

SPEED POST

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

BY SPEED POST

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 Bhawan,
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°00'30" to 20°01'20" N and longitude 79°11'50" to 79°12'35" E. Water requirement of 19.272 m cum 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.

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- 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 SO_x, NO_x 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.
not online..
- vi. High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm³.
- 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 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.
- 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 SO₂, NO_x, RSPM(PM₁₀/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 from 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.
- 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 Parishad / 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 , $\text{RSPM}(\text{PM}_{10}/\text{PM}_{2.5})$, SO_2 , NO_x (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

Environment and Forests

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.

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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

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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

Office copy



**RP-Sanjiv Goenka
Group**
Growing Legacies



Dhariwal Infrastructure Limited

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

Ref. No.: DIL/MoEF/HSE/10

Date: 28-05-2016

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

Sub. : Half Yearly E.C. Compliance report for the period (1st Oct. 2015 to 31st March 2016)

Ref.: MoEF, E.C. No. J-13011/10/2009-IA. II (T) dated 04-12-2009

Dear Sir,

Herewith we are submitting Half Yearly Compliance Report for the period from **1st October 2015 to 31st March 2016**, in respect of the stipulated prior environmental clearance terms and conditions with reference to our 2 x 300 MW, Thermal Power Plant at MIDC, Tadali Industrial Area, and Chandrapur (M.S.)

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

Thanking you,

Yours faithfully,

For DHARIWAL INFRASTRUCTURE LTD.

(Goutam Ghosal)
General Manager-O&M

Encl.: As above

CC:

Zonal Officer,
Central Pollution Control Board,
Parivesh Bhawan,
Opp. VMC Ward office, No.10, Subhanpura,
Vadodara, 300023 (Gujrat)

Regional Officer,
Maharashtra Pollution Control Board,
1st Floor, Udyog Bhawan,
Chandrapur,
Maharashtra

Recd. f. uson
31/5/16
Maharashtra Pollution Control Board
Regional office
Udyog Bhawan 1st Floor Station Road,
Chandrapur-442401.

**Environmental Compliance Report
For
The Period From
1st October 2015 to 31st March 2016**

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 and Forest,
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 31-08-2016.

All the environmental 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 hereunder for the period from 1st October 2015 to 31st March 2016 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 (October 2015 to March 2016) 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 (October 2015 to March 2016) are enclosed herewith as Enclosure -2
(v)	Two Bi-Flue stacks of 275 m height shall be provided with continuous online monitoring equipments for SO _x , NO _x 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, Bi-Flue stack of 275 m height are provided with continuous online monitoring equipments for SO _x , NO _x and PM. Exit velocity of flue gases is being maintained more than 25 m/sec. Mercury in outgoing emissions from stack is also being 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 .	Yes, High Efficiency Electrostatic Precipitator (ESP) for unit 1 & 2 are 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 4 th 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 4 th 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.
(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 State Pollution Control Board well In advance before undertaking the activity.	In the initial years bottom ash will not be disposed to abandoned mines.

(xii)	Closed cycle cooling system 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 used for bottom ash handling.
(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 have been made such that effluents and storm water do not get mixed.
(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 has been developed and through natural drains, rain water is collected and this water is used for plantation purpose.
(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 stock yard, especially during summer season has been made. Water sprinklers have been provided around coal stock yard and are kept in regular operation. (copy of location & lay out are attached as Enclosure-8)
(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 is 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 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	Network of existing wells and piezometers has been established for seasonal monitoring. The ground level monitoring and ground water quality analysis on seasonal basis in study area & specifically around ash pond site since beginning is regularly carried out by MOEF approved third party and reports are submitted. It is

	baseline data so as to ensure that the ground water quality is not adversely affected due to the project.	<p>observed that there is no adverse impact in the area.</p> <p>The ground water quality in the study area is also regularly analyzed for heavy metals and reports are submitted.</p>
(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 %	<p>As on date about 77,500 trees are existing.</p> <p>The major existing trees (46,200) are Akeshiya, Imli, Karanj, Mahaneem, Neem, Nilgiri, Peltoforam, Sisam and Casia.</p> <p>The other existing trees (31,300) are Black Ficus, Royal Palm, Aapta, Amla, Anjeer, Areka Palm, Aerial Palm, Arjun, Ashoka, Bargad, Badam, Banana, Boganvel, Chikku, Coconut, Flower tree, Fucus benjamina, Goldan Bambu, Green Bambu, Gulmohar, Jambhul, Jaswant, Kadam, Kanher, Kawat, Mahagani, Mango, Mogra, Mosambi, Nimbu, Pipal, Rain Tree, Red Rose, 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, Neem, Karanj, Shisam, Peltophorum, Alstonia (chatwan), Gulmohor etc.</p> <p>In the rainy season of the year 2016, plantations of about 20,000 saplings are being planted.</p>
(xx)	First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	Construction phase is completed. First aid and sanitation arrangements for the drivers and other contract workers are available. Regularly 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	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. will be periodically examined to maintain audiometric


	and any hearing loss including shifting to non noisy/less noisy areas.	record and any hearing loss including shifting to non noisy/less noisy areas. The ambient noise quality results for are enclosed herewith as Enclosure-4 .
(xxii)	Regular monitoring of ground level concentration of SO ₂ , NO _x , 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 on the website of the company.	Yes, regular ambient air quality monitoring at six locations is carried out and reports (October 2015 & March 2016) are enclosed herewith as Enclosure -5 .
(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.
(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	<p>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 is in progress.</p> <p>Providing sanitary toilets to 9 Adjacent villages. Education programme for Dropout students in nearby villages. Agriculture programme, Vegetable</p>

	employment and jobs.	<p>promotion activities & water shed project to adjacent villages.</p> <p>2 nos check Dam over Nallaha so that 3 times vegetables /crop can take in a year.</p> <p>Tree plantation in Surrounding villages</p> <p>Health check up plan for nearby villages on regular basis.</p> <p>Skill development programme.</p>
(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 be in this form of temporary structures to be removed after the completion of the project.	Yes, Construction phase is already completed & the demolition of temporary structures, which were provided during construction phase is under progress.
(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	Yes, it is complied.

