

**ENVIRONMENT CLEARANCE
COMPLIANCE
(Oct. 2024 to March 2025)**

**TORRENT POWER LTD.
(Unit : DGEN Mega Power Project)
Tal. Vagra, Dist. Bharuch
Gujarat -392130**

**Half Yearly Compliance Report
2025
01 Jun(01 Oct - 31 Mar)**

Acknowledgement

Proposal Name		M/s. Torrent Energy Ltd : 2 x 250 MW CCPP unit in addition to the 1 x 400 MW CCPP Unit for which EC already obtained for SEIAA Gujarat in October 2008	
Name of Entity / Corporate Office		Mr. DEEPAK DALAL	
Village(s)		N/A	
District		BHARUCH	
Proposal No.	IA/GJ/THE/10293/2009	Category	Thermal Projects
Plot / Survey / Khasra No.	N/A	Sub-District	N/A
State	GUJARAT	Entity's PAN	*****0294J
MoEF File No.	J-13012/105/2009-IA.II(T)	Entity name as per PAN	TORRENT POWER LIMITED

Compliance Reporting Details

Reporting Year	2025
Remarks (if any)	EC Half Yearly Compliance Report for the Period from October 2024 to March 2025 (H2FY25)
Reporting Period	01 Jun(01 Oct - 31 Mar)

Details of Production and Project Area

Name of Entity / Corporate Office	Mr. DEEPAK DALAL	
	Project Area as per EC Granted	Actual Project Area in Possession
Private	0	0
Revenue Land	0	0
Forest	0	0
Others	100	100
Total	100	100

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Electricity	MW	29/09/2028	1200	1629269	1200

Conditions

Specific Conditions

Sr.No.	Condition Type	Condition Details
1	Risk Mitigation and Disaster Management	Hydrocarbon leak detection system, automatic shut down valve, critical switches and alarm, regular pipeline inspection and fire fighting facilities will be installed to enhance the safe handling of natural gas.
PPs Submission: Complied Complied		Date: 12/05/2025
2	Risk Mitigation and Disaster Management	The natural gas facility will be equipped with an extensive array of gas detection and flame detection equipment.
PPs Submission: Complied Complied		Date: 12/05/2025
3	Risk Mitigation and Disaster Management	Methane gas detectors will be placed in any area where natural gas is being handled.
PPs Submission: Complied Complied		Date: 12/05/2025
4	Risk Mitigation and Disaster Management	Risk mitigation measures including hydrogen flame detectors, adequate local ventilation in the hydrogen storage area, safe handling and operating procedures and adequate fire fighting facilities shall be provided to attend any emergency due to accidental release of hydrogen.
PPs Submission: Complied Complied		Date: 12/05/2025
5	WATER QUALITY MONITORING AND PRESERVATION	No ground water shall be used for the project. water supply for the project shall be sourced from Dahej SEZ Ltd.
PPs Submission: Complied Complied		Date: 12/05/2025
6	WATER QUALITY MONITORING AND PRESERVATION	The treated wastewater shall be utilized for green belt within the premises to the maximum extent possible and the balance quantity shall be discharged into the Dahej SEZ underground drainage pipeline.
PPs Submission: Complied Complied. Treated effluent is being used for irrigating greenbelt/ plantation.		Date: 12/05/2025
7	AIR QUALITY MONITORING AND PRESERVATION	Natural gas shall be used as fuel in the power plant.
PPs Submission: Complied Complied		Date: 12/05/2025
8	AIR QUALITY	Adequate stack height as per the GPCB norms shall be provided.

	MONITORING AND PRESERVATION	
PPs Submission: Complied Complied		Date: 12/05/2025
9	AIR QUALITY MONITORING AND PRESERVATION	Gaseous emission at workplaces shall be controlled and kept below the limits prescribed by the factories act and Rules. Their records shall be maintained
PPs Submission: Complied Complied		Date: 12/05/2025
10	AIR QUALITY MONITORING AND PRESERVATION	The gaseous emissions and particulate matter from various process units shall conform to the standards prescribed by GPCB. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the prescribed standards.
PPs Submission: Complied Complied		Date: 12/05/2025
11	WASTE MANAGEMENT	The exhausted resin shall be disposed of in to nearest TSDF after necessary permission from the GPCB.
PPs Submission: Complied "Noted . Complied"		Date: 12/05/2025
12	WASTE MANAGEMENT	Used Oil / waste Oil shall be sent only to the authorized / registered recycler as per the permission of the GPCB and shall comply to the provisions of the hazardous waste (M&H) rules, 1989, as amended from time to time.
PPs Submission: Complied Noted . Complied		Date: 12/05/2025
13	WASTE MANAGEMENT	The company must strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous waste (management and Handling) rules 2003. Authorization from the GPCB must be obtained for collection / treatment / storage /disposal of hazardous wastes
PPs Submission: Complied Complied		Date: 12/05/2025
14	Risk Mitigation and Disaster Management	Adequate firefighting facilities will be provided at the proposed power plant.
PPs Submission: Complied Complied		Date: 12/05/2025
15	Risk Mitigation and Disaster Management	Flameproof fittings shall be provided in the manufacturing plant.

PPs Submission: Complied Complied		Date: 12/05/2025
16	Risk Mitigation and Disaster Management	Proper ventilation shall be provided in the work area.
PPs Submission: Complied Complied		Date: 12/05/2025
17	Risk Mitigation and Disaster Management	Storage and use of toxic chemicals shall be minimized to the extent possible.
PPs Submission: Complied Complied		Date: 12/05/2025
18	Risk Mitigation and Disaster Management	During material transfer, spillages shall be avoided, and garland drain be constructed to avoid mixing of accidental spillages with domestic waste and storm water drain.
PPs Submission: Complied Complied		Date: 12/05/2025
19	Risk Mitigation and Disaster Management	Personal protective equipment shall be provided to workers and its usage shall be ensured and supervised.
PPs Submission: Complied Complied		Date: 12/05/2025
20	Risk Mitigation and Disaster Management	First aid box and required antidotes for the chemicals used in the unit shall be readily available in adequate quantity at all the times.
PPs Submission: Complied Complied		Date: 12/05/2025
21	Risk Mitigation and Disaster Management	Training shall be given to all workers on safety and health aspects of handling chemicals.
PPs Submission: Complied Complied		Date: 12/05/2025
22	Risk Mitigation and Disaster Management	Occupational health surveillance of the workers shall be carried out on a regular basis and records shall be maintained as per the Factories Act and Rules. Pre-employment and periodical medical examination for all workers shall be undertaken as per statutory requirement.
PPs Submission: Complied Complied		Date: 12/05/2025
23	Noise Monitoring & Prevention	The overall noise level in and around the plant area shall be kept well within the prescribed standards by providing noise control measure including acoustic insulation, hoods, silencers, enclosures vibration dampers etc. on all sources of noise generation. The ambient noise levels shall confirm to the standards prescribed under the Environment (Protection) Act and Rules.

PPs Submission: Complied Complied		Date: 12/05/2025
24	GREENBELT	The project will carry out will tree plantation of 10,000 trees in the surrounding areas in consultation with nearby school, Gram Panchayat, etc. as Corporate Social Responsibility, and ensure their survival over a period of five years.
PPs Submission: Complied "The following plantation activities have been carried out: 1) 325 Nos. Shrub, 70 Nos. of herbs and 55 Nos. Tree plantation in DGEN. 2) 2450 Nos. Shrub, 670 Nos. of herbs Plantation in Meghdhanush residential township. 3) 30 Nos. shrubs, 25 Nos. of herbs and 15 Nos. Tree plantation at Primary Health centre in village Pakhajan.		Date: 12/05/2025
25	Statutory compliance	In Case fuel for running the power, plant is proposed to be changed from natural gas to other fuel (liquid or solid) the project proponent shall apply for such a change in environmental clearance along with necessary documents as required under EIA notification, 2006 (and its amendments). In such a case the necessity for holding public hearing again or otherwise will be determined by the ministry in consultation with the Expert Appraisal committee (Thermal Power).
PPs Submission: Complied Complied. No change in fuel is envisaged		Date: 12/05/2025
26	Statutory compliance	Land Requirement for the two units viz. 2x400 MW CCPP shall be restricted to 85 Ha and 25Ha shall be kept for future provision
PPs Submission: Complied Complied		Date: 12/05/2025
27	AIR QUALITY MONITORING AND PRESERVATION	NOX emission from each gas turbine shall not exceed 50 ppm
PPs Submission: Complied Complied.		Date: 12/05/2025
28	AIR QUALITY MONITORING AND PRESERVATION	Stacks of 70 m shall be provided with continuous online monitoring equipments. Exit velocity of flue gases shall not be less than 25 m/sec.
PPs Submission: Complied Stacks of 70 m are provided with continuous online monitoring equipment		Date: 12/05/2025
29	WATER QUALITY MONITORING AND PRESERVATION	COC 5.0 shall be adopted.
PPs Submission: Complied Complied		Date: 12/05/2025
30	WATER QUALITY MONITORING AND PRESERVATION	No ground water shall be extracted for the project work at any stage.

PPs Submission: Complied Complied		Date: 12/05/2025
31	WATER QUALITY MONITORING AND PRESERVATION	Minimum required environmental flow suggested by the competent authority of the state Govt. (if any) shall be maintained in the channel/ rivers (as applicable) even in lean season.
PPs Submission: Complied Not applicable because the treated wastewater shall be disposed into common effluent discharge system of GIDC.		Date: 12/05/2025
32	GREENBELT	Green belt consisting of 3 tiers of plantations around the plant of 100 m width and adequate tree density not less than 2500 per ha with survival rate not less than 75% shall be developed. In areas where 100 m width is not possible, green belt of not less than 50 m width shall be raised with adequate justification submitted to the regional office of the ministry.
PPs Submission: Complied Complied Greenbelt development is completed and is being maintained.		Date: 12/05/2025
33	WASTE MANAGEMENT	The treated effluents conforming to the prescribed standard only shall be reused to the extent possible and excess discharged. Arrangements shall be made that effluents and storm water do not get mixed.
PPs Submission: Complied Complied. Treated effluent is being used for irrigation, greenbelt/ plantation. Arrangements have been made to ensure that effluent and storm water does not mix.		Date: 12/05/2025
34	WASTE MANAGEMENT	A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt/plantation. Continuous monitoring of effluent discharge shall be undertaken and it shall be ensured that when discharge enters the natural drain the temperature of effluent shall be at ambient.
PPs Submission: Complied Complied. Treated sewage is being used for the greenbelt/plantation development.		Date: 12/05/2025
35	WATER QUALITY MONITORING AND PRESERVATION	Monitoring of ground and surface water quality (if any nearby) shall be regularly conducted and records maintained. The monitored data shall be submitted to the ministry regularly. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall be undertaken.
PPs Submission: Complied Complied. Monitoring of quality of ground water is undertaken and records are maintained. Reports are submitted to Ministry		Date: 12/05/2025
36	WATER QUALITY MONITORING AND PRESERVATION	A well designed rainwater harvesting shall be put in place. Central groundwater authority/ board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months from the date issue of clearance and details shall be furnished. Status of implementation shall be submitted to the regional office of the ministry.

