alkalinity (as CaCO3) mg/l	200/600	165.0
19	Total Hardness (as CaCO3) mg/l	300/600	180.0
20	Zinc (as Zn) mg/l	5/15	0.252
21	Lead (as Pb) mg/l	0.01	<0.01
22	Mercury (as Hg) mg/l	0.05	<0.001
23	Total Arsenic (as As) mg/l	0.01	<0.01
24	Total Chromium (as Cr) mg/l	0.05	<0.005
25	Total Coliform Bacteria, (CFU /100 ml)	Shall not be Detectable	4
26	Thermotolerant Coliform Bacteria/E. Coli (CFU /100 ml)	Shall not be Detectable	3

Note: 1) All the above Ground Water Quality Analysis were done by MOEF Approved 3rd party M/s Earth care Pvt. Ltd.

2) Information given to local panchayat through DIL CSR team for the necessary treatment & assistance.

ENCLOSURE - 3

STACK EMISSION QUALITY STATUS

Sr. No.	Parameters	Concentration							
		April-18		May-18		June-18		July-18	
		TPP Unit I	TPP Unit II	TPP Unit I	TPP Unit II	TPP Unit I	TPP Unit II	TPP Unit I	TPP Unit II
1.	Total Particulate Matter, mg/Nm^3	6.90	28.3	12.9	32.5	18.3	39.2	11.6	21.3
2.	Sulphur Dioxide as SO_2, mg/Nm^3	1258.5	1247.9	1146.8	1142.4	1399.7	1123.6	1224.9	1101.5
3.	Sulphur Dioxide as SO_2, Kg/Hr	1189.2	1536.9	931.0	1350.4	1378.8	1469.5	1191.1	1177.2
4.	Oxides of Nitrogen as NO_2, mg/Nm^3	557.2	338.8	678.6	189.1	799.4	114.7	358.5	182.4
5.	Oxides of Nitrogen as NO_2, ppm	296.2	180.05	360.7	100.5	424.9	60.9	190.5	96.9
6.	Mercury as Hg, mg/Nm^3	0.014	0.012	0.01	0.011	0.012	0.01	0.012	0.014
Note: All the above Ground Water Quality Analysis were done by MOEF Approved 3rd party M/s Earth care Pvt. Ltd.									

Sr. No.	Parameters	Concentration						
		August-2018					September-2018	
		D.G. Set No.1 1500 KVA (Left Bank)	D.G. Set No.2 1500 KVA (Left Bank)	D.G. Set No.1 1500 KVA Right Bank	D.G. Set No.2 1500 KVA (Right Bank)	TPP Unit- II	TPP Unit I	TPP Unit II
1.	Total Particulate Matter, mg/Nm^3	43.1	46.5	45.7	47.7	36.5	30.4	31.9
2.	Sulphur Dioxide as SO_2, mg/Nm^3	210.6	195.0	174.2	225.1	1120.5	1075.0	1146.0
3.	Sulphur Dioxide as SO_2, Kg/Hr	0.43	0.40	0.37	0.48	1235.4	821.9	1405.5
4.	Oxides of Nitrogen as NO_2, mg/Nm^3	184.3	178.7	167.9	216.5	173.2	267.9	238.7
5.	Oxides of Nitrogen as NO_2, ppm	97.9	94.9	89.3	115.1	92.1	142.4	126.9
6.	Mercury as Hg, mg/Nm^3	--	--	--	--	0.012	0.010	0.011
Note: All the above Ground Water Quality Analysis were done by MOEF Approved 3rd party M/s Earth care Pvt. Ltd.								

ENCLOSURE – 4

EFFLUENT QUALITY STATUS

Effluent Quality Monitoring report - APRIL.18 to SEPTEMBER.18									
Sr. No.	**Parameter**	**NORMS**		**APR.18**	**MAY.18**	**JUNE.18**	**JULY.18**	**AUG.18**	**SEPT.18**
1.	**PH**	**5.5 to 9.0**	**ETP Discharge**	7.48	7.84	8.36	7.30	7.87	7.83
2.	**Total Supended Solid**	**100 mg/l**		12.8	16.0	8.80	14.0	8.0	6.0
3.	**Oil & Grease**	**10 mg/l**		<0.2	<0.2	<0.2	<0.2	7.87	<0.2
4.	**Biolochemical Oxygen Demand (3 days/27°C)**	**30 mg/l**		<0.2	<0.2	<0.2	3.60	4.10	3.7
5.	**Chemical Oxgen demand**	**250 mg/l**		62.5	48.0	56.0	60.0	68.0	56.0
6.	**Total Dissolved Solid**	**2100 mg/l**		1654.0	1640.0	1317.0	1602.0	1558.0	889.0
Note: The Effluent Quality monitoring done MOEF approved 3rd party M/s Earth care Pvt. Ltd.									