	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 NO _x (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.	Yes, six monthly reports are regularly submitting since beginning.
(xxxii)	The environment statement for each financial /year ending 31 st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules. 1986, as amended subsequently, shall also be put on the website 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 31 st March 2015 is complied and submitted to MPCB. Acknowledged letter copy is enclosed herewith as Enclosure -6.B
(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 submitting since beginning.
(xxxiv)	Regional Office of the Ministry of Environment & Forests will monitor	Yes, will be complied time to time.

	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 upload 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.	Yes, separate funds are allocated for implementation of environmental protection measures.
(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.	Financial closure is done in the month of June 2010 and TPP construction & installation work is in full swing.
(xxxvii)	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.


(Goutam Ghosal)
General Manager-O&M

Encl: As above

Ref. No.: DIL/MoEF/HSE/10

Date: 28-04-2016

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

Sub. : Half Yearly E.C. Compliance report for the period (1st Oct. 2015 to 31st March 2016)

Ref.: MoEF, E.C. No. J-13011/10/2009-IA. II (T) dated 04-12-2009

Dear Sir,

Herewith we are submitting Half Yearly Compliance Report for the period from **1st October 2015 to 31st March 2016**, in respect of the stipulated prior environmental clearance terms and conditions with reference to our 2 x 300 MW, Thermal Power Plant at MIDC, Tadali Industrial Area, and Chandrapur (M.S.)

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

Thanking you,

Yours faithfully,

For DHARIWAL INFRASTRUCTURE LTD.

(Goutam Ghosal)
General Manager-O&M

Encl.: As above

CC:

Zonal Officer,
Central Pollution Control Board,
Parivesh Bhawan,
Opp. VMC Ward office, No.10, Subhanpura,
Vadodara, 300023 (Gujrat)

Regional Officer,
Maharashtra Pollution Control Board,
1st Floor, Udyog Bhawan,
Chandrapur,
Maharashtra

ENCLOSURE – 1
GROUND WATER LEVEL STATUS
January -2016

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	27-01-2016	2.55	9.5	7.75	0.8	6.85
2.	Village- Sonegaon	Grampanchayat Dugwell, Near Hanuman Mandir	DIL 2	27-01-2016	4.10	9.8	7.80	0.8	7.0
3.	Village- Sonegaon	Borewell of Shri Kundlik Vishwanath Urkude,	DIL 3	27-01-2016	0.16	8.0	8.34	0.1	8.24
4.	Village- Yerur	Dugwell of Shri Ravindra Pandurangji Balki	DIL 4	27-01-2016	6.0	9.5	8.70	0.1	8.6
5.	Village- Wandhari	Dugwell of Shri Anandrao Vithoba Kawarash Farm	DIL 5	27-01-2016	5.0	10.3	9.20	0.2	9.0

6.	Village- Yerur	Grampanchayat Dugwell near Primary School	DIL 6	27-01-2016	4.95	11.0	8.40	0.7	7.70
7.	Village- Ghodpeth	Dugwell of Shiv Mandir	DIL 7	27-01-2016	4.50	9.0	5.10	0.6	4.5
8.	Village- Tadali	Grampanchayat Dugwell Near Z.P. Primary School	DIL 8	27-01-2016	3.65	12.35	7.70	0.8	6.90
9.	Village- Morwa	Dugwell near Jagnath Baba Mandir	DIL 9	27-01-2016	2.40	14.80	3.20	0.8	2.4
10.	Village- Mursa	Grampanchayat, Dugwell near Z.P. Primary School	DIL 10	27-01-2016	7.0	10.8	7.70	4.4	3.5
11.	MIDC, Tadali	Piezometer Well No.5 near Chimney Area	DIL 11	27-01-2016	0.1	15.0	7.34	0.2	7.14
12.	MIDC, Tadali	Piezometer Well No.4 behind Site Office near Cooling Tower, DIL	DIL 12	27-01-2016	0.1	15.0	8.10	0.1	8.0
13	Village- Wadhwa	Intake Well	DIL 12	27-01-2016	11.0	21.8	17.40	2.20	15.2

GROUND WATER LEVEL STATUS

OCTOBER - 2015

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 Zitiraji Wadai Farm	DIL 1	23-10-2015	2.55	9.5	5.75	0.8	4.95
2.	Village- Sonegaon	Grampanchayat Dugwell, Near Hanuman Mandir	DIL 2	23-10-2015	4.10	9.8	3.85	0.8	3.05
3.	Village- Sonegaon	Borewell of Shri Kundlik Vishwanath Urkude,	DIL 3	23-10-2015	0.16	80.0	2.80	0.1	2.7
4.	Village- Yerur	Dugwell of Shri Ravindra Pandurangji Balki	DIL 4	23-10-2015	6.0	9.5	4.50	0.1	4.4
5.	Village- Wandhari	Dugwell of Shri Anandrao Vithoba Kavarashe Farm	DIL 5	23-10-2015	5.0	10.3	6.30	0.2	6.1
6.	Village- Yerur	Grampanchayat Dugwell near Primary School	DIL 6	23-10-2015	4.95	11.0	4.50	0.7	3.8
7.	Village- Ghodpeth	Dugwell of Shiv Mandir	DIL 7	23-10-2015	4.50	9.0	5.15	0.6	4.5
8.	Village- Tadali	Grampanchayat Dugwell Near Z. P. Primary School	DIL 8	23-10-2015	3.65	12.35	5.30	0.8	4.5