PPs Submission: Complied Complied. Rainwater harvesting system is installed at plant . During the last monsoon around 129.2 million liters of rainwater harvesting in FY 2024-25		Date: 12/05/2025
37	Risk Mitigation and Disaster Management	Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires 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.
PPs Submission: Complied Complied		Date: 12/05/2025
38	Noise Monitoring & Prevention	Noise levels emanating from turbines shall be 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.
PPs Submission: Complied Complied		Date: 12/05/2025
39	AIR QUALITY MONITORING AND PRESERVATION	Regular monitoring of ground level concentration of SO ₂ , NO _x , RSPM(PM ₁₀ & PM _{2.5}) etc. 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 submitted to the regional office of this ministry. The data shall also be put on the website of the company.
PPs Submission: Being Complied Complied. Monitoring of Ambient Air Quality is being carried out periodically and records are maintained and also submitted to GPCB every month		Date: 12/05/2025
40	PUBLIC HEARING	Time bound action plan for implementation of issues raised in public hearing shall be submitted to the ministry within three months.
PPs Submission: Complied The project was exempted from Public Hearing since it is located within SEZ.		Date: 12/05/2025
41	Corporate Environmental Responsibility	An amount of RS 6.8 Crores shall be earmarked as one time capital cost for CSR programme. Subsequently a recurring expenditure of Rs 1.4 crores 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.
PPs Submission: Complied Company undertakes various CSR activities some of which are listed in Annexure A . In addition, local populace are offered earning opportunities by hiring them for various services/ jobs viz., Horticulture, Driving, employment in company Canteen, jobs in Hospital project, etc.		Date: 12/05/2025
42	Corporate Environmental Responsibility	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 transitional 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 programmers. This will be in addition to vocational training for individuals imparted to take up self employment and jobs.
PPs Submission: Complied Company undertakes various CSR activities some of which are listed in Annexure A . In addition, local populace are offered earning opportunities by hiring them for various services/ jobs viz., Horticulture, Driving, employment in company Canteen, jobs in Hospital project, etc		Date: 12/05/2025
43	Corporate Environmental Responsibility	It shall be ensured that in – built monitoring mechanism for the schemes identified is in place and annual social audit shall be got done from the nearest government institute of repute in the region. The project proponent shall also submit the status of implementation of the scheme from time to time.
PPs Submission: Complied No government institute available in close vicinity for social audit. Alternatives are being explored.		Date: 12/05/2025
44	Human Health Environment	An Environmental Cell shall be created at the project site it self and shall be headed by an officer of appropriate seniority and qualification. It shall be ensured that the head of the cell shall directly report to the head of the organization.
PPs Submission: Complied Complied. Project is already completed and commissioned. However Environmental cell is established and is functional.		Date: 12/05/2025
General Conditions		
Sr.No.	Condition Type	Condition Details
1	Risk Mitigation and Disaster Management	The applicable shall provide flame detectors, and adequate local ventilation in the hydrogen storage area for emergency and safety measures.
PPs Submission: Complied Complied		Date: 12/05/2025
2	Human Health Environment	The company shall undertake eco-developmental measure including community welfare program most useful in the project area for the overall improvement. The eco-development plan shall be submitted to GPCB within three months of receipt of the EC.
3	Risk Mitigation and Disaster Management	The project management shall also comply with all environment protection measure and risk mitigation measure/safeguards proposed by them.
PPs Submission: Complied Complied		Date: 12/05/2025
4	WATER QUALITY MONITORING AND PRESERVATION	The company shall develop rainwater harvesting structures to harvest the runoff water for recharge of ground water. Also harvesting of surface as well as rainwater from the rooftops of the building proposed in the project shall be undertaken and the same

		water shall be used for the various activities of the projects to conserve fresh water.
PPs Submission: Complied Complied. Rainwater harvesting system is installed at plant . During the last monsoon around 129.2 million liters of rainwater harvesting in FY 2024-25.		Date: 12/05/2025
5	AIR QUALITY MONITORING AND PRESERVATION	At no time, the emissions shall exceed the prescribed limits. In the event of failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the describe efficiency has been achieved.
PPs Submission: Complied Complied		Date: 12/05/2025
6	Risk Mitigation and Disaster Management	The project management shall also comply with all the environment protection measures, risk mitigation measure and safeguards recommended in the EIA/EMP report as well as other proposals made by them.
PPs Submission: Complied Complied		Date: 12/05/2025
7	Statutory compliance	The applicant shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose of the environmental protection and management
PPs Submission: Complied Complied		Date: 12/05/2025
8	Statutory compliance	No further expansion or modifications in the plant shall be carried out without prior approval of the MOEF/SEIAA, as the case may be. In case of deviations or alterations in the project proposal from those submitted to MOEF/SEIAA/SEAC for clearance, a fresh reference shall be made to the SEIAA/SEAC to assess the adequacy of conditions imposed and to add additional environmental protection measure required, if any.
PPs Submission: Complied Complied		Date: 12/05/2025
9	Corporate Environmental Responsibility	The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
PPs Submission: Complied Complied		Date: 12/05/2025
10	Statutory compliance	It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.

PPs Submission: Complied Complied		Date: 12/05/2025
11	Statutory compliance	The project authorities shall also adhere to the stipulations made by the GPCB.
PPs Submission: Complied "Complied Project is already completed and commissioned"		Date: 12/05/2025
12	Statutory compliance	The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
PPs Submission: Complied Complied. Financial closure: 21 May 2011 Land development: January 2011 Commercial Operation: December 11, 2014 EC and Consolidate Consent and Authorization (CCA) are in place.		Date: 12/05/2025
13	MISCELLANEOUS	The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.
PPs Submission: Agreed to Comply Noted		Date: 12/05/2025
14	Statutory compliance	The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary. The above conditions will be enforced, inter alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air(Prevention & Control of Pollution) Act 1981, the Environment (Protection) Act 1986, Hazardous Wastes (Management and Handling) Rules, 2003 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
PPs Submission: Complied Complied		Date: 12/05/2025
15	Corporate Environmental Responsibility	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.
PPs Submission: Being Complied Being complied.		Date: 12/05/2025
16	Statutory compliance	Storage facilities for auxiliary liquid fuel such as LDO and/HFO/LSHS (if any) shall Be made in the plant area in consultation with Department of Explosives, Nagpur. Sulphur content in the liquid fuel with not exceeds 0.5%. Disaster Management plane shall be prepared to meet any eventually in case of an accident taking place due to storage of oil.
PPs Submission: Complied		Date:

Complied		12/05/2025
17	Risk Mitigation and Disaster Management	First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
PPs Submission: Complied No longer applicable as the plat is commissioned and operational		Date: 12/05/2025
18	Human Health Environment	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 STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project
PPs Submission: Complied "Complied. No longer applicable as the plant is commissioned and operational."		Date: 12/05/2025
19	Statutory compliance	The proponent shall upload the status of compliance of the stipulated environmental clearance 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
PPs Submission: Complied "Complied. Half-yearly EC compliance and Environment reports are uploaded on company website (www.torrentpower.com) and reports are submitted to MoEF (Online), CPCB , GPCB. Half yearly Environment Monitoring reports from Oct.2024 to March 2025 are attached herewith" Reports are uploaded on the website of www.torrentpower.com and updated periodically.		Date: 12/05/2025
20	Statutory compliance	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.
PPs Submission: Complied "Complied. Half-yearly EC compliance and Environment reports are uploaded on company website (www.torrentpower.com) and reports are submitted to MoEF (Online), CPCB , GPCB. Half yearly Environment Monitoring reports from Oct.2024 to March 2025 are attached herewith" Reports are uploaded on the website of www.torrentpower.com and updated periodically.		Date: 12/05/2025
21	Statutory compliance	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.
PPs Submission: Complied "Complied. Half-yearly EC compliance and Environment reports are uploaded on company website (www.torrentpower.com) and reports are submitted to MoEF (Online), CPCB ,GPCB. Half yearly Environment Monitoring reports from Oct.2024 to March 2025 are attached herewith"		Date: 12/05/2025
22	Statutory compliance	Regional office of the ministry of environment & forests will monitor the implementation of the stipulated conditions. A complete set of document 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 and in public domain.
PPs Submission: Complied "Complied. Half-yearly EC compliance and Environment reports are uploaded on company website (www.torrentpower.com) and reports are submitted to MoEF (Online), CPCB , GPCB. Half yearly Environment Monitoring reports from Oct.2024 to March 2025 are attached herewith" "Reports are uploaded on the website of www.torrentpower.com and updated periodically.		Date: 12/05/2025
23	Statutory compliance	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 dates of start of land development work and commissioning of plant.
PPs Submission: Complied Complied. Financial closure: 21st May 2011 Land development: January 2011 EC and Consolidated Consent and Authorization (CCA) are in place.		Date: 12/05/2025
24	MISCELLANEOUS	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.
PPs Submission: Agreed to Comply Agreed		Date: 12/05/2025
Visit Remarks		
Last Site Visit Report Date:		N/A
Additional Remarks:		Name of the Entity /corporate office is TORRENT POWER LIMITED GPCB has is issued a CCA till September 29, 2028.
Note: This acknowledgement is as per the details submitted by project proponent. In no way is this document to be considered as conclusion on any action on the compliance of the project. This is strictly for the project proponent's reference purpose.		