Effluent Quality Monitoring report -APRIL.18 to SEPTEMBER.18												
Sl.No.	**Parameter**	**Norms**		**APR.18**		**MAY.18**		**JUNE.18**		**JULY.18**	**AUG.18**	**SEPT.18**	
				unit – I	**unit - II**	**unit - I**	**unit - II**	**unit - I**	**unit - II**	**unit - II**	**unit - II**	**unit - I**	**unit - II**
1	**PH**	**5.5 - 9.0**	**Condensor cooling Water**	7.42	8.80	7.56	7.50	7.92	7.84	7.80	8.05	7.86	7.74
2	**Temp.**	**<5°C higher than Intake water**		4.0	4.0	3.0	3.0	3.0	3.0	4.0	2.0	3.0	2.0
3	**Free Available Chlorine**	**0.5 mg/l**		<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Note:	**Effluent Quality monitoring done by MoEF approved 3rd party M/s Earth care Pvt. Ltd.**												

Effluent Quality Monitoring report - APRIL.18 to SEPTEMBER.18

Sl.No.	Parameter	Norms		APR.18		MAY.18		JUNE.18		JULY.18	AUG.18	SEPT.18	
				unit - I	unit - II	unit - I	unit - II	unit - I	unit - II	unit - II	unit - II	unit - I	unit - II
1	Total Suspended solid	100 mg/l	Boiler Blow Down	9.20	6.00	8.0	14.0	10.0	6.0	8.0	8.0	4.0	6.0
2	Oil & Grease	10 mg/l		<0.2	<0.2	0.20	0.20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
3	Copper(Total)	1 mg/l		0.14	0.06	0.051	0.04	0.04	0.035	0.046	0.038	0.06	0.04
4	Iron(Total),mg/l	1 mg/l		0.18	0.11	0.125	0.07	0.11	0.084	0.10	0.11	0.12	0.10
Note:	The Effluent Quality monitoring done by MoEF approved M/s Earth care Pvt. Ltd.												

Effluent Quality Monitoring-Cooling Tower Blow down report From APRIL.18 to SEPTEMBER.18													
Sl.No.	Parameter	Norms		APR.18		MAY.18		JUNE.18		JULY.18	AUG.18	SEPT.18	
				unit - I	unit - II	unit - I	unit - II	unit - I	unit - II	unit - II	unit - II	unit - I	unit - II
1	Free Available chlorine	0.5 mg/l	Cooling tower blow down	<0.1	<0.1	0.10	0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
2	Zinc	1 mg/l		0.10	0.12	0.162	0.171	0.144	0.158	0.48	0.39	0.15	0.34
3	Chromium (Total)	0.2 mg/l		0.06	0.07	0.005	0.021	0.016	0.018	0 025	0.03	0.02	0.03
4	Phosphate	5 mg/l		0 60	0.55	0.90	0.96	0.93	1.04	1.67	1.94	1.94	2.12
Note:	The Effluent Quality Monitoring done by MoEF approved 3rd Party M/s Earth care Pvt. Ltd.												

Effluent Quality Monitoring-Ash Pond report From APRIL.18 to SEPTEMBER.18									
Sl.No.	Parameter	unit		APR.18	MAY.18	JUNE.18	JULY.18	AUG.18	SEPT.18
1	PH	--	Ash Pond	7.99	7.56	7.65	8.91	8.93	8.67
2	Oil & grease	mg/l		<0.2	0.20	<0.2	<0.2	<0.2	<0.2
3	TSS	mg/l		6.40	58.0	10.0	18.0	8.0	10.0
4	Lead (As Pb)	mg/l		0.12	0.072	0.084	0.10	0.12	0.14
5	Mercury (As Hg)	mg/l		0.008	0.009	0.008	0.012	0.014	0.021
6	Total Chromium (As Cr)	mg/l		0.09	0.052	0.056	0.09	0.11	0.10
7	Total Arsenic (As As)	mg/l		0.05	0.031	0.034	0.06	0.08	0.06
Note:	Effluent Quality Monitoring done by MoEF approved 3rd Party M/s Earth care Pvt. Ltd.								

Effluent Quality Monitoring-STP Treated effluent report From APRIL.18 to SEPTEMBER.18										
Sl.No.	Parameter	Norms	Unit		APR.18	MAY.18	JUNE.18	JULY.18	AUG.18	SEPT.18
1	PH	5.5 to 9.0		STP Treated Effluent	6.97	7.16	7.22	7.49	7.56	7.45
2	Total Suspended Solids (TSS)	100	mg/L		6.00	6.0	10.0	3.60	4.00	12.0
3	BOD	100	mg/L		5.40	8.0	12.0	4.00	5.60	7.20
Note:	Effluent Quality Monitoring done by MoEF approved 3rd Party M/s Earth care Pvt. Ltd.									

ENCLOSURE – 5

AMBIENT NOISE QUALITY STATUS

Location			AAQMS Cabin-01 (Near VIP Gate)		AAQMS Cabin-02 (Near ETP & RWH Pond)		AAQMS Cabin-03 (Near Old Switch Yard)	
Parameters	**Month**	**Reading**	**During Day Time**	**During Night Time**	**During Day Time**	**During Night Time**	**During Day Time**	**During Night Time**
Noise Level in dB (A)	**April-2018**	Leq	60.3	50.6	61.4	53.9	63.6	55.1
	May-2018	Leq	59.1	50.4	65.7	57.5	58.4	49.5
	June-2018	Leq	60.0	49.8	64.2	54.3	59.0	49.3
	July-2018	Leq	62.2	54.4	63.5	55.6	60.2	49.9
	August-2018	Leq	66.2	55.0	64.6	54.1	65.5	54.1
	September-2018	Leq	65.9	53.8	65.1	51.8	63.8	50.1
Norms		**Industrial Area**	**75**	**70**	**75**	**70**	**75**	**70**
Note: All the above Ambient Noise Quality Analysis were done by MOEF Approved 3rd party M/s Earth care Pvt. Ltd.								