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)
9.	Village- Morwa	Dugwell near Jagnath Baba Mandir	DIL 9	23-10-2015	2.40	14.80	3.00	0.8	2.2
10.	Village- Mursa	Grampanchayat. Dugwell near Z.P. Primary School	DIL 10	23-10-2015	7.0	10.8	6.80	4.4	2.4
11.	MIDC, Tadali	Piezometer Well No.5 near Chimney Area	DIL 11	23-10-2015	0.1	15.0	5.50	0.2	5.3
12.	MIDC, Tadali	Piezometer Well No.4 behind Site Office near Cooling Tower, DIL	DIL 12	23-10-2015	0.1	15.0	5.75	0.1	5.65
13.	Village- Wadha	Intake Well	DIL 13	23-10-2015	11.0	21.8	12.50	2.20	10.3

ENCLOSURE -2

WATER QUALITY STATUS :- DUGWELL & BOREWELL

Sr. No.	Parameters	Acceptable / Permissible Limit (IS 10500: 2012)	Concentration Location				
			Location				
			Dugwell Pandari Farm, Pandharkawda)	Water (Mr. Wadai Village- Sonegaon)	Borewell Panchayat Hanuman Mandir, Village- Sonegaon)	Water Borewell near Urkude Farm, Village- Sonegaon)	Water (Mr. Vishwanath Farm, Village- Sonegaon)
			22-10-2015	22-10-2015	22-10-2015	22-10-2015	22-10-2015
1.	Colour, Hazen units	5/15	<5.0	<5.0	<5.0	<5.0	<5.0
2.	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3.	pH value	6.5 to 8.5	7.39	6.98	7.27	7.63	7.63
4.	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5.	Turbidity, NTU	1/5	<0.1	0.30	0.2	0.6	0.6
6.	Total dissolved solids, mg/l	500/2000	2035.4	1200.1	539.2	491.2	491.2
7.	Boron (as B) mg/l	0.5/1.0	0.44	0.25	0.30	0.46	0.46
8.	Calcium (as Ca) ,mg/l	75/200	222.4	99.2	38.4	19.2	19.2
9.	Chloride (as Cl), mg/l	250/1000	445.2	220.1	53.8	29.4	29.4
10.	Copper (as Cu), mg/l	0.05/1.5	0.02	0.01	<0.006	<0.006	<0.006
11.	Fluoride (as F), mg/l	1.0/1.5	0.257	0.71	0.80	1.34	1.34
12.	Free Residual Chlorine, mg/l	0.2/1.0	<0.1	<0.1	<0.1	<0.1	<0.1

WATER QUALITY STATUS

13	Iron (as Fe), mg/l	0.3	0.06	0.07	0.14	0.01
14	Magnesium (as Mg), mg/l	30/100	111.3	49.8	26.4	23.4
15	Manganese (as Mn), mg/l	0.1/0.3	0.01	<0.003	<0.003	<0.003
16	Nitrate (as NO ₃), mg/l	45	11.5	11.3	10.3	7.70
17	Sulphate (as SO ₄), mg/l	200/400	368.5	165.2	67.4	51.1
18	Total Alkalinity (as CaCO ₃) mg/l	200/600	418.0	391.6	378.4	413.6
19	Total Hardness(as CaCO ₃) mg/l	300/600	1012.0	452.0	204.0	144.0
20	Zinc (as Zn) mg/l	5/15	0.05	0.04	<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	0.001	0.01	<0.005	<0.005	<0.005

WATER QUALITY STATUS: – DUG WELL

Sr. No.	Parameters	Acceptable / Permissible Limit (IS 10500: 2012)	Concentration			
			Location			
			Dugwell Water of Shiv Mandir , Village- Wadhri	Dugwell Water (Near Jagnath Baba Mandir, Marwa)	Dugwell Water (Shiv Mandir , Village – Ghodpeth)	Dugwell Water (Grampanchayat Dugwell Near ZP Primary School, Village – Tadali)
1.	Colour, units	5/15	22-10-2015 <5.0	22-10-2015 <5.0	22-10-2015 <5.0	22-10-2015 <5.0
2.	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3.	pH value	6.5 to 8.5	8.07	7.66	7.34	7.51
4.	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5.	Turbidity, NTU	1/5	0.3	0.20	<0.1	<0.1
6.	Total dissolved solids, mg/l	500/2000	248.7	257.9	453.9	737.1
7.	Boron (as B) mg/l	0.5/1.0	0.14	0.07	0.18	0.32
8.	Calcium (as Ca) ,mg/l	75/200	33.6	52.8	46.4	72.0
9.	Chloride (as Cl), mg/l	250/1000	14.7	34.2	29.4	127.2
10.	Copper (as Cu), mg/l	0.05/1.5	<0.006	<0.006	<0.006	0.008
11.	Fluoride (as F), mg/l	1.0/1.5	0.67	0.30	1.14	0.79
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	0.04	0.01	0.01	<0.01
14	Magnesium (as Mg), mg/l	30/100	9.76	23.4	26.4	69.3
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	1.20	0.3	1.90	11.1
17	Sulphate (as SO ₄), mg/l	200/400	36.4	6.52	148.4	133.7
18	Total Alkalinity (as CaCO ₃) mg/l	200/600	215.6	224.4	316.8	316.8
19	Total Hardness (as CaCO ₃) mg/l	300/600	124.0	228.0	224.0	464.0
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	0.001	<0.005	<0.005	<0.005	<0.005

Ground Water from Intake Well near Wadha Village

Sr. No.	Parameters	Acceptable / Permissible Limit (IS 10500: 2012)	Goround water of Intake well (WADA)
			22-10-2015
1.	Colour, Hazen units	5/15	Below 5 Hz.
2.	Odour	Agreeable	Agreeable
3.	pH value	6.5 to 8.5	8.31
4.	Taste	Agreeable	Agreeable
5.	Turbidity, NTU	1/5	4.10
6.	Total dissolved solids, mg/l	500/2000	288.9
7.	Boron (as B) mg/l	0.5/1.0	0.05
8.	Calcium (as Ca) .mg/l	75/200	41.6
9.	Chloride (as Cl), mg/l	250/1000	34.2
10.	Copper (as Cu), mg/l	0.05/1.5	<0.006
11.	Fluoride (as F), mg/l	1.0/1.5	0.37
12.	Free Residual Chlorine, mg/l	0.2/1.0	<0.1
13.	Iron (as Fe), mg/l	0.3	0.17
14.	Magnesium (as Mg), mg/l	30/100	26.4
15.	Manganese (as Mn), mg/l	0.1/0.3	<0.003
16.	Nitrate (as NO ₃), mg/l	45	2.10
17.	Sulphate (as SO ₄), mg/l	200/400	91.8
18.	Total Alkalinity (as CaCO ₃) mg/l	200/600	242.0
19.	Total Hardness (as CaCO ₃) mg/l	300/600	212.0
20.	Zinc (as Zn) mg/l	5/15	<0.03
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	0.001	<0.005