**Half Yearly Compliance Report
2025
01 Jun(01 Oct - 31 Mar)**

Acknowledgement

Proposal Name	M/s. Torrent Energy Ltd : Expansion by addition of 2x 400 MW DGEN Gas based Combined Cycle Power Plant in Dahej SEZ Area at Village Dahej , in Vagra Taluk, in Bharuch Distt., in Gujarat.		
Name of Entity / Corporate Office	Mr. DEEPAK DALAL		
Village(s)	N/A		
District	BHARUCH		
Proposal No.	IA/GJ/THE/10507/2011	Category	Thermal Projects
Plot / Survey / Khasra No.	N/A	Sub-District	N/A
State	GUJARAT	Entity's PAN	*****0294J
MoEF File No.	J-13012/36/2011-IA.II(T)	Entity name as per PAN	TORRENT POWER LIMITED

Compliance Reporting Details

Reporting Year	2025
Remarks (if any)	EC Half Yearly Compliance Report for the Period from Oct.2024 to March 2025 (H2FY25)
Reporting Period	01 Jun(01 Oct - 31 Mar)

Details of Production and Project Area

Name of Entity / Corporate Office	Mr. DEEPAK DALAL	
	Project Area as per EC Granted	Actual Project Area in Possession
Private	0	0
Revenue Land	0	0
Forest	0	0
Others	100	100
Total	100	100

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Electricity	MW	29/09/2028	1200	1629269	1200

Conditions

Specific Conditions

Sr.No.	Condition Type	Condition Details
1	WATER QUALITY MONITORING AND PRESERVATION	No ground water shall be extracted for the project work at any stage
PPs Submission: Complied Complied		Date: 12/05/2025
2	WASTE MANAGEMENT	It shall be ensured that the area drainage is not disturbed due to the proposed expansion.
PPs Submission: Complied Complied		Date: 12/05/2025
3	Statutory compliance	In Case fuel for running the power, plant is proposed to be changed from natural gas to other fuel (liquid or solid) the project proponent shall apply for such a change in environmental clearance along with necessary documents as required under EIA notification, 2006 (and its amendments). In such a case the necessity for holding public hearing again or otherwise will be determined by the ministry in consultation with the Expert Appraisal committee (Thermal Power).
PPs Submission: Complied No change in fuel is envisaged.		Date: 12/05/2025
4	Statutory compliance	Vision documents specifying prospective plan for the site shall be formulated and submitted to the Ministry within Six Month.
PPs Submission: Complied Complied		Date: 12/05/2025
5	GREENBELT	Conservation and regeneration of mangroves in the area within 5.0 kms shall be initiated and implementation initiated during commencement of the proposed and completed before operation of the expansion project. The project proponent shall accordingly first prepare a common plan along with and in consultation and co-operation of other industries (including power producer) in the study area. The District Administration shall be accordingly approached for its effective implementation. The plan shall also include sustainable live hood options and social measures for fishermen community in the region.
PPs Submission: Complied Complied. Mangroves plantation carried out in 50 hectares area near Dahej sea shore, 7 km from the Project site, through Forest Department.		Date: 12/05/2025
6	AIR QUALITY MONITORING AND PRESERVATION	A long-term study through a reputed institution assesses the cumulative impact of the power plant on the AAQ of the area shall be undertaken. The study shall assess the impact of gas emission on the chemistry of atmosphere and the impact on radiation budget. It shall be ensured that the study considers the worst seasonal atmospheric conditions.
PPs Submission: Being Complied "Being complied. AAQ monitoring data are collected by GPCB approved third party as per defined		Date:

frequency. The same is submitted to MoEF vide our half yearly EC compliance report and also to GPCB vide our environmental monitoring report. Further, data acquired from continuous AAQ monitoring stations installed at site is being compiled for analysis and study purpose."		12/05/2025
7	Risk Mitigation and Disaster Management	Mass Spectrometer based Helium detector to detect the gas leakage shall be installed.
PPs Submission: Complied Complied		Date: 12/05/2025
8	ENERGY PRESERVATION MEASURES	Scheme for harnessing solar power within the premises for the plant (Particularly at available roof tops) shall be critically examined and status of implementation shall be submitted.
PPs Submission: Complied "Complied. Solar Water Heaters are already installed on Rooftop of Project Office, Administration, Canteen Buildings and residential colony building. 65kw roof top plant has been installed in TPLs housing colony."		Date: 12/05/2025
9	AIR QUALITY MONITORING AND PRESERVATION	Concentration for photochemical oxidants shall be monitored along with NOx and permanent monitoring station shall be installed at appropriate location in consultation with the central / State pollution Control board.
PPs Submission: Complied "Complied. Three (3) nos. permanent online AAQ monitoring stations, equipped with relevant Photochemical Oxidants i.e., Ozone is being monitored along with NOx and installed at site as per CPCB guidelines."		Date: 12/05/2025
10	WATER QUALITY MONITORING AND PRESERVATION	COC of 5.0 shall be adopted.
PPs Submission: Complied Complied		Date: 12/05/2025
11	WATER QUALITY MONITORING AND PRESERVATION	Hydro-geological study of the area shall be reviewed annually to assess the sustainability of the source of water particularly in lean season. The review report duly vetted by the concerned Dept. in the state government shall be submitted to the ministry. In case adverse impact on ground and surface water is observed, immediate mitigating steps to contain the same shall be undertaken.
PPs Submission: Complied "Water is supplied by GIDC which in turn is sourced from River Narmada. Ground water is not being extracted; hence it is not applicable."		Date: 12/05/2025
12	WASTE MANAGEMENT	The treated effluent conforming to the prescribed standard only shall be reused to the extent possible and excess discharged. Arrangements shall be made that effluent and storm water does not get mixed.
PPs Submission: Complied Complied. Treated effluent is being used for the irrigation, greenbelt/ plantation. Arrangements have been made to ensure that effluent and storm water is not mixed.		Date: 12/05/2025
13	WASTE MANAGEMENT	A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt/plantation.

		Continuous monitoring of effluent discharge shall be undertaken, and it shall be ensured that when discharge enters the natural drain the temperature of effluent shall be at ambient.
PPs Submission: Complied Complied Treated sewage is being used for the greenbelt/plantation development.		Date: 12/05/2025
14	WATER QUALITY MONITORING AND PRESERVATION	Monitoring of ground and surface water quality (if any nearby) shall be regularly conducted, and records maintained. The monitored data shall be submitted to the ministry regularly. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall be undertaken.
PPs Submission: Complied Complied Monitoring of quality of ground water is undertaken and records are maintained. Reports are submitted to GPCB and Ministry		Date: 12/05/2025
15	WATER QUALITY MONITORING AND PRESERVATION	A well-designed rainwater harvesting shall be put in place. Central groundwater authority/ board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months from the date issue of clearance and details shall be furnished. Status of implementation shall be submitted to the regional office of the ministry.
PPs Submission: Complied "Complied. Rainwater harvesting system is installed at plant . During the last monsoon around 129.2 million liters of rainwater harvesting in FY 2024-25		Date: 12/05/2025
16	Risk Mitigation and Disaster Management	Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires 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.
PPs Submission: Complied Complied		Date: 12/05/2025
17	Noise Monitoring & Prevention	Noise levels emanating from turbines shall be controlled such that the noise in the work zone shall be limited to 75 dBA at 1m from the source of noise. For people working in the high noise area, requisite personal protective equipment like earplugs/earmuffs 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.
PPs Submission: Complied Complied		Date: 12/05/2025
18	AIR QUALITY MONITORING AND PRESERVATION	NOX emission from each gas turbine shall not exceed 50 ppm
PPs Submission: Complied Complied		Date: 12/05/2025
19	AIR QUALITY MONITORING AND	Stacks of 70 m shall be provided with continuous online monitoring equipment's. Exit velocity of flue gases shall not be less than 22

	PRESERVATION	m/sec.
PPs Submission: Complied Stacks of 70 m are provided with continuous online monitoring equipments		Date: 12/05/2025
20	AIR QUALITY MONITORING AND PRESERVATION	Regular monitoring of ground level concentration of NOX shall be carried out in the impact zone and records maintained. If at any stage the 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.
PPs Submission: Being Complied Being complied Monitoring of Ambient Air Quality is being carried out periodically and records are maintained and submitted to GPCB.		Date: 12/05/2025
21	Corporate Environmental Responsibility	Local employable youth shall be trained in skill relevant to the project for eventual employment in the project itself. The action taken report and details therefore to this effect shall be submitted to the regional office of the Ministry and the state govt. Dept, concerned from time to time.
PPs Submission: Complied "Complied Company undertakes various CSR activities some of which are listed in Annexure A. In addition, local populace are offered earning opportunities by hiring them for various services/ jobs viz., Horticulture, Driving, employment in company Canteen, jobs in Hospital project, etc."		Date: 12/05/2025
22	Corporate Environmental Responsibility	An amount of RS 13.60 Crores shall be earmarked as one time capital cost for CSR program. Subsequently a recurring expenditure of Rs 2.70 Crores per annum till the life of the plant shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted to the regional office of the Ministry along with road map for implantation.
PPs Submission: Complied Company undertakes various CSR activities some of which are listed in Annexure A. In addition, local populace are offered earning opportunities by hiring them for various services/ jobs viz., Horticulture, Driving, employment in company Canteen, jobs in Hospital project, etc.		Date: 12/05/2025
23	Corporate Environmental Responsibility	CSR scheme shall be identified based on need-based assessment in and around villages within 5 km of the site and in constant consultation with the village Panchayat and the district Administration. As part of CSR prior identification of local employable youth and eventual employment in the project after imparting relevant training shall be also undertaken. Income generating projects consistent with the traditional skills of the people shall be undertaken. Development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such program. Company shall provide separate budget for community development activities and income generating programs. Vocational training program for possible self-employment and job shall be imparted to identify villagers free of cost.
PPs Submission: Complied Company undertakes various CSR activities some of which are listed in Annexure A. In addition, local populace are offered earning opportunities by hiring them for various services/ jobs viz., Horticulture, Driving, employment in company Canteen, jobs in Hospital project, etc.		Date: 12/05/2025