ENCLOSURE – 6

AMBIENT AIR QUALITY STATUS

1.0 Location: - AAQMS Cabin-01 (Near VIP Gate)

Sr. No.	Parameters	Norms	TWA	Concentration					
				April-2018	May-2018	June-2018	July-2018	Aug-2018	Sept-2018
1.	Sulphur Dioxide (SO_2) µg/m^3	80	Annual	7.63	7.70	6.51	6.19	8.10	6.02
2.	Nitrogen Dioxide (NO_2) µg/m^3	80	Annual	21.5	21.5	14.9	9.30	12.1	11.8
3.	Particulate Matter of size less than 10 µm (PM_{10}) µg/m^3	100	Annual	48.9	57.6	61.9	49.4	49.6	45.7
4.	Particulate Matter of size less than 2.5 µm ($PM_{2.5}$)µg/m^3	60	Annual	24.5	25.2	27.7	21.8	20.9	19.1
5.	Ozone (O_3) (µg/m^3)	100	8 Hrs	20.9	15.4	12.1	12.9	12.3	14.6
6.	Lead (Pb) (µg/m^3)	0.5	Annual	0.25	0.18	0.032	0.04	0.05	0.03
7.	Carbon Monoxide (CO) (mg/m^3)	2	8 Hrs	0.62	0.4	0.2	0.14	0.14	0.20
8.	Ammonia (NH_3) (µg/m^3)	100	Annual	21.9	16.2	14.4	11.8	10.5	7.91
9.	Benzene (C_6H_6) (µg/m^3)	5	Annual	3.21	3.21	3.21	3.15	3.19	3.21
10.	Benzo(a) Pyrene (BaP) (ng/m^3)	1	Annual	0.51	0.63	0.55	0.35	0.32	0.58
11.	Arsenic (As) (ng/m^3)	6	Annual	2.54	2.45	2.57	2.34	2.23	2.60
12.	Nickel (Ni) (ng/m^3)	20	Annual	13.8	10.2	9.67	7.67	7.08	8.21
Note: All the above Ambient Air Quality Analysis were done by MOEF Approved 3rd party M/s Earth care Pvt. Ltd.									

2.0 Location: - AAQMS Cabin-02 (Near ETP and RWH pond)

Sr. No.	Parameters	Norms	TWA	Concentration					
				April-2018	May-2018	June-2018	July-2018	Aug-2018	Sept-2018
1.	Sulphur Dioxide (SO_2) µg/m^3	80	Annual	7.12	6.24	8.37	8.02	8.06	6.58
2.	Nitrogen Dioxide (NO_2) µg/m^3	80	Annual	19.9	19.9	12.2	12.6	11.23	12.1
3.	Particulate Matter of size less than 10 µm (PM_{10}) µg/m^3	100	Annual	51.6	48.5	63.7	46.1	47.6	48.6
4.	Particulate Matter of size less than 2.5 µm ($PM_{2.5}$)µg/m^3	60	Annual	27.8	22.3	29.9	24.6	21.1	21.5
5.	Ozone (O_3) (µg/m^3)	100	8 Hrs	23.4	12.8	15.0	10.4	10.6	15.1
6.	Lead (Pb) (µg/m^3)	0.5	Annual	0.32	0.12	0.06	0.031	0.06	0.03
7.	Carbon Monoxide (CO) (mg/m^3)	2	8 Hrs	0.58	0.3	0.28	0.16	0.18	0.26
8.	Ammonia (NH_3) (µg/m^3)	100	Annual	21.4	13.7	12.8	8.50	8.31	6.96
9.	Benzene (C_6H_6) (µg/m^3)	5	Annual	3.25	3.24	3.36	3.10	3.24	3.29
10.	Benzo(a) Pyrene (BaP) (ng/m^3)	1	Annual	0.53	0.53	0.61	0.36	0.40	0.58
11.	Arsenic (As) (ng/m^3)	6	Annual	2.56	2.50	2.70	2.07	2.66	2.43
12.	Nickel (Ni) (ng/m^3)	20	Annual	14.9	8.93	8.88	7.89	8.20	9.28
Note: All the above Ambient Air Quality Analysis were done by MOEF Approved 3rd party M/s Earth care Pvt. Ltd.									