WATER QUALITY STATUS: – DUG WELL & BORE WELL

Sr. No.	Parameters	Acceptable / Permissible Limit (IS 10500: 2012)	Concentration Location				
			Dugwell Pandari Farm, Pandharkawda)	Borewell Panchayat Hanuman Mandir, Village-Sonegaon)	Water (Mr. Wadai Village-)	Borewell Kundlik Urkude Farm, Village-Sonegaon)	Dugwell Ravindra Pandurang Bulki Farm, Village-Yerur)
			31-01-2016	31-01-2016	31-01-2016	31-01-2016	31-01-2016
1.	Colour, Hazen units	5/15	<5.0	<5.0	<5.0	<5.0	<5.0
2.	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3.	pH value	6.5 to 8.5	7.29	7.58	7.44	7.74	7.74
4.	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5.	Turbidity, NTU	1/5	<0.1	0.20	<0.1	<0.1	0.50
6.	Total dissolved solids, mg/l	500/2000	2870.9	1438.9	471.6	927.7	927.7
7.	Boron (as B) mg/l	0.5/1.0	0.30	0.16	0.02	0.20	0.20
8.	Calcium (as Ca) ,mg/l	75/200	321.6	124.8	67.2	75.2	75.2
9.	Chloride (as Cl), mg/l	250/1000	497.7	178.4	8.86	84.8	84.8
10.	Copper (as Cu), mg/l	0.05/1.5	0.04	0.03	0.02	0.02	0.02
11.	Fluoride (as F), mg/l	1.0/1.5	0.28	0.67	1.16	0.95	0.95
12.	Free Residual Chlorine, mg/l	0.2/1.0	<0.1	<0.1	<0.1	<0.1	<0.1

13	Iron (as Fe), mg/l	0.3	0.09	0.15	0.10	0.20
14	Magnesium (as Mg), mg/l	30/100	122.0	44.9	26.4	34.2
15	Manganese (as Mn), mg/l	0.1/0.3	0.02	0.01	0.01	0.01
16	Nitrate (as NO ₃), mg/l	45	33.1	51.2	21.6	49.2
17	Sulphate (as SO ₄), mg/l	200/400	339.6	28.1	22.2	72.4
18	Total Alkalinity (as CaCO ₃) mg/l	200/600	352.0	332.0	288.0	400.0
19	Total Hardness (as CaCO ₃) mg/l	300/600	1304.0	496.0	276.0	328.0
20	Zinc (as Zn) mg/l	5/15	0.08	0.06	0.04	0.05
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	0.001	0.06	0.03	0.007	0.01

WATER QUALITY STATUS: – DUG WELL & BORE WELL

Sr. No.	Parameters	Acceptable / Permissible Limit (IS 10500: 2012)	Concentration			
			Location			
			Dugwell Water of Shiv Mandir , Village- Wandhri	Dugwell Water (Near Jagnath Baba Mandir, Marwa)	Dugwell Water (Shiv Mandir , Village – Ghodpeth)	Dugwell Water (Grampanchyat Dugwell Near ZP Primary School, Village – Tadali)
			31-01-2016	31-01-2016	31-01-2016	31-01-2016
1.	Colour, Hazen units	5/15	<5.0	<5.0	<5.0	<5.0
2.	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3.	pH value	6.5 to 8.5	7.15	7.59	7.86	7.68
4.	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5.	Turbidity, NTU	1/5	0.20	<0.1	<0.1	0.30
6.	Total dissolved solids, mg/l	500/2000	1701.8	528.9	636.0	980.9
7.	Boron (as B) mg/l	0.5/1.0	0.40	0.04	0.04	0.10
8.	Calcium (as Ca) ,mg/l	75/200	118.4	51.2	91.2	121.6
9.	Chloride (as Cl), mg/l	250/1000	25.6	29.6	15.8	153.7
10.	Copper (as Cu), mg/l	0.05/1.5	0.02	0.01	0.01	0.04
11.	Fluoride (as F), mg/l	1.0/1.5	1.28	0.76	1.31	0.87
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	0.17	0.11	0.07	0.10
14	Magnesium (as Mg), mg/l	30/100	65.4	24.4	24.4	74.2
15	Manganese (as Mn), mg/l	0.1/0.3	0.01	0.01	0.01	0.01
16	Nitrate (as NO ₃), mg/l	45	49.7	4.39	18.9	48.2
17	Sulphate (as SO ₄), mg/l	200/400	204.9	27.8	178.4	84.4
18	Total Alkalinity (as CaCO ₃) mg/l	200/600	436.0	296.0	280.0	400.0
19	Total Hardness (as CaCO ₃) mg/l	300/600	564.0	228.0	328.0	608.0
20	Zinc (as Zn) mg/l	5/15	0.08	0.05	0.09	0.08
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	0.001	0.02	0.01	0.05	0.06