24	Corporate Environmental Responsibility	It shall be ensured that in – built monitoring mechanism for the schemes identified is in place and annual social audit shall be got done from the nearest government institute of repute in the region. The project proponent shall also submit the status of implementation of the scheme from time to time.
PPs Submission: Complied No government institute available in close vicinity for social audit. Alternatives are being explored.		Date: 12/05/2025
25	GREENBELT	Green belt consisting of 3 tiers of plantations around the plant with adequate tree density not less than 2500 per ha with survival rate not less than 80% shall be developed. The green belt developed shall not be less than 33 % of total area.
PPs Submission: Complied Complied. Greenbelt development is completed and is being maintained.		Date: 12/05/2025
26	Statutory compliance	The project proponent shall formulate a well laid corporate environment policy and identify and designate responsible officers at all levels of its hierarchy for ensuring adherence to the policy and compliance with conditions stipulated in this clearance latter and other applicable environmental laws and regulation.
PPs Submission: Complied Complied		Date: 12/05/2025
General Conditions		
Sr.No.	Condition Type	Condition Details
1	Risk Mitigation and Disaster Management	First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
PPs Submission: Complied No longer applicable as the plant is commissioned and operational.		Date: 12/05/2025
2	Statutory compliance	Storage facilities for auxiliary liquid fuel such as LDO and/HFO/LSHS (if any) shall be made in the plant area in consultation with Department of Explosives, Nagpur. Sulphur content in the liquid fuel with not exceeds 0.5%. Disaster Management plan shall be prepared to meet any eventually in case of an accident taking place due to storage of oil.
PPs Submission: Complied Complied		Date: 12/05/2025
3	Human Health Environment	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 STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project
PPs Submission: Complied No longer applicable as the plant is commissioned and operational.		Date: 12/05/2025
4	Human Health Environment	An Environmental Cell shall be created at the project site itself and

		shall be headed by an officer of appropriate seniority and qualification. It shall be ensured that the head of the cell shall directly report to the head of the organization.
PPs Submission: Complied Project is already completed and commissioned. However Environmental cell is established and is functional.		Date: 12/05/2025
5	Corporate Environmental Responsibility	Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. This 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.
PPs Submission: Complied Complied Project is completed and commissioned.		Date: 12/05/2025
6	Statutory compliance	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 dates of start of land development work and commissioning of plant.
PPs Submission: Complied Complied Project is already completed and commissioned		Date: 12/05/2025
7	MISCELLANEOUS	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.
PPs Submission: Agreed to Comply Agreed		Date: 12/05/2025
8	Statutory compliance	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.
PPs Submission: Complied "Complied. Half-yearly EC compliance and Environment reports are uploaded on company website (www.torrentpower.com) and reports are submitted to MoEF (Online), CPCB , GPCB. Half yearly Environment Monitoring reports from Oct.2024 to March 2025 are attached herewith"		Date: 12/05/2025
9	Statutory compliance	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.
PPs Submission: Complied "Complied. Half-yearly EC compliance and Environment reports are uploaded on company website (www.torrentpower.com) and reports are submitted to MoEF (Online), CPCB , GPCB. Half yearly Environment Monitoring reports from April 2024 to Sep.2024 are attached herewith"		Date: 12/05/2025

10	Statutory compliance	Regional office of the ministry of environment & forests will monitor the implementation of the stipulated conditions. A complete set of document 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 bases. Criteria pollutants levels including NOX (from stack & ambient air) shall be displayed at the main gate of the power plant and in public domain.
PPs Submission: Complied "Complied. Half-yearly EC compliance and Environment reports are uploaded on company website (www.torrentpower.com) and reports are submitted to MoEF (Online), CPCB , GPCB. Half yearly Environment Monitoring reports from Oct.2024 to March 2025 are attached herewith"		Date: 12/05/2025
11	Statutory compliance	The proponent shall upload the status of compliance of the stipulated environmental clearance 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
PPs Submission: Complied Complied. Half yearly EC compliance and Environment reports are uploaded on company website (www.torrentpower.com) and reports are submitted to MoEF (Online), CPCB , GPCB. Half yearly Environment Monitoring reports from Oct. 2024 to March 2025 are attached herewith"		Date: 12/05/2025
<h3 style="text-align: center;">Visit Remarks</h3>		
Last Site Visit Report Date:		N/A
Additional Remarks:		Name of the Entity /corporate office is TORRENT POWER LIMITED. GPCB has issued CCA AWH 131100 valid up to September 29, 2028.
<p>Note: This acknowledgement is as per the details submitted by project proponent. In no way is this document to be considered as conclusion on any action on the compliance of the project. This is strictly for the project proponent's reference purpose.</p>		

Annexure 'A'.

1200 MW DGEN Mega Power Project

(File No. J13012/36/2011-IA.II (T) Dt. October 21,2011)

xxii) Subsequently, a recurring expenditure of Rs 2.70 crs per annum till the life of the plant shall be earmarked as recurring expenditure for CSR activities.

The following is the recurring expenses on CSR for period October-2024 to March-2025.

Expenses incurred on:

- Miscellaneous CSR activities like local charitable Contribution, social support, welfare activities for labour Rs. 0.00 Cr
(*Rs 52,698.46/-)
- Medical facilities, camps and Mobile OPD for children in Vagra & Naswadi taluka Under REACH programme Rs. 1.31 Cr
(*Rs 1,31,02,440.86/-)
- Medical facilities, camps and Mobile OPD for children in Kamrej taluka Under REACH programme.....Rs. 10.14 Cr.
(*10,13,71,906/-)

Total.....Rs.11.45 Cr.

Note:

It may be noted that during the period **October-2024 to March-2025**, 1200 MW DGEN Power Project has operated only intermittently/ partially due to non-availability of affordable fuel and long term PPA.

HALF YEARLY ENVIRONMENTAL MONITORING REPORT

(PERIOD)

(OCTOBER 2024 TO MARCH 2025)

FOR



**M/S TORRENT POWER LTD.
DGEN MEGA POWER PLANT
DAHEJ SEZ PART-1, TAL: VAGRA,
DIST: BHARUCH – 392130**



PREPARED BY

M/s. ECO EARTH TECHNOLOGIES

Plot No-3202/A/2/1, T-1, 3rd Floor, GIDC Multilevel Shed

Near Advance Paint, G.I.D.C Ind. Estate

Ankleshwar 393002, Dist: Bharuch, Gujarat

Phone No. +91-9409133000/9601758907

Email ID: ecoearth.technologies@gmail.com

Website: www.ecoearthtechnologies.com



TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



CONTENTS

SR.NO.	Particulars	PAGE NO.
1	INTRODUCTION	3
2	AMBIENT AIR QUALITY MONITORING	6
3	FLUE GAS STACK EMISSION	14
4	STACK SAMPLING - DIESEL GENERATOR	17
5	CHEMICAL ANALYSIS OF WASTE WATER	20
6	CHEMICAL ANALYSIS OF STP WATER	28
7	CHEMICAL ANALYSIS OF GROUND WATER	33
8	SOIL ANALYSIS	36
9	NOISE LEVEL MONITORING	40





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



CHAPTER – 1

1.0 INTRODUCTION

(PERIOD - OCTOBER 2024 TO MARCH 2025)





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



Environmental Monitoring was carried out as per the scope of work.

Ambient Air Quality Monitoring was conducted. Sampling and analysis for ambient air at specified locations performed; based on the methodology specified in National Ambient Air Quality Standards by Ministry of Environment and Forest, Government of India.

Ground Water samples were collected during the monitoring period. Sampling and analysis for ground water was carried out as per the procedure specified in APHA (23rd Edition) and Codes as per the Bureau of Indian standard.

Treated Effluent water and sewage water sampling and analysis carried out on monthly basis. Noise measurement carried out for day and night time on monthly basis. Plant stack sampling of all operational units carried out on monthly basis and Diesel Generator stack sampling and analysis carried out on quarterly basis. Soil sampling is also carried out on quarterly basis.

The equipment used for sampling and analysis are calibrated and certified as per NABL requirements with NIST traceability as per ISO/IEC 17025:2017.

Eco Earth Technologies, Ankleshwar is recognized by Ministry of Environment & Forest, Government of India, New Delhi under the EPA- article 12 A. along with the recognition as Environmental Auditors; under the Honourable High Court; Gujarat Orders.

Laboratory set up is having international recognition from NABL (National Accreditation Board for Laboratories) under the ministry of Science & Technology as per ISO/IEC 17025:2017 for the Environmental / Food / Air / Solid-Hazardous waste, Construction material etc. (Detailed scope is available on NABL web site).

Entire administration and operations of the laboratory is as per ISO 9001:2015 quality systems and is certified by TUV consultants.





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



Applicable Codes as per Bureau of Indian Standards:

SR. NO.	MONITORING DETAILS	APPLICABLE BIS CODE
1	Ambient Air Quality	IS:5182/ CPCB Method
2	Stack Emission Analysis	IS:11255
3	Treated Effluent Water Quality	IS:3025
4	Treated Sewage Water Quality	IS:3025
5	Ground Water Quality	IS:3025
6	Soil Analysis	USDA/IS 2720 etc.
7	Noise Level	IS 9876/IS 9989





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



CHAPTER 2

2.0 RESULTS OF AMBIENT AIR QUALITY MONITORING

MONITORING PERIOD: OCTOBER 2024 TO MARCH 2025





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



2.0 AMBIENT AIR QUALITY MONITORING:

DETAIL OF ANALYSIS METHOD:

SR. NO.	PARAMETERS	UNIT	METHODOLOGY	LIMIT#	GPCB Limit*	Minimum Detection Limit
1	Particulate Matter (PM ₁₀)	µg/m ³	Gravimetric	100	100	< 10
2	Particulate Matter (PM _{2.5})	µg/m ³	Gravimetric	60	60	< 5.0
3	Lead as Pb	µg/m ³	AAS Method after sampling on EPM 2000 Filter paper	1.0	Not Specified	< 0.001
4	Benzo (a) Pyrene (BaP) - particulate phase only	ng/m ³	Solvent Extraction followed by GC Analysis	1.0	Not Specified	< 0.001
5	Arsenic as As	ng/m ³	AAS Method after sampling on EPM 2000 Filter paper	6.0	Not Specified	< 0.001
6	Nickel as Ni	ng/m ³	AAS Method after sampling on EPM 2000 Filter paper	20	Not Specified	< 0.001
7	Carbon Monoxide as CO	mg/m ³	Non-Dispersive Infra-Red (NDIR)	4.0	Not Specified	< 0.001
8	Benzene as C ₆ H ₆	µg/m ³	Gas chromatography based on Continuous Analyser	5.0	Not Specified	< 0.001
9	Ammonia as NH ₃	µg/m ³	Indophenol Blue method	400	Not Specified	<1.0
10	Sulphur Dioxide as SO ₂	µg/m ³	Improved West and Gaeke	80	80	< 1.0
11	Nitrogen Dioxide as NO ₂	µg/m ³	Modified Jacob & Hochheiser	80	80	< 1.0
12	Ozone as O ₃	µg/m ³	Chemical Method	180	Not Specified	< 1.0





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



2.1: RESULTS OF AAQM ANALYSIS [OCTOBER 2024]