3.0 Location: - AAQMS Cabin-03 (Near Old Switchyard)

Sr. No.	Parameters	Norms	TWA	Concentration					
				April-2018	May-2018	June-2018	July-2018	Aug-2018	Sept-2018
1.	Sulphur Dioxide (SO_2) µg/m^3	80	Annual	7.99	6.83	7.97	7.71	7.54	6.35
2.	Nitrogen Dioxide (NO_2) µg/m^3	80	Annual	20.7	16.6	10.4	10.4	11.4	12.9
3.	Particulate Matter of size less than 10 µm (PM_{10}) µg/m^3	100	Annual	49.5	47.2	56.5	39.6	39.7	48.5
4.	Particulate Matter of size less than 2.5 µm ($PM_{2.5}$)µg/m^3	60	Annual	29.2	25.4	27.5	16.7	16.5	24.0
5.	Ozone (O_3) (µg/m^3)	100	8 Hrs	21.6	14.9	14.5	8.20	8.47	14.7
6.	Lead (Pb) (µg/m^3)	0.5	Annual	0.31	0.12	0.05	0.02	0.03	0.05
7.	Carbon Monoxide (CO) (mg/m^3)	2	8 Hrs	0.65	0.26	0.24	0.12	0.12	0.26
8.	Ammonia (NH_3) (µg/m^3)	100	Annual	25.7	14.9	9.09	6.50	6.74	7.85
9.	Benzene (C_6H_6) (µg/m^3)	5	Annual	3.35	3.21	3.26	2.95	2.95	2.88
10.	Benzo(a) Pyrene (BaP) (ng/m^3)	1	Annual	0.49	0.53	0.59	0.35	0.27	0.43
11.	Arsenic (As) (ng/m^3)	6	Annual	2.48	2.48	2.63	1.83	2.30	2.52
12.	Nickel (Ni) (ng/m^3)	20	Annual	14.9	9.52	8.60	7.15	6.92	7.37
Note: All the above Ambient Air Quality Analysis were done by MOEF Approved 3rd party M/s Earth care Pvt. Ltd.									

4.0 Location: - Mr. Maroti Shankar Roge house Village-Sonegaon

Sr. No.	Parameters	Norms	TWA	Concentration					
				April-2018	May-2018	June-2018	July-2018	Aug-2018	Sept-2018
1.	Sulphur Dioxide (SO_2) µg/m^3	80	Annual	6.58	8.14	7.76	7.44	7.16	6.89
2.	Nitrogen Dioxide (NO_2) µg/m^3	80	Annual	20.1	21.2	15.7	12.5	12.1	11.7
3.	Particulate Matter of size less than 10 µm (PM_{10}) µg/m^3	100	Annual	51.4	46.6	59.1	55.4	46.0	47.4
4.	Particulate Matter of size less than 2.5 µm ($PM_{2.5}$)µg/m^3	60	Annual	16.4	14.4	28.3	24.5	21.3	21.0
5.	Ozone (O_3) (µg/m^3)	100	8 Hrs	20.0	10.2	5.60	6.76	6.54	12.3
6.	Lead (Pb) (µg/m^3)	0.5	Annual	0.20	0.08	0.032	0.02	0.029	0.02
7.	Carbon Monoxide (CO) (mg/m^3)	2	8 Hrs	0.31	0.18	0.15	0.10	0.10	0.14
8.	Ammonia (NH_3) (µg/m^3)	100	Annual	20.3	14.3	12.2	8.10	8.31	6.40
9.	Benzene (C_6H_6) (µg/m^3)	5	Annual	3.36	2.86	3.24	2.98	2.75	2.56
10.	Benzo(a) Pyrene (BaP) (ng/m^3)	1	Annual	0.51	0.51	0.54	0.32	0.34	0.32
11.	Arsenic (As) (ng/m^3)	6	Annual	2.59	2.16	2.60	1.88	1.87	1.74
12.	Nickel (Ni) (ng/m^3)	20	Annual	7.78	8.21	8.77	7.26	7.49	7.48
Note: All the above Ambient Air Quality Analysis were done by MOEF Approved 3rd party M/s Earth care Pvt. Ltd.									

5.0 Location: - Terrace of Shri Bapurao Pimpalkar House, Village - Wandhri

Sr. No.	Parameters	Norms	TWA	Concentration					
				April-2018	May-2018	June-2018	July-2018	Aug-2018	Sept-2018
1.	Sulphur Dioxide (SO_2) µg/m^3	80	Annual	5.79	8.35	7.89	6.70	6.71	6.56
2.	Nitrogen Dioxide (NO_2) µg/m^3	80	Annual	21.4	24.3	16.2	11.8	11.2	11.5
3.	Particulate Matter of size less than 10 µm (PM_{10}) µg/m^3	100	Annual	39.4	41.7	58.6	33.8	44.4	41.1
4.	Particulate Matter of size less than 2.5 µm ($PM_{2.5}$)µg/m^3	60	Annual	15.1	18.9	25.0	14.7	15.8	16.6
5.	Ozone (O_3) (µg/m^3)	100	8 Hrs	11.1	11.8	5.90	6.09	6.37	12.4
6.	Lead (Pb) (µg/m^3)	0.5	Annual	0.28	0.12	0.032	0.02	0.04	0.03
7.	Carbon Monoxide (CO) (mg/m^3)	2	8 Hrs	0.36	0.21	0.18	0.12	0.14	0.18
8.	Ammonia (NH_3) (µg/m^3)	100	Annual	21.3	14.9	13.8	7.50	8.31	8.57
9.	Benzene (C_6H_6) (µg/m^3)	5	Annual	3.56	3.25	3.26	2.16	2.59	2.70
10.	Benzo(a) Pyrene (BaP) (ng/m^3)	1	Annual	0.67	0.61	0.54	0.24	0.30	0.41
11.	Arsenic (As) (ng/m^3)	6	Annual	3.62	2.74	2.66	1.53	2.03	1.76
12.	Nickel (Ni) (ng/m^3)	20	Annual	8.40	9.04	8.88	6.15	7.92	7.62
Note: All the above Ambient Air Quality Analysis were done by MOEF Approved 3rd party M/s Earth care Pvt. Ltd.									