Sr. No.	Parameters	Acceptable / Permissible Limit (IS 10500: 2012)	Ground Water from Intake Well near Wadha Village
			31-01-2016
1.	Colour, Hazen units	5/15	<5.0
2.	Odour	Agreeable	Agreeable
3.	pH value	6.5 to 8.5	8.39
4.	Taste	Agreeable	Agreeable
5.	Turbidity, NTU	1/5	0.80
6.	Total dissolved solids. mg/l	500/2000	350.2
7.	Boron (as B) mg/l	0.5/1.0	0.01
8.	Calcium (as Ca) .mg/l	75/200	36.8
9.	Chloride (as Cl), mg/l	250/1000	22.7
10.	Copper (as Cu), mg/l	0.05/1.5	0.02
11.	Fluoride (as F), mg/l	1.0/1.5	0.38
12.	Free Residual Chlorine. mg/l	0.2/1.0	<0.1
13.	Iron (as Fe), mg/l	0.3	0.16
14.	Magnesium (as Mg), mg/l	30/100	21.5
15.	Manganese (as Mn), mg/l	0.1/0.3	0.01
16.	Nitrate (as NO3), mg/l	45	6.15
17.	Sulphate (as SO4), mg/l	200/400	37.2
18.	Total Alkalinity (as CaCO3) mg/l	200/600	156.0
19.	Total Hardness (as CaCO3) mg/l	300/600	180.0
20.	Zinc (as Zn) mg/l	5/15	0.04
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	0.001	0.02

ENCLOSURE – 3
Ambient Air Monitoring Report

STACK EMISSION MONITORING REPORT

Sr. No.	Parameters	Concentration				
		Oct.15	Nov. -15	Dec-15	Jan-15	February - 2016
1.	Total Particulate Matter, mg/Nm ³			TPP Unit II	TPP Unit II	TPP Unit II
2.	Sulphur Oxides as SOx, mg/ Nm ³	Both units of the Thermal power plant were not in operation during the period.				
3.	Sulphur Oxides as SOx, Kg/Hr					
4.	Nitrogen Dioxide as NOx, mg/Nm ³					
				11.58	37.9	39.5
				818.7	1710.3	1725.9
				707.1	1327.5	1331.4
				1120	986.0	961.0
						12.5
						1646.4
						1062.0
						927.0

Remarks: Unit #1 is not in operation.

Ambient Air Monitoring Report

DG STACK MONITORING REPORT

Sr. No.	Parameters	Concentration							
		Oct-15				Jan-16			
		D.G. Set No.1 1500 KVA (Right Bank)	D.G. Set No.1 1500 KVA (Left Bank)	D.G. Set No.2 1500 KVA (Right 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 (Left Bank)	D.G. Set No.2 1500 KVA (Right Bank)	D.G. Set No.2 1500 KVA (Left Bank)
1.	Total Particulate Matter, mg/Nm ³	48.2	33.9	42.8	19.2	33.6	39.1	18.3	41.5
2.	Sulphur Oxides as SO _x , mg/ Nm ³	102.8	99.3	90.3	93.8	98.2	103.3	89.5	91.7
3.	Sulphur Oxides as SO _x , Kg/1hr	0.22	0.22	0.19	0.20	0.21	0.22	0.19	0.19
4.	Nitrogen Dioxide as NO _x , mg/Nm ³	51.2	58.1	55.5	58.7	57.4	49.6	53.3	57.5

Remarks: DG set Monitoring done on quarterly basis

ENCLOSURE – 4

AMBIENT NOISE QUALITY STATUS

Parameters	Location		VIP Gate(Near AAOMS Cabin - 01)		ETP (near AAQMS Cabin -02 & RWII Pond)		Old Switch Yard (Near AAQMS Cabin-03)	
	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)	October-15	L _{eq}	54.0	49.3	52.8	47.6	58.2	53.4
	November- 15	L _{eq}	54.2	49.0	57.7	51.3	53.5	47.2
	December- 15	L _{eq}	69.5	64.4	66.5	61.3	61.2	56.4
	January- 16	L _{eq}	55.3	46.2	47.5	35.7	49.6	40.2
	February- 16	L _{eq}	54.8	44.1	43.4	37.5	47.7	39.3
	March-2016	L _{eq}	62.9	51.0	51.8	43.9	54.8	45.5
Norms		Industrial Area	75	70	75	70	75	70

ENCLOSURE -5

AMBIENT AIR QUALITY STATUS

13. Location: - ETP (Near AAQMS Cabin-02)

Sl. No.	Parameters	Norms	Concentration					
			Oct.-15	Nov.-15	December-2015	January-2016	February-2016	March-2016
1.	Sulphur Dioxide (SO ₂) µg/m ³	80	37.6	12.3	11.0	7.31	7.16	6.07
2.	Nitrogen Dioxide (NO ₂) µg/m ³	80	9.32	6.75	24.9	8.20	8.21	6.75
3.	Particulate Matter of size less than 10 µm (PM ₁₀) µg/m ³	100	43.8	19.5	57.0	47.7	47.4	49.5
4.	Particulate Matter of size less than 2.5 µm (PM _{2.5}) µg/m ³	60	20.1	10.9	34.1	30.5	30.1	33.1
5.	Ozone (O ₃) (µg/m ³)	100	-	-	3.66	< 1.0	< 1.0	< 1.0
6.	Lead (Pb) (µg/m ³)	0.5	-	-	< 1.0	<0.5	< 0.5	< 0.5
7.	Carbon Monoxide (CO) (mg/m ³)	2	-	-	<1.14	<1.14	<1.14	<1.1
8.	Ammonia (NH ₃) (µg/m ³)	100	-	-	11.3	< 5.0	< 5.0	< 5.0
9.	Benzene (C ₆ H ₆) (µg/m ³)	5	-	-	< 5.0	< 5.0	< 5.0	
10.	Benzo(a) Pyrene (BaP) (ng/m ³)	1	-	-	< 1.0	< 1.0	< 1.0	< 1.0
11.	Arsenic (As) (ng/m ³)	6	-	-	< 6.0	< 6.0	< 6.0	< 6.0
12.	Nickel (Ni) (ng/m ³)	20	-	-	< 20.0	< 20.0	< 20.0	< 20.0