Date of Sampling			21.10.2024	
SR. NO.	TEST PARAMETER	UNIT	Meghdhanush Colony	Switch Yard
1	Particulate Matter PM 10	µg/m ³	56.70	57.80
2	Particulate Matter PM 2.5	µg/m ³	22.49	21.42
3	Sulphur dioxide (SO ₂)	µg/m ³	19.68	18.91
4	Nitrogen Dioxide (NO ₂)	µg/m ³	15.33	16.35
5	OZONE (O ₃)	µg/m ³	06	06
6	LEAD as (Pb)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
7	Carbon Monoxide (CO)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
8	Ammonia (NH ₃)	µg/m ³	BDL (< 1.0)	BDL (< 1.0)
9	BENZENE C ₆ H ₆	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
10	BENZO (a) Pyrene (BaP)- particulate phase only	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
11	Arsenic as (As)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
12	Nickle as (Ni)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)

Date of Sampling			21.10.2024	
SR. NO.	TEST PARAMETER	UNIT	Pravesh Gate	Guard pond
1	Particulate Matter PM 10	µg/m ³	52.49	54.90
2	Particulate Matter PM 2.5	µg/m ³	18.75	21.58
3	Sulphur dioxide (SO ₂)	µg/m ³	16.36	18.69
4	Nitrogen Dioxide (NO ₂)	µg/m ³	14.20	16.25
5	OZONE (O ₃)	µg/m ³	07	04
6	LEAD as (Pb)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
7	Carbon Monoxide (CO)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
8	Ammonia (NH ₃)	µg/m ³	BDL (< 1.0)	BDL (< 1.0)
9	BENZENE C ₆ H ₆	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
10	BENZO (a) Pyrene (BaP)- particulate phase only	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
11	Arsenic as (As)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
12	Nickle as (Ni)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



2.2: RESULTS OF AAQM ANALYSIS

[NOVEMBER 2024]

Date of Sampling			25.11.2024	
SR. NO.	TEST PARAMETER	UNIT	Meghdhanush Colony	Switch Yard
1	Particulate Matter PM 10	µg/m ³	54.91	59.41
2	Particulate Matter PM 2.5	µg/m ³	20.83	23.18
3	Sulphur dioxide (SO ₂)	µg/m ³	18.52	19.50
4	Nitrogen Dioxide (NO ₂)	µg/m ³	17.06	15.24
5	OZONE (O ₃)	µg/m ³	05	07
6	LEAD as (Pb)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
7	Carbon Monoxide (CO)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
8	Ammonia (NH ₃)	µg/m ³	BDL (< 1.0)	BDL (< 1.0)
9	BENZENE C ₆ H ₆	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
10	BENZO (a) Pyrene (BaP)- particulate phase only	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
11	Arsenic as (As)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
12	Nickle as (Ni)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)

Date of Sampling			25.11.2024	
SR. NO.	TEST PARAMETER	UNIT	Pravesh Gate	Guard pond
1	Particulate Matter PM 10	µg/m ³	54.09	55.73
2	Particulate Matter PM 2.5	µg/m ³	17.34	22.39
3	Sulphur dioxide (SO ₂)	µg/m ³	15.81	20.50
4	Nitrogen Dioxide (NO ₂)	µg/m ³	13.76	17.98
5	OZONE (O ₃)	µg/m ³	06	05
6	LEAD as (Pb)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
7	Carbon Monoxide (CO)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
8	Ammonia (NH ₃)	µg/m ³	BDL (< 1.0)	BDL (< 1.0)
9	BENZENE C ₆ H ₆	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
10	BENZO (a) Pyrene (BaP)- particulate phase only	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
11	Arsenic as (As)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
12	Nickle as (Ni)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



2.3: RESULTS OF AAQM ANALYSIS [DECEMBER 2024]

Date of Sampling			13.12.2024	
SR. NO.	TEST PARAMETER	UNIT	Meghdhanush Colony	Switch Yard
1	Particulate Matter PM 10	µg/m3	56.10	57.65
2	Particulate Matter PM 2.5	µg/m3	19.46	21.39
3	Sulphur dioxide (SO2)	µg/m3	17.73	18.42
4	Nitrogen Dioxide (NO2)	µg/m3	16.89	16.09
5	OZONE (O3)	µg/m3	06	06
6	LEAD as (Pb)	µg/m3	BDL (< 0.001)	BDL (< 0.001)
7	Carbon Monoxide (CO)	µg/m3	BDL (< 0.001)	BDL (< 0.001)
8	Ammonia (NH3)	µg/m3	BDL (< 1.0)	BDL (< 1.0)
9	BENZENE C6H6	µg/m3	BDL (< 0.001)	BDL (< 0.001)
10	BENZO (a) Pyrene (BaP)- particulate phase only	µg/m3	BDL (< 0.001)	BDL (< 0.001)
11	Arsenic as (As)	µg/m3	BDL (< 0.001)	BDL (< 0.001)
12	Nickle as (Ni)	µg/m3	BDL (< 0.001)	BDL (< 0.001)

Date of Sampling			13.12.2024	
SR. NO.	TEST PARAMETER	UNIT	Pravesh Gate	Guard pond
1	Particulate Matter PM 10	µg/m3	52.76	53.19
2	Particulate Matter PM 2.5	µg/m3	19.43	20.81
3	Sulphur dioxide (SO2)	µg/m3	17.15	18.77
4	Nitrogen Dioxide (NO2)	µg/m3	15.22	15.68
5	OZONE (O3)	µg/m3	07	04
6	LEAD as (Pb)	µg/m3	BDL (< 0.001)	BDL (< 0.001)
7	Carbon Monoxide (CO)	µg/m3	BDL (< 0.001)	BDL (< 0.001)
8	Ammonia (NH3)	µg/m3	BDL (< 1.0)	BDL (< 1.0)
9	BENZENE C6H6	µg/m3	BDL (< 0.001)	BDL (< 0.001)
10	BENZO (a) Pyrene (BaP)- particulate phase only	µg/m3	BDL (< 0.001)	BDL (< 0.001)
11	Arsenic as (As)	µg/m3	BDL (< 0.001)	BDL (< 0.001)
12	Nickle as (Ni)	µg/m3	BDL (< 0.001)	BDL (< 0.001)





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



2.4: RESULTS OF AAQM ANALYSIS [JANUARY 2025]

Date of Sampling			06.01.2025	
SR. NO.	TEST PARAMETER	UNIT	Meghdhanush Colony	Switch Yard
1	Particulate Matter PM 10	µg/m ³	55.24	59.02
2	Particulate Matter PM 2.5	µg/m ³	18.39	22.84
3	Sulphur dioxide (SO ₂)	µg/m ³	16.58	19.42
4	Nitrogen Dioxide (NO ₂)	µg/m ³	14.07	17.53
5	OZONE (O ₃)	µg/m ³	05	06
6	LEAD as (Pb)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
7	Carbon Monoxide (CO)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
8	Ammonia (NH ₃)	µg/m ³	BDL (< 1.0)	BDL (< 1.0)
9	BENZENE C ₆ H ₆	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
10	BENZO (a) Pyrene (BaP)- particulate phase only	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
11	Arsenic as (As)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
12	Nickle as (Ni)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)

Date of Sampling			06.01.2025	
SR. NO.	TEST PARAMETER	UNIT	Pravesh Gate	Guard pond
1	Particulate Matter PM 10	µg/m ³	54.39	55.86
2	Particulate Matter PM 2.5	µg/m ³	20.87	21.39
3	Sulphur dioxide (SO ₂)	µg/m ³	18.62	19.24
4	Nitrogen Dioxide (NO ₂)	µg/m ³	16.71	17.48
5	OZONE (O ₃)	µg/m ³	08	06
6	LEAD as (Pb)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
7	Carbon Monoxide (CO)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
8	Ammonia (NH ₃)	µg/m ³	BDL (< 1.0)	BDL (< 1.0)
9	BENZENE C ₆ H ₆	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
10	BENZO (a) Pyrene (BaP)- particulate phase only	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
11	Arsenic as (As)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
12	Nickle as (Ni)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



2.5: RESULTS OF AAQM ANALYSIS [FEBRUARY 2025]

Date of Sampling			24.02.2025	
SR. NO.	TEST PARAMETER	UNIT	Meghdhanush Colony	Switch Yard
1	Particulate Matter PM 10	µg/m ³	53.18	57.43
2	Particulate Matter PM 2.5	µg/m ³	20.37	21.60
3	Sulphur dioxide (SO ₂)	µg/m ³	18.46	18.35
4	Nitrogen Dioxide (NO ₂)	µg/m ³	16.15	15.09
5	OZONE (O ₃)	µg/m ³	07	05
6	LEAD as (Pb)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
7	Carbon Monoxide (CO)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
8	Ammonia (NH ₃)	µg/m ³	BDL (< 1.0)	BDL (< 1.0)
9	BENZENE C ₆ H ₆	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
10	BENZO (a) Pyrene (BaP)- particulate phase only	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
11	Arsenic as (As)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
12	Nickle as (Ni)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)

Date of Sampling			24.02.2025	
SR. NO.	TEST PARAMETER	UNIT	Pravesh Gate	Guard pond
1	Particulate Matter PM 10	µg/m ³	55.70	54.81
2	Particulate Matter PM 2.5	µg/m ³	19.43	20.43
3	Sulphur dioxide (SO ₂)	µg/m ³	17.18	18.70
4	Nitrogen Dioxide (NO ₂)	µg/m ³	16.32	17.28
5	OZONE (O ₃)	µg/m ³	07	08
6	LEAD as (Pb)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
7	Carbon Monoxide (CO)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
8	Ammonia (NH ₃)	µg/m ³	BDL (< 1.0)	BDL (< 1.0)
9	BENZENE C ₆ H ₆	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
10	BENZO (a) Pyrene (BaP)- particulate phase only	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
11	Arsenic as (As)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
12	Nickle as (Ni)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



2.6: RESULTS OF AAQM ANALYSIS [MARCH 2025]

Date of Sampling			18.03.2025	
SR. NO.	TEST PARAMETER	UNIT	Meghdhanush Colony	Switch Yard
1	Particulate Matter PM 10	µg/m ³	55.36	54.36
2	Particulate Matter PM 2.5	µg/m ³	19.48	19.43
3	Sulphur dioxide (SO ₂)	µg/m ³	20.14	20.68
4	Nitrogen Dioxide (NO ₂)	µg/m ³	17.25	14.06
5	OZONE (O ₃)	µg/m ³	06	06
6	LEAD as (Pb)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
7	Carbon Monoxide (CO)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
8	Ammonia (NH ₃)	µg/m ³	BDL (< 1.0)	BDL (< 1.0)
9	BENZENE C ₆ H ₆	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
10	BENZO (a) Pyrene (BaP)- particulate phase only	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
11	Arsenic as (As)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
12	Nickle as (Ni)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)