6.0 Location: - Terrace of Gram Panchayat, Village- Yerur

Sr. No.	Parameters	Norms	TWA	Concentration					
				April-2018	May-2018	June-2018	July-2018	Aug-2018	Sept-2018
1.	Sulphur Dioxide (SO_2) µg/m^3	80	Annual	6.49	9.47	8.74	8.62	8.41	6.86
2.	Nitrogen Dioxide (NO_2) µg/m^3	80	Annual	20.8	23.4	13.5	13.3	12.9	13.3
3.	Particulate Matter of size less than 10 µm (PM_{10}) µg/m^3	100	Annual	45.5	44.9	57.4	38.9	39.1	51.5
4.	Particulate Matter of size less than 2.5 µm ($PM_{2.5}$)µg/m^3	60	Annual	16.6	15.5	26.7	17.9	16.7	23.8
5.	Ozone (O_3) (µg/m^3)	100	8 Hrs	20.3	11.5	4.70	4.74	5.12	14.1
6.	Lead (Pb) (µg/m^3)	0.5	Annual	0.22	0.1	0.04	0.01	0.03	0.03
7.	Carbon Monoxide (CO) (mg/m^3)	2	8 Hrs	0.38	0.15	0.16	0.11	0.1	0.19
8.	Ammonia (NH_3) (µg/m^3)	100	Annual	21.8	14.3	11.2	7.30	8.31	6.80
9.	Benzene (C_6H_6) (µg/m^3)	5	Annual	3.33	3.34	3.26	2.84	2.42	2.68
10.	Benzo(a) Pyrene (BaP) (ng/m^3)	1	Annual	0.65	0.57	0.53	0.33	0.25	0.35
11.	Arsenic (As) (ng/m^3)	6	Annual	2.91	2.74	2.76	1.47	1.88	1.98
12.	Nickel (Ni) (ng/m^3)	20	Annual	8.16	9.22	8.84	6.48	7.06	7.36
Note: All the above Ambient Air Quality Analysis were done by MOEF Approved 3rd party M/s Earth care Pvt. Ltd.									

Enclosure-7

DHARIWAL INFRASTRUCTURE LIMITED,

Tadali, Dist. Chandrapur.

6 Monthly (April 18 to Sept 18)

Consolidated Report on

Corporate Social Responsibility

Year 2018 to 2019

Broad CSR Initiatives

1) **Swachh Bharat Abhiyan (Health, Sanitation & Drinking Water)**
2) **Digital Village Program**
3) **Skill Development**
4) **SHG Promotion and adolescent girls program**
5) **Education promotion**
6) **Agricultural / Irrigation Development**
7) **Village Infrastructure Development**

Swachh Bharat Abhiyan Program

Objectives

- To promote safe sanitation & clean environment as way of life in rural areas
- To incentivize Panchayat Raj Institutions (PRIs) to make the villagers Open Defecation Free(OFD) and to promote Solid and Liquid Waste Management(SLWM)
- To sustain the initiative of clean environment.
- To encourage organization to play a catalytic role in social mobilization in the implementation of Swachh Bharat Abhiyan

The Progress made so far under Swachh Bharat Abhiyan

- Organized Rally, Pathanitaka, Gram Swachhta Abhiyan, Home to Home mobilization, Exposure visit ,Swachh Bharat Abhiyan Workshop ,Gramsabha & concern dept Meeting for Sanitation.
- Meetings held with Sarpanch and villagers for mobilizing participation.
- Home visits conducted to mobilize people's participation and contribution to construction of toilets along with GP secretary & GP Members.
- DIL got felicitation from state home minister.
- Meeting with District Magistrate & CEO & BDO for sanitation.

Digital Village Program

Objective

- Selected Pandharkawda for the digital village program
- 100% coverage with the inclusion of cashless transactions, usage of online wallets and provision of free Wi-Fi.
- Mobile Banking, SMS Banking, Missed Call Alerts, Internet Banking, Debit Card etc. would be enabled for all households in the villages
- Villagers would be issued with RuPay debit card and they would be covered under RuPay Insurance Scheme
- Reduction of gap between rural and urban India, by bringing financially excluded people under the fold of banking.
- Based on the success of this initiative, DIL will plan for scaling up to more villages

Activity

- 100% Bank account opened for villagers in Pandharkawda Village .
- 90 % villagers have their Adhar linked with bank acount.
- 158 villagers were installed with cash less app for financial transaction such as BHIM ,PYTM ,MAHABANK, RUPAY, PHON PE etc.
- Organized 2 Cashless training for villagers.
- Survey
- Conducting classes for ZP school students.
- Conducting classes for women.
- Started Government to Customer service in Pandharkawda (G to C)

Output

- 158 villagers are using apps for cashless transaction.
- 90% Villagers have paid electricity bill through online payment. .
- 70 % villagers are using ATM.
- Villagers are getting certificate(Income certificate and other govt certi.) from the Centre.
- Mr Sudhirbhau Mungantiwar (State Finance Minister) has visited and inaugurated digital village.

Education Program

Objective

Ensure all students in classes 1st – 8th are able to perform at least 50% score in their class exams.

Activity

- Started 19 L2R, R2L classes in 8 villages 322 students have enrolled.
- 8 libraries are running successfully from last three years , 750 children have enrolled
- Organized 1 training for staff and Balsakhi.
- Organized Pustakwala program in 8 villages .
- Organized the drawing competition, GK exam and various type of program through the Ganesh Mandal .