14. Location: - VIP Gate (near AAOMS Cabin-01)

AMBIENT AIR QUALITY STATUS

Sr. No.	Parameters	Norms	Concentration					
			Oct.-15	Nov.-15	December-2015	January-2016	February-2016	March-2016
1.	Sulphur Dioxide (SO ₂) µg/m ³	80	17.5	7.72	15.9	28.4	29.4	7.61
2.	Nitrogen Dioxide (NO ₂) µg/m ³	80	10.1	8.72	24.1	10.5	10.7	6.03
3.	Particulate Matter of size less than 10 µm (PM ₁₀) µg/m ³	100	54.6	54.1	57.1	49.2	50.1	48.9
4.	Particulate Matter of size less than 2.5 µm (PM _{2.5}) µg/m ³	60	28.0	32.4	37.9	29.1	28.7	27.2
5.	Ozone (O ₃) (µg/m ³)	100	-	-	1.71	1.17	1.18	< 1.0
6.	Lead (Pb) (µg/m ³)	0.5	-	-	< 1.0	< 0.5	< 0.5	< 0.5
7.	Carbon Monoxide (CO) (mg/m ³)	2	-	-	< 1.14	< 1.14	< 1.14	< 1.1
8.	Ammonia (NH ₃) (µg/m ³)	100	-	-	13.7	< 5.0	< 5.0	13.2
9.	Benzene (C ₆ H ₆) (µg/m ³)	5	-	-	< 5.0	< 5.0	< 5.0	< 5.0
10.	Benzo(a) Pyrene (BaP) (ng/m ³)	1	-	-	< 1.0	< 1.0	< 1.0	< 1.0
11.	Arsenic (As) (ng/m ³)	6	-	-	< 6.0	< 6.0	< 6.0	< 6.0
12.	Nickel (Ni) (ng/m ³)	20	-	-	< 20.0	< 20.0	< 20.0	< 20.0

AMBIENT AIR QUALITY STATUS

15. Location: - Old Switch Yard (Near AAQMS Cabin-03)

Sr. No.	Parameters	Norms	Concentration					
			Oct.-15	November.-15	December-15	January-2016	February-2016	March-2016
1.	Sulphur Dioxide (SO ₂) µg/m ³	80	26.6	30.7	19.1	26.6	25.5	4.40
2.	Nitrogen Dioxide (NO ₂) µg/m ³	80	9.60	6.33	18.2	12.5	11.4	3.59
3.	Particulate Matter of size less than 10 µm (PM ₁₀) µg/m ³	100	88.2	53.1	54.7	51.1	50.6	43.4
4.	Particulate Matter of size less than 2.5 µm (PM _{2.5})µg/m ³	60	45.3	33.5	31.5	32.9	32.7	21.2
5.	Ozone (O ₃) (µg/m ³)	100	-	-	1.90	2.35	2.38	< 1.0
6.	Lead (Pb) (µg/m ³)	0.5	-	-	< 1.0	< 0.5	< 0.5	< 0.5
7.	Carbon Monoxide (CO) (mg/m ³)	2	-	-	< 5.0	< 1.14	< 1.14	< 1.1
8.	Ammonia (NH ₃) (µg/m ³)	100	-	-	14.5	< 5.0	< 5.0	< 5.0
9.	Benzene (C ₆ H ₆) (µg/m ³)	5	-	-	< 5.0	< 5.0	< 5.0	< 5.0
10.	Benzo(a) Pyrene (BaP) (ng/m ³)	1	-	-	< 1.0	< 1.0	< 1.0	< 1.0
11.	Arsenic (As) (ng/m ³)	6	-	-	< 6.0	< 6.0	< 6.0	< 6.0
12.	Nickel (Ni) (ng/m ³)	20	-	-	< 20.0	< 20.0	< 20.0	< 20.0

AMBIENT AIR QUALITY STATUS

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

Sr. No.	Parameters	Norms	October-15	Concentration				
				November-15	December-2015	January-2016	February-2016	March-2016
1.	Sulphur Dioxide (SO ₂) µg/m ³	80	33.0	28.0	25.4	35.2	34.2	8.19
2.	Nitrogen Dioxide (NO ₂) µg/m ³	80	8.80	14.8	22.4	16.1	15.8	3.48
3.	Particulate Matter of size less than 10 µm (PM ₁₀) µg/m ³	100	40.4	38.0	80.4	81.8	81.6	70.5
4.	Particulate Matter of size less than 2.5 µm (PM _{2.5}) µg/m ³	60	21.6	20.0	43.1	45.6	46.6	43.5
5.	Ozone (O ₃) (µg/m ³)	100	-	-	1.48	1.45	1.40	< 1.0
6.	Lead (Pb) (µg/m ³)	0.5	-	-	< 1.0	< 0.5	< 0.5	< 0.5
7.	Carbon Monoxide (CO) (mg/m ³)	2	-	-	< 1.14	< 1.14	< 1.14	< 1.1
8.	Ammonia (NH ₃) (µg/m ³)	100	-	-	11.5	< 5.0	< 5.0	< 5.0
9.	Benzene (C ₆ H ₆) (µg/m ³)	5	-	-	< 5.0	< 5.0	< 5.0	< 5.0
10.	Benzo(a) Pyrene (BaP) (ng/m ³)	1	-	-	< 1.0	< 1.0	< 1.0	< 1.0
11.	Arsenic (As) (ng/m ³)	6	-	-	< 6.0	< 6.0	< 6.0	< 6.0
12.	Nickel (Ni) (ng/m ³)	20	-	-	< 20.0	< 20.0	< 20.0	< 20.0