Date of Sampling			18.03.2025	
SR. NO.	TEST PARAMETER	UNIT	Pravesh Gate	Guard pond
1	Particulate Matter PM 10	µg/m ³	57.35	54.81
2	Particulate Matter PM 2.5	µg/m ³	17.42	20.43
3	Sulphur dioxide (SO ₂)	µg/m ³	15.23	18.70
4	Nitrogen Dioxide (NO ₂)	µg/m ³	19.43	17.28
5	OZONE (O ₃)	µg/m ³	06	06
6	LEAD as (Pb)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
7	Carbon Monoxide (CO)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
8	Ammonia (NH ₃)	µg/m ³	BDL (< 1.0)	BDL (< 1.0)
9	BENZENE C ₆ H ₆	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
10	BENZO (a) Pyrene (BaP)- particulate phase only	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
11	Arsenic as (As)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)
12	Nickle as (Ni)	µg/m ³	BDL (< 0.001)	BDL (< 0.001)





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



CHAPTER 3

3.0 RESULTS OF PLANT STACK EMISSION MONITORING

MONITORING PERIOD: OCTOBER 2024 TO MARCH 2025





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



3.0 PLANT STACKEMISSION MONITORING:

DETAILS OF ANALYSIS METHOD:

SR. NO.	TEST PARAMETER	UNIT	GPCB LIMIT	TEST/SAMPLING METHOD
1	Particulate Matter	mg/Nm ³	150	IS:11255 (Part-1)
2	Sulfur dioxide (as SO ₂)	ppm	100	IS:11255 (Part-2)
3	Oxides of Nitrogen	ppm	50	IS:11255 (Part-7)





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



3.1: RESULTS OF STACK ANALYSIS [OCTOBER 2024]

Date of Sampling		-	-	22.10.2024	21.10.2024
SR. NO.	TEST PARAMETERS	SM # 1 Heat recovery and Steam Generation HRSG -1 (Unit 51)	SM # 2 Heat recovery and Steam Generation HRSG -1 (Unit 52)	SM # 3 Heat recovery and Steam Generation HRSG 3 (Unit 53)	SM # 8 Natural Gas Dew Point Water Heater -1 (01UEN)
1	Oxides of Nitrogen (ppm)	-	-	17.58	14.93

Date of Sampling		-	-	21.10.2024	-
SR. NO.	TEST PARAMETERS	SM # 9 Natural Gas Dew Point Water Heater -2 (01UEN)	SM # 10 Natural Gas Dew Point Water Heater -3 (01UEN)	SM # 11 Natural Gas Dew Point Water Heater -1 (03UEN)	SM # 12 Natural Gas Dew Point Water Heater -2 (03UEN)
1	Oxides of Nitrogen (ppm)	-	-	18.07	-

ND*: Below detection limit: PM: 5 mg/Nm³, Sulfur dioxide (as SO₂): 1.00 ppm.

All Other Stack was not in operation during monitoring.





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



CHAPTER 4

4.0 RESULTS OF DG STACK EMISSION MONITORING

MONITORING PERIOD: OCTOBER 2024 TO MARCH 2025





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



4.0 D G STACK EMISSION MONITORING

LOCATION DETAILS

DETAILS OF ANALYSIS METHOD:

SR. NO.	TEST PARAMETER	UNIT	PERMISSIBLE LIMIT	METHOD OF MEASUREMENT
			CCA/GPCB	
1	Particulate Matter	mg/Nm ³	150	IS:11255 (Part-1) 2014
2	Sulfur dioxide (as SO ₂)	ppm	100	IS:11255 (Part-2) 2017
3	Oxides of Nitrogen	ppm	50	IS:11255 (Part-7) 2014
4	Non Methyl Hydro Carbon (NMHC)	mg/Nm ³	Not Specified	Gas Chromatography
5	Carbon Monoxide (CO)	mg/Nm ³	Not Specified	IS 5182 (Part 10) : 1999
6	Sulfur Content in fuel	%	Not Specified	by gravimetric method





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



4.1: RESULTS OF DG STACK EMISSION MONITORING [OCTOBER 2024]

Date of Sampling		22.10.2024	21.10.2024
SR. NO.	TEST PARAMETERS	SM # 4 Emergency Diesel Generator -1 (780.8 KW)	SM # 5 Emergency Diesel Generator -2 (780.8 KW)
1	Particulate Matter (mg/Nm ³)	31.80	32.40
2	Sulfur Dioxide as SO ₂ (ppm)	07.59	11.81
3	Oxides of Nitrogen (ppm)	29.37	28.53
4	Non-Methyl Hydro Carbon (NMHC) (mg/m ³)	0.80	0.85
5	Carbon Monoxide (CO) mg/Nm ³	10.11	06.98
6	Sulfur Content in fuel (%)	BDL<(0.01)	BDL<(0.01)

Date of Sampling		21.10.2024	22.10.2024
SR. NO.	TEST PARAMETERS	SM # 6 Emergency Diesel Generator -3 (780.8 KW)	SM # 7 Emergency Diesel Generator -4 (780.8 KW)
1	Particulate Matter (mg/Nm ³)	27.41	31.43
2	Sulfur Dioxide as SO ₂ (ppm)	06.81	07.58
3	Oxides of Nitrogen (ppm)	25.68	29.84
4	Non-Methyl Hydro Carbon (NMHC) (mg/m ³)	0.56	0.71
5	Carbon Monoxide (CO) mg/Nm ³	09.52	11.93
6	Sulfur Content in fuel (%)	BDL<(0.01)	BDL<(0.01)





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



CHAPTER 5

5.0 RESULTS OF TREATED EFFLUENT WATER QUALITY MONITORING

MONITORING PERIOD: OCTOBER 2024 TO MARCH 2025





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



5.0 TREATED EFFLUENT WATER QUALITY MONITORING:

ANALYSIS METHOD DETAILS:

SR. NO.	PARAMETERS	UNIT	GPCB NORMS	METHOD ADOPTED	MINIMUM DETECTABLE LIMIT
1	pH	--	6.5 to 8.5	APHA : (4500 – H+ B) 23rd Edition	1
2	Temperature	°C	40°C	IS 3025 (Part 9):1984 (Reaffirmed 2006)	2
3	Colour	Co. Pt	100 Co-pt scale	APHA : (2550 B&C) 23rd Edition	1
4	Oil and Grease	mg/L	10 mg/L	APHA (23rd Edition) 5520 B	0.001
5	Suspended Solid	mg/L	300 mg/L	APHA : (2540 D) 23rd Edition	1
6	Phenolic Compound	mg/L	1 mg/L	APHA : (5530 D) 23rd Edition	0.001
7	Sulphide	mg/L	2 mg/L	APHA (23rd Edition) 4500 S2 F Iodometric Method	0.001
8	Total Dissolved Solids	mg/L	2100 mg/L	APHA : (2540 C) 23rd Edition	5
9	BOD (3 day @ 27 °C)	mg/L	30 mg/L	IS 3025 (Part-44)	1
10	COD	mg/L	100 mg/L	APHA (23rd Edition) 5220 B Open Reflux Method	1
11	Hexavalent Chromium	mg/L	0.1 mg/L	APHA (23rd Edition) 3500 Cr B Colorimetric Method	0.001
12	Total Chromium	mg/L	2 mg/L	APHA (23rd Edition) 3111 B	0.001
13	Ammonical Nitrogen	mg/L	50 mg/L	APHA : (4500 NH3) 23rd Edition	0.001
14	Chloride	mg/L	600 mg/L	APHA : (4500 Cl B) 23rd Edition	0.001
15	Sulphate	mg/L	1000 mg/L	APHA : (4500 SO4-2 E) 23rd Edition	0.001





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



5.1 CHEMICAL ANALYSIS OF TREATED EFFLUENT WATER [OCTOBER 2024]

Sr. No.	Parameter	Unit (SI)	Results	GPCB Limit	Test Method
1	pH @ 25°C	-	6.84	6.5 – 8.5	APHA : (4500 – H+ B) 23rd Edition
2	Total Dissolve Solid	mg/L	1930	2100	APHA: (2540 C) 23rd Edition
3	Temperature	°C	29.5	40	IS 3025 (Part 9):1984 (Reaffirmed 2006)
4	Total Suspended Solids	mg/L	4.20	100	APHA : (2540 D) 23rd Edition
5	BOD (5 day at 20 °C)	mg/L	7.12	30	IS 3025 (Part 44):1993 (Reaffirmed 2014)
6	COD	mg/L	27.02	100	APHA : (5220 B) 23rd Edition
7	Oil & Grease	mg/L	BDL (<0.001)	10	APHA : (5520 B) 23rd Edition
8	Ammonical Nitrogen	mg/L	BDL	50	APHA : (4500 NH3) 23rd Edition
9	Chlorides	mg/L	460.7	600	APHA : (4500 Cl B) 23rd Edition
10	Sulphates	mg/L	356.1	1000	APHA : (4500 SO4-2 E) 23rd Edition
11	Hexavalent Chromium	mg/L	BDL(<0.001)	0.1	APHA : (3500 Cr) 23rd Edition
12	Colour	Pt. Co. Scale	< 5	100	APHA : (2550 B&C) 23rd Edition
13	Phenolic Compound	mg/L	BDL(<0.001)	1	APHA : (5530 D) 23rd Edition
14	Sulphides	mg/L	BDL(<0.001)	0.5	APHA : (4500 SO2 F) 23rd Edition
15	Total Chromium	mg/L	BDL(<0.001)	2	APHA : (3500 Cr) 23rd Edition
16	Total Copper	mg/L	BDL(<0.001)	1	APHA : (3500 Cu A) 23rd Edition
17	Total Zinc	mg/L	BDL(<0.001)	1	APHA : (3500 Zn A) 23rd Edition
18	Nickle	mg/L	BDL(<0.001)	3	APHA: (3500 Ni) 23rd Edition
19	Mercury	mg/L	BDL(<0.001)	0.01	APHA: (3500 Hg A) 23rd Edition
20	Lead	mg/L	BDL(<0.001)	0.1	APHA: (3500 pb A) 23rd Edition
21	Arsenic	mg/L	BDL(<0.001)	0.2	APHA: (3500 As A) 23rd Edition
22	Cadmium	mg/L	BDL(<0.001)	2	APHA: (3500 cd A) 23rd Edition
23	Selenium	mg/L	BDL(<0.001)	0.05	APHA: (3500-Se B) 23rd Edition
24	Cyanides	mg/L	BDL(<0.001)	0.2	APHA: (4500 CN- E) 23rd Edition
25	Fluorides	mg/L	BDL(<0.001)	1.5	APHA: (4500 F- D) 23rd Edition
26	Boron	mg/l	BDL(<0.001)	2	IS 3025(Part 57): 2005
27	Percent Sodium	%	39	60	By Calculation
28	Total Residual Chlorine	mg/L	BDL	1	APHA: (4500 Cl B) 23rd Edition
29	Bio – Assay Test	%	98	90% Survival of fish after 96 hrs. in 100% Effluent	IS 6582 (Part 2):2001 (Reaffirmed 2007)
30	Sodium Absorption Ratio (SAR)	%	18.59	26	By Calculation
31	Insecticide / Pesticide	mg/L	BDL	Absent	USEPA 3510 & 8141 A, 8181A