Agriculture Program

Objective

- Farmers clubs in Shengaon , Pandharkawa, Wadha, Dhanora,Yerur & Sonegaon are able to access all supports from NABARD & Agriculture department
- Develop the Intake area into a Agriculture Demostration Farm for Farmers Training.

Activity

- Conducted five training for the farmers club such as fertilizer, pesticides, seeds, soil testing , cotton etc
- Conducted exposure visit in Warora .
- Maintenance of 150 Oranges plants in Intake well, Wadha. Planted 105 orange ,10 guava , 250 Nilgiri , marigold, lady finger , bins, fenugreek, coriander, brindle ,chilies and water melon and mangoes.
- Preparation of land for farming.

Self Help Group Program

Objective

- SHG members practice savings and credit
- SHGs have Bank linkages and have their Bank Accounts.
- SHG will start small business.

Activity

- Meeting with SHG group.
- 6 New SHG group formed
- 8 youth meeting have been conducted in villages.

Adolescent Girls Program

Objective

- Adolescent Girls of class VIII to XII in one school are access to safe and hygienic sanitary napkins.
- To create awareness of adolescence girls during their period..

Activity

- Organized 4 HB camp in four villages.
- Conducted awareness meeting for adolescent girls in 8 villages .

Skill Development Program

- Mobilization meeting for automobile training
- 10 students have selected for automobile training.

Village Infrastructure Development

- Renovation of ICCU Crist Hospital. ,
- Help for the Durga Pujan & Ganpati Pujan.

.

Expenditure

- Total Expenditure for the period from April 2018 to Sept 2018 for all CSR activities was Rs. 16.41 Lakhs.
- Total Expenditure for all CSR Activities till date was Rs. 287.5 Lakhs.

ENCLOSURE –8

Monitoring the Implementation of Environmental Safeguards

Ministry of Environment & Forests

Regional Office (W), Nagpur

Monitoring Report					
PART- I					
DATA SHEET					
Ref No.	DIL/HSE/F-09/18-19			**Date :**	28/11/2018
1.	Project type : River-valley/Mining / Industry/Thermal/Nuclear/other (specify)		:	Thermal Power Plant	
2	Name of the project		:	M/s. Dhariwal Infrastructure Ltd. Plot No. C-6, C-7 & C-8, Tadali Industrial Area, MIDC, Village – Tadali, Dist. - Chandrapur	
3.	Clearance letter (s)/OM no and date		:	J-13011/10/2009-IA. II (T) dated 04 -12-2009	
4.	Location				
	a.	District (s)	:	Chandrapur	
	b.	State(s)	:	Maharashtra	
	c.	Latitude/Longitude	:	Latitude : 20°00'30" to 20°01'20" North Longitude 79°11'50" to 79°12'35" East	
5.	Address for correspondence				
	a.	Address of Concerned Project Chief Engineer (with pin code & telephone/telex/fax numbers	:	Shri. Rabi Chowdhury, Managing Director M/s. Dhariwal Infrastructure Ltd. Plot No. C-6, C-7 & C-8, Tadali Industrial Area, MIDC, Village – Tadali, Dist. – Chandrapur, PIN - 442406 Phone No. 07172-645911-13 Fax No.- 07172-237992	
	b.	Address of Executive Project Engineer/Manager (with pin code/fax numbers)	:	Shri. Goutam Ghoshal Vice President M/s. Dhariwal Infrastructure Ltd. Plot No. C-6, C-7 & C-8, Tadali Industrial Area, MIDC, Village – Tadali, Dist. – Chandrapur PIN - 442406 Phone No. 07172-645911-13 Fax No.- 07172-237992	
6	Salient features				
	a.	of the project	:	Please refer **Annexure-1**	
	b.	of the environmental management plans	:		
/.	Break up of the project area				
	a.	submergence area : forest & non-forest	:	Not applicable since the Unit is set up in MIDC Industrial Area	

	b.	Others	:	Total project area : 441.84 Acres Area earmarked for green belt development is : 125.34 Acres
8.		Break up of the project affected population with enumeration of those losing houses/dwelling units only agricultural land only, both dwelling units & agricultural land & landless laborers/artisan (Please indicate whether these figures are based on any scientific and systematic survey carried out or only provisional figures, if a survey is carried out give details and years of survey)	:	Not applicable since the Unit is set up in MIDC Industrial Area
9.		Financial details		
	a.	Project cost as originally planned and subsequent revised estimates and the year of price reference	:	Total project cost originally planned was Rs. 3054 Crores. The gross capital incurred as on date is Rs. 3888.86 Crores.
	b.	Allocation made for environmental management plans with item wise and year wise break-up	Rs. **314.5** Lakhs.	