17 Location: - Terrace of Shri Bapurao Pimpalkar House, Village - Wandhari

Sr. No.	Parameters	Norms	Oct-15	Concentration				
				Nov-15	December-2015	January-2016	February-2016	March-2016
1.	Sulphur Dioxide (SO ₂) µg/m ³	80	18.1	20.1	9.08	28.6	27.1	20.9
2.	Nitrogen Dioxide (NO ₂) µg/m ³	80	11.3	31.3	21.9	18.6	18.4	7.53
3.	Particulate Matter of size less than 10 µm (PM ₁₀) µg/m ³	100	30.8	28.9	72.2	81.8	86.4	73.4
4.	Particulate Matter of size less than 2.5 µm (PM _{2.5}) µg/m ³	60	18.0	16.5	41.5	53.4	54.2	48.9
5.	Ozone (O ₃) (µg/m ³)	100	-	-	1.56	2.75	2.77	< 1.0
6.	Lead (Pb) (µg/m ³)	0.5	-	-	< 1.0	< 0.5	< 0.5	< 0.5
7.	Carbon Monoxide (CO) (mg/m ³)	2	-	-	< 1.14	< 1.14	< 1.14	< 1.1
8.	Ammonia (NH ₃) (µg/m ³)	100	-	-	14.9	< 5.0	< 5.0	< 5.0
9.	Benzene (C ₆ H ₆) (µg/m ³)	5	-	-	< 5.0	< 5.0	< 5.0	< 5.0
10.	Benzo(a) Pyrene (BaP) (ng/m ³)	1	-	-	< 1.0	< 1.0	< 1.0	< 1.0
11.	Arsenic (As) (ng/m ³)	6	-	-	< 6.0	< 6.0	< 6.0	< 6.0
12.	Nickel (Ni) (ng/m ³)	20	-	-	< 20.0	< 20.0	< 20.0	< 20.0

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

Sr. No.	Parameters	Norms	Oct-15	Concentration				
				Nov-15	December-2015	January-2016	February-2016	March-2016
1.	Sulphur Dioxide (SO ₂) µg/m ³	80	13.8	36.9	15.1	44.3	43.5	11.6
2.	Nitrogen Dioxide (NO ₂) µg/m ³	80	9.26	12.9	19.2	17.2	16.7	19.4
3.	Particulate Matter of size less than 10 µm (PM ₁₀) µg/m ³	100	73.3	39.1	82.2	75.9	77.2	78.6
4.	Particulate Matter of size less than 2.5 µm (PM _{2.5}) µg/m ³	60	47.7	16.0	58.0	41.2	40.5	39.8
5.	Ozone (O ₃) (µg/m ³)	100	-	-	1.18	1.18	1.17	<1.0
6.	Lead (Pb) (µg/m ³)	0.5	-	-	<1.0	<0.5	<0.5	<0.5
7.	Carbon Monoxide (CO) (mg/m ³)	2	-	-	<1.14	<1.14	<1.14	<1.0
8.	Ammonia (NH ₃) (µg/m ³)	100	-	-	15.1	<5.0	<5.0	<5.0
9.	Benzene (C ₆ H ₆) (µg/m ³)	5	-	-	<5.0	<5.0	<5.0	<5.0
10.	Benzo(a) Pyrene (BaP) (ng/m ³)	1	-	-	<1.0	<1.0	<1.0	<1.0
11.	Arsenic (As) (ng/m ³)	6	-	-	<6.0	<6.0	<6.0	<6.0
12.	Nickel (Ni) (ng/m ³)	20	-	-	<20.0	<20.0	<20.0	<20.0

ENCLOSURE -6

Monitoring the Implementation of Environmental Safeguards

Ministry of Environment & Forests


Regional Office (W), Nagpur

Monitoring Report		
PART- I		
DATA SHEET		
Ref No.	DIL/ MoEF//MR/11	Date : 30-05-2016
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. Basab Ghose 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	:
7.	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 : 480 Acres Area earmarked for green belt development is 138 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. 3058 Crores. The gross capital incurred as on date is Rs. 3938.11 Crores.
	b.	Allocation made for environmental management plans with item wise and year wise break-up	Rs	
Sr.No.	Particular		Capital Cost Incurred (Rs. Lacs)	Recurring Cost Projected for April 2016 to September 2016 (Rs. Lacs)
1	Air Pollution Control			60.73
2	Water Pollution Control			
3	Noise Pollution Control			
4	Environment Monitoring and Management			108.08
5	Reclamation borrow/mined area			NA
6	Occupational Health			
7	Green Belt and Land Environment			35.37
8	Others (Pl. Specify) Socio-economic Environment			28.00
	Total			232.18
	c.	Benefit cost ratio/Internal rate of Return and the year of assessment	:	The construction work is started in the financial year 2010-11 and 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. 3958 Crores

	f.	Actual expenditure incurred on the environmental management plans so far	:	Total Recurring Cost : Rs 232.18 Lacs ----- Total : Rs 232.18 Lacs
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)	:	Aug. 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.	:	DIL is regularly submitting Half Yearly Compliance Reports since April 2010.
		(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.)		

For DHARIWAL INFRASTRUCTURE LTD.


(Goutam Ghosal
General Manager-O&M

eco bharat



Maharashtra Pollution
Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

Form V is to be filled before 30th September annually; for the period from 1st April to 31st March

PART A

Company Information

Company Name : Dhariwal Infrastructure Ltd.
 Facility Name : C-6, C-7 & C-8
 Person Name * : Devendra Tripathi
 Designation * : Manager HSE
 Premise Name : C-6, C-7 & C-8
 Road Name : Tadali, Growth Centre MIDC, Tada
 Area / Locality : Dist.- Chandrapur
 City : Chandrapur
 Pin code : 442406
 Region : Chandrapur ▼
 Telephone No * : 07172645911
 FAX No : 07172237992
 Email Id * : devendra.tripathi@rp-sg.in
 Industry Category * : Red ▼
 Industry Sub-Category * : Power generating plants (excl ▼
 Date of Last Environmental statement submitted online: NA
 Consent No: BO/EIC No.CH-1663-14/CAC-CEI
 Consent Issue Date: 8/2/2014
 Consent Valid Upto Date: 8/31/2015
 Submission Of Financial Year: 1st April 2014 to 31st March 2015
 Year Of Establishment : 2014
 Industry Type * : LSI (Large Scale Industry) ▼

Industry Sub-Type * : Manufacturer

Production

Product/By-Product Name	Consent Quantity	Actual Quantity	Unit
power	5256.000	429.239	Others