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



5.2 CHEMICAL ANALYSIS OF TREATED EFFLUENT WATER [NOVEMBER 2024]

Sr. No.	Parameter	Unit (SI)	Results	GPCB Limit	Test Method
1	pH @ 25°C	-	7.70	6.5 – 8.5	APHA : (4500 – H+ B) 23rd Edition
2	Total Dissolve Solid	mg/L	459.8	2100	APHA: (2540 C) 23rd Edition
3	Temperature	°C	30.01	40	IS 3025 (Part 9):1984 (Reaffirmed 2006)
4	Total Suspended Solids	mg/L	9.8	100	APHA : (2540 D) 23rd Edition
5	BOD (5 day at 20 °C)	mg/L	11.20	30	IS 3025 (Part 44):1993 (Reaffirmed 2014)
6	COD	mg/L	36.43	100	APHA : (5220 B) 23rd Edition
7	Oil & Grease	mg/L	BDL (<0.001)	10	APHA : (5520 B) 23rd Edition
8	Ammonical Nitrogen	mg/L	BDL	50	APHA : (4500 NH3) 23rd Edition
9	Chlorides	mg/L	95.26	600	APHA : (4500 Cl B) 23rd Edition
10	Sulphates	mg/L	41.54	1000	APHA : (4500 SO4-2 E) 23rd Edition
11	Hexavalent Chromium	mg/L	BDL(<0.001)	0.1	APHA : (3500 Cr) 23rd Edition
12	Colour	Pt. Co. Scale	< 5	100	APHA : (2550 B&C) 23rd Edition
13	Phenolic Compound	mg/L	BDL(<0.001)	1	APHA : (5530 D) 23rd Edition
14	Sulphides	mg/L	BDL(<0.001)	0.5	APHA : (4500 SO2 F) 23rd Edition
15	Total Chromium	mg/L	BDL(<0.001)	2	APHA : (3500 Cr) 23rd Edition
16	Total Copper	mg/L	BDL(<0.001)	1	APHA : (3500 Cu A) 23rd Edition
17	Total Zinc	mg/L	BDL(<0.001)	1	APHA : (3500 Zn A) 23rd Edition
18	Nickle	mg/L	BDL(<0.001)	3	APHA: (3500 Ni) 23rd Edition
19	Mercury	mg/L	BDL(<0.001)	0.01	APHA: (3500 Hg A) 23rd Edition
20	Lead	mg/L	BDL(<0.001)	0.1	APHA: (3500 pb A) 23rd Edition
21	Arsenic	mg/L	BDL(<0.001)	0.2	APHA: (3500 As A) 23rd Edition
22	Cadmium	mg/L	BDL(<0.001)	2	APHA: (3500 cd A) 23rd Edition
23	Selenium	mg/L	BDL(<0.001)	0.05	APHA: (3500-Se B) 23rd Edition
24	Cyanides	mg/L	BDL(<0.001)	0.2	APHA: (4500 CN- E) 23rd Edition
25	Fluorides	mg/L	BDL(<0.001)	1.5	APHA: (4500 F- D) 23rd Edition
26	Boron	mg/l	BDL(<0.001)	2	IS 3025(Part 57): 2005
27	Percent Sodium	%	43	60	By Calculation
28	Total Residual Chlorine	mg/L	BDL	1	APHA: (4500 Cl B) 23rd Edition
29	Bio – Assay Test	%	98	90% Survival of fish after 96 hrs. in 100% Effluent	IS 6582 (Part 2):2001 (Reaffirmed 2007)
30	Sodium Absorption Ratio (SAR)	%	15.27	26	By Calculation
31	Insecticide / Pesticide	mg/L	BDL	Absent	USEPA 3510 & 8141 A, 8181A





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



5.3 CHEMICAL ANALYSIS OF TREATED EFFLUENT WATER [DECEMBER 2024]

Sr. No.	Parameter	Unit (SI)	Results	GPCB Limit	Test Method
1	pH @ 25°C	-	7.65	6.5 – 8.5	APHA : (4500 – H+ B) 23rd Edition
2	Total Dissolve Solid	mg/L	1609	2100	APHA: (2540 C) 23rd Edition
3	Temperature	°C	31.40	40	IS 3025 (Part 9):1984 (Reaffirmed 2006)
4	Total Suspended Solids	mg/L	10.2	100	APHA : (2540 D) 23rd Edition
5	BOD (5 day at 20 °C)	mg/L	13.73	30	IS 3025 (Part 44):1993 (Reaffirmed 2014)
6	COD	mg/L	42.39	100	APHA : (5220 B) 23rd Edition
7	Oil & Grease	mg/L	BDL (<0.001)	10	APHA : (5520 B) 23rd Edition
8	Ammonical Nitrogen	mg/L	BDL	50	APHA : (4500 NH3) 23rd Edition
9	Chlorides	mg/L	106.84	600	APHA : (4500 Cl B) 23rd Edition
10	Sulphates	mg/L	65.74	1000	APHA : (4500 SO4-2 E) 23rd Edition
11	Hexavalent Chromium	mg/L	BDL(<0.001)	0.1	APHA : (3500 Cr) 23rd Edition
12	Colour	Pt. Co. Scale	< 5	100	APHA : (2550 B&C) 23rd Edition
13	Phenolic Compound	mg/L	BDL(<0.001)	1	APHA : (5530 D) 23rd Edition
14	Sulphides	mg/L	BDL(<0.001)	0.5	APHA : (4500 SO2 F) 23rd Edition
15	Total Chromium	mg/L	BDL(<0.001)	2	APHA : (3500 Cr) 23rd Edition
16	Total Copper	mg/L	BDL(<0.001)	1	APHA : (3500 Cu A) 23rd Edition
17	Total Zinc	mg/L	BDL(<0.001)	1	APHA : (3500 Zn A) 23rd Edition
18	Nickle	mg/L	BDL(<0.001)	3	APHA: (3500 Ni) 23rd Edition
19	Mercury	mg/L	BDL(<0.001)	0.01	APHA: (3500 Hg A) 23rd Edition
20	Lead	mg/L	BDL(<0.001)	0.1	APHA: (3500 pb A) 23rd Edition
21	Arsenic	mg/L	BDL(<0.001)	0.2	APHA: (3500 As A) 23rd Edition
22	Cadmium	mg/L	BDL(<0.001)	2	APHA: (3500 cd A) 23rd Edition
23	Selenium	mg/L	BDL(<0.001)	0.05	APHA: (3500-Se B) 23rd Edition
24	Cyanides	mg/L	BDL(<0.001)	0.2	APHA: (4500 CN- E) 23rd Edition
25	Fluorides	mg/L	BDL(<0.001)	1.5	APHA: (4500 F- D) 23rd Edition
26	Boron	mg/l	BDL(<0.001)	2	IS 3025(Part 57): 2005
27	Percent Sodium	%	45	60	By Calculation
28	Total Residual Chlorine	mg/L	BDL	1	APHA: (4500 Cl B) 23rd Edition
29	Bio – Assay Test	%	98	90% Survival of fish after 96 hrs. in 100% Effluent	IS 6582 (Part 2):2001 (Reaffirmed 2007)
30	Sodium Absorption Ratio (SAR)	%	17.30	26	By Calculation
31	Insecticide / Pesticide	mg/L	BDL	Absent	USEPA 3510 & 8141 A, 8181A





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



5.4 CHEMICAL ANALYSIS OF TREATED EFFLUENT WATER [JANUARY 2025]

Sr. No.	Parameter	Unit (SI)	Results	GPCB Limit	Test Method
1	pH @ 25°C	-	6.97	6.5 – 8.5	APHA : (4500 – H+ B) 23rd Edition
2	Total Dissolve Solid	mg/L	1616	2100	APHA: (2540 C) 23rd Edition
3	Temperature	°C	30.9	40	IS 3025 (Part 9):1984 (Reaffirmed 2006)
4	Total Suspended Solids	mg/L	75.60	100	APHA : (2540 D) 23rd Edition
5	BOD (5 day at 20 °C)	mg/L	7.69	30	IS 3025 (Part 44):1993 (Reaffirmed 2014)
6	COD	mg/L	19.92	100	APHA : (5220 B) 23rd Edition
7	Oil & Grease	mg/L	BDL (<0.001)	10	APHA : (5520 B) 23rd Edition
8	Ammonical Nitrogen	mg/L	BDL	50	APHA : (4500 NH3) 23rd Edition
9	Chlorides	mg/L	413.38	600	APHA : (4500 Cl B) 23rd Edition
10	Sulphates	mg/L	451.41	1000	APHA : (4500 SO4-2 E) 23rd Edition
11	Hexavalent Chromium	mg/L	BDL (<0.001)	0.1	APHA : (3500 Cr) 23rd Edition
12	Colour	Pt. Co. Scale	< 5	100	APHA : (2550 B&C) 23rd Edition
13	Phenolic Compound	mg/L	BDL (<0.001)	1	APHA : (5530 D) 23rd Edition
14	Sulphides	mg/L	BDL (<0.001)	0.5	APHA : (4500 SO2 F) 23rd Edition
15	Total Chromium	mg/L	BDL (<0.001)	2	APHA : (3500 Cr) 23rd Edition
16	Total Copper	mg/L	BDL (<0.001)	1	APHA : (3500 Cu A) 23rd Edition
17	Total Zinc	mg/L	BDL (<0.001)	1	APHA : (3500 Zn A) 23rd Edition
18	Nickle	mg/L	BDL (<0.001)	3	APHA: (3500 Ni) 23rd Edition
19	Mercury	mg/L	BDL (<0.001)	0.01	APHA: (3500 Hg A) 23rd Edition
20	Lead	mg/L	BDL (<0.001)	0.1	APHA: (3500 pb A) 23rd Edition
21	Arsenic	mg/L	BDL (<0.001)	0.2	APHA: (3500 As A) 23rd Edition
22	Cadmium	mg/L	BDL (<0.001)	2	APHA: (3500 cd A) 23rd Edition
23	Selenium	mg/L	BDL (<0.001)	0.05	APHA: (3500-Se B) 23rd Edition
24	Cyanides	mg/L	BDL (<0.001)	0.2	APHA: (4500 CN- E) 23rd Edition
25	Fluorides	mg/L	BDL (<0.001)	1.5	APHA: (4500 F- D) 23rd Edition
26	Boron	mg/l	BDL (<0.001)	2	IS 3025(Part 57): 2005
27	Percent Sodium	%	49	60	By Calculation
28	Total Residual Chlorine	mg/L	BDL	1	APHA: (4500 Cl B) 23rd Edition
29	Bio – Assay Test	%	98	90% Survival of fish after 96 hrs. in 100% Effluent	IS 6582 (Part 2):2001 (Reaffirmed 2007)
30	Sodium Absorption Ratio (SAR)	%	23.81	26	By Calculation
31	Insecticide / Pesticide	mg/L	BDL	Absent	USEPA 3510 & 8141 A, 8181A