Sr.No.	**Particular**	**Capital Cost Incurred for April 2018 to September 2018 (Rs. In Lakhs)**	**Recurring Cost Incurred for April 2018 to September 2018 (Rs. In Lakhs)**
1	Air Pollution Control	142.67	117.23
2	Water Pollution Control	10.16	11.88
3	Noise Pollution Control		
4	Environment Monitoring and Management		9.27
5	Reclamation borrow/mined area		
6	Occupational Health		0.07
7	Green Belt and Land Environment		22.30
8	Others (Pl. Specify) Socio-economic Environment		0.9
	Total	**152.83**	**161.65**

	c.	Benefit cost ratio/Internal rate of Return and the year of assessment	:	The construction work is started in the financial year 2010-11and Plant is commissioned in two phases in October 2013 and July 2014.
	d.	Whether (c) includes the cost of environmental management as shown in the above	:	Yes
	e	Actual expenditure incurred on the project so far	:	Rs. 3888.86 Crores
	f.	Actual expenditure incurred on the environmental management plans from April 2018 to September 2018.	:	Capital Cost : Rs. 152.83 Lakhs Recurring Cost : Rs. 161.65 Lakhs **Total : Rs. 314.5 Lakhs**

10	Forest land requirement			
	a.	The status of approval for diversion of forest land for non-forestry use	:	Not applicable, since the Unit is located in MIDC Industrial Area, Tadali, Chandrapur.
	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 programme in the light 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)	:	June 2010
	b.	Date of completion (Actual and/of planned)	:	July 2014
13	Reasons for the delay if the project is yet to start		:	Work is completed.
14	Dates of site visits			
	a	The dates on which the project was monitored by the Regional Office on previous occasions, if any.	:	Nil
	b.	Date of site visit for this monitoring report.	:	--
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. (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.)		:	DIL is regularly submitting Half Yearly Compliance Reports since April 2010.

For **DHARIWAL INFRASTRUCTURE LTD.**

(Biplab Kanti Kar)
Head O & M

ANNEXURE-1

SALIENT FEATURES

1.0 Salient Features of the Project

- It is a coal based Thermal Power Plant (TPP) of capacity @ 2 x 300 MW. The requirement of coal is 3.0 Million TPA and full fledged coal handling plant is installed in the Unit.
- Auxiliary fuel, LDO is stored in 2 X 1000 m^3 storage capacity tank.
- Total fresh water requirement is 19.272 Million KL Per Annum and it is fulfilled from Wardha River.
- Rail infrastructure & Road network is adequately available.
- The 400 KV Sub-Station - Chandrapur is located at 7.0 km towards East direction and connected for power evacuation.
- The ash handling system comprising dry extraction by pneumatic conveying system has been provided, Ash bund of adequate capacity is also provided. Ash disposal as per Fly Ash Notification Nov. 2008 is in progress.
- The operation of 2 x 300 MW TPP is started with all pollution control systems.

2.0 Salient Features of Environment Management Plan

The adequate pollution control measures with latest pollution control system are installed in the Plant.
The EMP has been prepared to further mitigate the impacts, if any, on environment due to the Unit and to ensure that the study area will be well conserved during construction and operation phase of the TPP.

2.1.1 Construction Phase

- Constuction Phase is over in year 2014 and Plant (both Unit-1 and Unit-2) was commissioned on October 2013 and June 2014 respectively.

2.1.2 Operation Phase

2.1.2.1 Land Environment

The EMP for land environment is to scientifically utilize the capabilities of different plant species for attenuation of particulate and noise. Further, afforestation programme & green belt development programme is in progress on priority.

- The tree species selected for plantation are as per the CPCB Guidelines.
- Tree species are selected considering tolerance to specific conditions or alternatively wide adaptability to eco-physiological conditions.
- Fly ash is directly supplied to cement plants.
- Bottom ash is disposed at ash bund.
- Abandoned quarries/mines in the region will be studied for filling and leveling by bed ash as well as for green belt development.
- Generation of used/spent oil in insignificant and its disposal will be carried out scientifically.

21.2.2 Air Environment

Generation of ambient air quality data helps to develop sustainable environment. Following measures are carried out for further environmental improvements:

- A system is developed for the regular check up and efficient maintenance of all the pollution control arrangements.
- Truck/wagon unloading operations are regularly supervised to reduce fugitive emissions.
- A green belt around the plant site and plantation within the plant premises especially around the possible sources of fugitive emissions is carried out
- Water sprinkling on roads is carried out to prevent dust pollution.
- Water Sprinklers are provided in Coal yard and sprinkling is done to prevent dust pollution.

2.1.2.3 Noise Environment

- The operator's cabins and control rooms are properly acoustically insulated with special doors and observation windows.
- Noise attenuating devices like ear plug and ear muffs are provided to protect the workers from high noise levels.
- Walls and ceilings are lined with sound absorbing materials, wherever required.
- The vent valves are equipped with silencers.

2.1.2.4 Water Environment

- The water conservation scheme is implemented in different sections/ operations so as to reduce water requirements.
- Regular monitoring and quantification of water requirement at various operations/sections is carried out.
- Rain water harvesting is carried out.
- All the pipeline/taps leakage is promptly attended to.

2.1.2.5 Socio-Economic Environment

Environmental Management Plan (EMP) is prepared considering the impacts which have manifested as a result of the ongoing activities i.e. existing socio-economic profile in the study area. The details are given below

- Though there is limited direct employment required in the TPP, still the local people are given opportunities for indirect jobs and business in the project.
- All workers, labours & staff are provided with personal protective appliances (PPEs') and safety gadgets.
- Social welfare programmes with reference to health, education, water conservation, income generation are organized in the nearby villages.
- For all the social welfare activities to be undertaken by the authorities, collaboration and consultation is sought with the local administration, grampanchayat, block development office, NGOs etc. for better co-ordination.
- Rest rooms, canteen, drinking water etc near the work place are provided for contract labours as well as transporters.