PART B

1) Water Consumption m3/day

Sr.No	Water Consumption for	Consent Quantity	Actual Quantity
1	Process	5280.000	763.900
2	Cooling	49440.000	16281.600
3	Domestic	40.000	15.000
4	All Others		
5	Total	54760.000	17060.500
6	Total water consumption as per cess bill for the year (m3/annum)		

Sr.No	Particulars	Consent Quantity	Actual Quantity
1	Daily quantity of trade effluent from the factory	7776.000	120.000
2	Daily quantity of sewage effluent from the factory	36.000	10.000
3	Daily quantity of treated effluent	0.000	130.000

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

Sr.No	Name of Products (Production)	During the Previous Financial year	During the Current Financial year
1	power	0.000	0.004

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

Sr.No	Name of Raw Materials	During the Previous Financial year	During the Current Financial year	Unit Name
1	Water	0.000	0.004 per unit of product	Kilo Liter

4) Fuel Consumption

Sr.No	Fuel Name	Consent Quantity	Actual Quantity	Unit
1	Coal	2014800.000	328068.000 per annum	MetricTon
2	LDO(Light Diesel Oil)	2033.050	1370.000 per annum	Kilo Liter

PART C

Parameter Details for WATER - mass/day (Kg/day)

Sr.No	Parameters	Quantity Of Pollutant Discharged(mass/day)	Actual	Unit
1	pH		7.040	
2	Suspended Solids	1.673	12.870	mg/l
3	BOD 3 Days	0.403	3.100	mg/l
4	COD	8.736	67.200	mg/l
5	Oil and Grease	0.000	0.000	mg/l
6	TDS	127.088	977.600	mg/l
7	Chlorides	0.000	0.000	mg/l
8	Sulphates			mg/l
9	DO			mg/l

Sr.No	Parameters	Quantity Of Pollutant Discharged(mass/day)	Range	Standard	Actual
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Parameter Details for STACK

stack1

Parameters	Quantity Of Pollutant Discharged(mass/day)	Actual	Unit
Particulates	690.500	33.400	mg/Nm3
HCL			mg/Nm3
SO2			mg/Nm3
CO			mg/Nm3
Total Organic			mg/Nm3
HF			mg/Nm3
NOx			mg/Nm3
Total dioxines			ng[TEQ]Nm3
cd+Th			mg/Nm3
Hg			mg/Nm3
Heavy metal			mg/Nm3

stack2

Parameters	Quantity Of Pollutant Discharged(mass/day)	Actual	Unit
Particulates	583.400	28.800	mg/Nm3
HCL			mg/Nm3
SO2			mg/Nm3
CO			mg/Nm3
Total Organic			mg/Nm3
HF			mg/Nm3
NOx			mg/Nm3
Total dioxines			ng[TEQ]Nm3
cd+Th			mg/Nm3
Hg			mg/Nm3
Heavy metal			mg/Nm3

PART D - Hazardous Waste
[as specified under Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008]

1) From Process

Sr.No	Category no: Type of waste	Consent Quantity	Unit	During Previous Financial year	During Current Financial year
1	5.1 Used / spent oil	1.440	MetricTon	0.000	1.200
2	34.2 Spent ion exchange resin containing toxic metals	3.600	MetricTon	0.000	3.200
3	34.4 Oil and grease skimming residues	12.000	MetricTon	0.000	0.000
4	33.3 Discarded containers / barrels / liners contaminated with hazardous wastes / chemicals	240.000	Numbers	0.000	0.000

2) From Pollution Control Facility

Sr.No	Category no: Type of waste	Consent Quantity	Unit	During Previous Financial year	During Current Financial year
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PART E - Solid Waste

[as specified under Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008]

1) From Process

Sr.No	Type of Waste	Consent Quantity	During Previous Year	During Financial Year	Unit
1	FLY ASH	1321300.000	0.000	85475.530	MetricTon
2	BOTTOM ASH	328500.000	0.000	15963.380	MetricTon

2) From Pollution Control Facility

Sr.No	Type of Waste	Consent Quantity	During Previous Year	During Financial Year	Unit
1	Biological Sludge	6.000	0.000	0.000	MetricTon

PART F

Hazardous Waste

Sr.No	Type of Hazardous Waste Generated	Qty of Hazardous Waste	Consistency of Hazardous Waste	Disposal
1	5.1 Used / spent oil	1.200	Oily	Sell
2	34.2 Spent ion exchange resin containing toxic metals	3.200	Solid	MEPL (Maharashtra Enviro Power Ltd.) Land Fill

3	34.4 Oil and grease skimming residues	0.000	Oily	MEPL (Maharashtra Enviro Power Ltd.) Incineration
4	33.3 Discarded containers / barrels / liners contaminated with hazardous wastes / chemicals	0.000	Solid	MEPL (Maharashtra Enviro Power Ltd.) Incineration

Solid Waste

Sr.No	Type of Solid Waste Generated	Qty of Solid Waste	Consistency of Solid Waste	Disposal
1	FLY ASH	85475.530	Powder / Powdery	Sell
2	BOTTOM ASH	15963.380	Slurry	Other
3	Biological Sludge	0.000	Semi Solid	Other

PART G

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

Sr.No	Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel and Solvent Consumption (Kg/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment (Rs)	Reduction in Maintenance (Rs)
1	Since plant started in this financial year, Hence	0.000	0.000	0.000	0.000	0.000	0.000

PART H

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

Sr.No	Description	Environmental Protection Measures	Capital Investment (Rs)
1	Expenditure made on pollution control measures such as, water spray system, environmental online sys	water spray system, Tree plantation, storage facilities etc	3009000.000

PART I

Any other particulars for improving the quality of the environment.

High efficiency Electrostatic Precipitator (ESP), at Boiler, Bag filters, Dust suppression system, and Shed has been provided CHP & AHP storage and transfer points. Development of extensive green belt is under progress.

// * Maximum 200

characters

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