ENCLOSURE - 9

Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

FORM V

Environmental Audit Report for the financial Year ending the 31st March 2018

Unique Application Number
MPCB-ENVIRONMENT_STATEMENT-0000013964

Submitted Date
29-09-2018

Company Information

Company Name
Dhariwal Infrastructure Limited

Application UAN number
MPCB-CONSENT 0000009208

Address
Dhariwal Infrastructure Limited

Plot no	***Taluka***	***Village***
C-6, C-7 & C-8	Tadali Industrial area MIDC	Tadali
Capital Investment (In lakhs)	***Scale***	***City***
393811	LSI	Chandrapur
Pincode	***Person Name***	***Designation***
442406	Devendra Tripathi	Manager-HSE
Telephone Number	***Fax Number***	***Email***
9561112004	07172237992	devendra.tripathi@rp-sg.in
Region	***Industry Category***	***Industry Type***
SRO-Chandrapur	Red	R48 Thermal Power Plants
Last Environmental statement submitted online	***Consent Number***	***Consent Issue Date***
yes	BO/RO(Chandrapur)/CAC-CELL/CAC-1703001440	21.03.2017
Consent Valid Upto		
31.12.2018		

Product Information

Product Name	***Consent Quantity***	***Actual Quantity***	***UOM***
Electricity generation	5256000	2393267	Mwh

By-product Information

By Product Name	***Consent Quantity***	***Actual Quantity***	***UOM***
0	0	0	

1) Water Consumption in m3/day

Water Consumption for	***Consent Quantity in m3/day***	***Actual Quantity in m3/day***
Process	5280	1539
Cooling	49440	13862
Domestic	40	37
All others	0	0
Total	54760	15438

1) Effluent Generation in CMD / MLD

Particulars	***Consent Quantity***	***Actual Quantity***	***UOM***

Trade Effluent	7776	618.6	CMD
Domestic Effluent	32	28.4	CMD

2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Power Generation	2.42	2.35	

3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Coal	0.6555564	0.6100388	
LDO	0.0000001193	0.00000032924	
Hydrochloric Acid	0.0000440	0.0000581	
Caustic Lye	0.0000235	0.0000324	
Sulphuric Acid	0.0002813	0.0002756	
Sodium hypochlorite	0.0002107	0.0002649	
Alum	0.0000502	0.000429	
Lime	0.0000034	0.0000049	

4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Coal	4029600	1459985	MT/A
LDO	4066	787	KL/A

Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

[A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour	Percentage of variation from prescribed standards with reasons		
	Quantity	Concentration	%variation	Standard	Reason
Our Industry is ZLD	0	0	0	2100	0

[B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/NM3)	Percentage of variation from prescribed standards with reasons		
	Quantity	Concentration	%variation	Standard	Reason
Stack -1 (Particulate Matter)	102.8	27.5	0	50	0
Stack -2 (Particulate Matter)	485	24.5	0	50	0

HAZARDOUS WASTES

1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.1 Used /spent oil	14.28	29.19	MT/A
34.2 Toxic metal-containing residue from water purificatio	0.4	0	MT/A

33.3 Discarded containers / barrels / liner	0	0	Nos./Y
Other Hazardous Waste	70	46	Nos./Y

2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
34.4 Chemical sludge, oil and grease skimming residue	0	0	MT/A

SOLID WASTES

1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
FLY ASH	307803	448906	MT/A
BOTTOM ASH	33358	44267	MT/A

2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
BIOLOGICAL SLUDGE	0	0	MT/A

3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	MT/A

Please specify the characteristics(in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
5.1 Used /spent oil	29.19	MT/A	Well below the norms, Testing report attached
34.2 Toxic metal-containing residue from water purificatio	0	MT/A	Well below the norms
34.4 Chemical sludge, oil and grease skimming residue	0	MT/A	0
33.3 Discarded containers / barrels / liner	0	Nos./Y	0
Other Hazardous Waste	46	Nos./Y	It is Battery Waste and well below the consented quantity

2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
FLY ASH	448906	MT/A	NA
BOTTOM ASH	44267	MT/A	NA

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
2015-16	0.	0	0	0	0	0
2016-17	1284	37686	0	8.32	386	4155
2017-18	458	0	298 Kg/day	8376435	503	0

Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution.

[A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection	***Environmental Protection Measures***	***Capital Investment (Lacks)***
Total exp made (capital & recurring) on Air pollution, water pollution and land pollution control measures, Greenery development and other Environment protection measures	Expenditure made on Air pollution, water pollution and land pollution control measures, Greenery development and other Environment protection measures	503

[B] Investment Proposed for next Year

Detail of measures for Environmental Protection	***Environmental Protection Measures***	***Capital Investment (Lacks)***
Total exp made (Capital) proposed on Air pollution, water pollution and land pollution control measures, Greenery development and other Environment protection measures	Expenditure proposed for on Air pollution, water pollution and land pollution control measures, Greenery development and other Environment protection measures as recurring is 206 lacs	673

Any other particulars in respect of environmental protection and abatement of pollution.

Particulars

Factory has already implemented all the necessary pollution control measures. Green belt development programme is a regular features.

Name & Designation

DEVENDRA PRASAD TRIPATHI, MANAGER HSE