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



5.5 CHEMICAL ANALYSIS OF TREATED EFFLUENT WATER [FEBRUARY 2025]

Sr. No.	Parameter	Unit (SI)	Results	GPCB Limit	Test Method
1	pH @ 25°C	-	7.06	6.5 – 8.5	APHA : (4500 – H+ B) 23rd Edition
2	Total Dissolve Solid	mg/L	1531	2100	APHA : (2540 C) 23rd Edition
3	Temperature	°C	29.4	40	IS 3025 (Part 9):1984 (Reaffirmed 2006)
4	Total Suspended Solids	mg/L	59.76	100	APHA : (2540 D) 23rd Edition
5	BOD (5 day at 20 °C)	mg/L	9.62	30	IS 3025 (Part 44):1993 (Reaffirmed 2014)
6	COD	mg/L	28.40	100	APHA : (5220 B) 23rd Edition
7	Oil & Grease	mg/L	BDL (<0.001)	10	APHA : (5520 B) 23rd Edition
8	Ammonical Nitrogen	mg/L	BDL	50	APHA : (4500 NH3) 23rd Edition
9	Chlorides	mg/L	114.96	600	APHA : (4500 Cl B) 23rd Edition
10	Sulphates	mg/L	84.16	1000	APHA : (4500 SO4-2 E) 23rd Edition
11	Hexavalent Chromium	mg/L	BDL(<0.001)	0.1	APHA : (3500 Cr) 23rd Edition
12	Colour	Pt. Co. Scale	< 5	100	APHA : (2550 B&C) 23rd Edition
13	Phenolic Compound	mg/L	BDL(<0.001)	1	APHA : (5530 D) 23rd Edition
14	Sulphides	mg/L	BDL(<0.001)	0.5	APHA : (4500 SO2 F) 23rd Edition
15	Total Chromium	mg/L	BDL(<0.001)	2	APHA : (3500 Cr) 23rd Edition
16	Total Copper	mg/L	BDL(<0.001)	1	APHA : (3500 Cu A) 23rd Edition
17	Total Zinc	mg/L	BDL(<0.001)	1	APHA : (3500 Zn A) 23rd Edition
18	Nickle	mg/L	BDL(<0.001)	3	APHA : (3500 Ni) 23rd Edition
19	Mercury	mg/L	BDL(<0.001)	0.01	APHA : (3500 Hg A) 23rd Edition
20	Lead	mg/L	BDL(<0.001)	0.1	APHA : (3500 pb A) 23rd Edition
21	Arsenic	mg/L	BDL(<0.001)	0.2	APHA : (3500 As A) 23rd Edition
22	Cadmium	mg/L	BDL(<0.001)	2	APHA : (3500 cd A) 23rd Edition
23	Selenium	mg/L	BDL(<0.001)	0.05	APHA : (3500-Se B) 23rd Edition
24	Cyanides	mg/L	BDL(<0.001)	0.2	APHA : (4500 CN- E) 23rd Edition
25	Fluorides	mg/L	BDL(<0.001)	1.5	APHA : (4500 F- D) 23rd Edition
26	Boron	mg/l	BDL(<0.001)	2	IS 3025(Part 57): 2005
27	Percent Sodium	%	47	60	By Calculation
28	Total Residual Chlorine	mg/L	BDL	1	APHA : (4500 Cl B) 23rd Edition
29	Bio – Assay Test	%	98	90% Survival of fish after 96 hrs. in 100% Effluent	IS 6582 (Part 2):2001 (Reaffirmed 2007)
30	Sodium Absorption Ratio (SAR)	%	21.40	26	By Calculation
31	Insecticide / Pesticide	mg/L	BDL	Absent	USEPA 3510 & 8141 A, 8181A





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



5.6 CHEMICAL ANALYSIS OF TREATED EFFLUENT WATER [MARCH 2025]

Sr. No.	Parameter	Unit (SI)	Results	GPCB Limit	Test Method
1	pH @ 25°C	-	7.60	6.5 – 8.5	APHA : (4500 – H+ B) 23rd Edition
2	Total Dissolve Solid	mg/L	1160	2100	APHA: (2540 C) 23rd Edition
3	Temperature	°C	27.8	40	IS 3025 (Part 9):1984 (Reaffirmed 2006)
4	Total Suspended Solids	mg/L	10.6	100	APHA : (2540 D) 23rd Edition
5	BOD (5 day at 20 °C)	mg/L	5.71	30	IS 3025 (Part 44):1993 (Reaffirmed 2014)
6	COD	mg/L	20.00	100	APHA : (5220 B) 23rd Edition
7	Oil & Grease	mg/L	BDL (<0.001)	10	APHA : (5520 B) 23rd Edition
8	Ammonical Nitrogen	mg/L	BDL	50	APHA : (4500 NH3) 23rd Edition
9	Chlorides	mg/L	386.47	600	APHA : (4500 Cl B) 23rd Edition
10	Sulphates	mg/L	121.58	1000	APHA : (4500 SO4-2 E) 23rd Edition
11	Hexavalent Chromium	mg/L	BDL (<0.001)	0.1	APHA : (3500 Cr) 23rd Edition
12	Colour	Pt. Co. Scale	< 5	100	APHA : (2550 B&C) 23rd Edition
13	Phenolic Compound	mg/L	BDL (<0.001)	1	APHA : (5530 D) 23rd Edition
14	Sulphides	mg/L	BDL (<0.001)	0.5	APHA : (4500 SO2 F) 23rd Edition
15	Total Chromium	mg/L	BDL (<0.001)	2	APHA : (3500 Cr) 23rd Edition
16	Total Copper	mg/L	BDL (<0.001)	1	APHA : (3500 Cu A) 23rd Edition
17	Total Zinc	mg/L	BDL (<0.001)	1	APHA : (3500 Zn A) 23rd Edition
18	Nickle	mg/L	BDL (<0.001)	3	APHA: (3500 Ni) 23rd Edition
19	Mercury	mg/L	BDL (<0.001)	0.01	APHA: (3500 Hg A) 23rd Edition
20	Lead	mg/L	BDL (<0.001)	0.1	APHA: (3500 pb A) 23rd Edition
21	Arsenic	mg/L	BDL (<0.001)	0.2	APHA: (3500 As A) 23rd Edition
22	Cadmium	mg/L	BDL (<0.001)	2	APHA: (3500 cd A) 23rd Edition
23	Selenium	mg/L	BDL (<0.001)	0.05	APHA: (3500-Se B) 23rd Edition
24	Cyanides	mg/L	BDL (<0.001)	0.2	APHA: (4500 CN- E) 23rd Edition
25	Fluorides	mg/L	BDL (<0.001)	1.5	APHA: (4500 F- D) 23rd Edition
26	Boron	mg/l	BDL (<0.001)	2	1S 3025(Part 57): 2005
27	Percent Sodium	%	42	60	By Calculation
28	Total Residual Chlorine	mg/L	BDL	1	APHA: (4500 Cl B) 23rd Edition
29	Bio – Assay Test	%	98	90% Survival of fish after 96 hrs. in 100% Effluent	IS 6582 (Part 2):2001 (Reaffirmed 2007)
30	Sodium Absorption Ratio (SAR)	%	18.7	26	By Calculation
31	Insecticide / Pesticide	mg/L	BDL	Absent	USEPA 3510 & 8141 A, 8181A





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



CHAPTER 6

6.0 RESULTS OF TREATED SEWAGE WATE QUALITY MONITORING

MONITORING PERIOD: OCTOBER 2024 TO MARCH 2025





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



6.0 SEWAGE WATER QUALITY MONITORING:

ANALYSIS METHOD DETAILS:

SR. NO.	PARAMETERS	UNIT	METHOD ADOPTED	GPCB NORMS	MINIMUM DETECTABLE LIMIT
1	BOD (3 Days @ 27 °C)	mg/L	IS 3025 (Part-44)	<30 mg/L	1.0
2	Suspended Solids	mg/L	IS 3025 (Part – 17)	< 100 mg/L	1.0
3	pH	--	IS 3025 (Part-11) Electrometric Method	6.5 to 9.0	1.0
4	Fecal Coliform	MPN/100ml	APHA(23rdEdi)9221 C&E	< 1000	--





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



6.1 CHEMICAL ANALYSIS OF STP WATER

[OCTOBER 2024]

SR. NO.	PARAMETERS	UNIT	STP-1	STP-2	GPCB NORMS
1	Total Residual Chlorine	mg/L	7.59	7.38	Min. 0.5
2	Total Suspended Solids	mg/L	2.20	15.80	30
3	BOD (5 day at 20 °C)	mg/L	5.38	4.27	20
4	Total Coliform	MPN/100ml	194	246	< 1000

6.2 CHEMICAL ANALYSIS OF STP WATER

[NOVEMBER 2024]

SR. NO.	PARAMETERS	UNIT	STP-1	STP-2	GPCB NORMS
1	Total Residual Chlorine	mg/L	7.93	7.49	Min. 0.5
2	Total Suspended Solids	mg/L	1.60	17.34	30
3	BOD (5 day at 20 °C)	mg/L	6.32	6.89	20
4	Total Coliform	MPN/100ml	170	274	< 1000





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



6.3 CHEMICAL ANALYSIS OF STP WATER

[DECEMBER 2024]

SR. NO.	PARAMETERS	UNIT	STP-1	STP-2	GPCB NORMS
1	Total Residual Chlorine	mg/L	7.51	7.57	Min. 0.5
2	Total Suspended Solids	mg/L	8.37	10.2	30
3	BOD (5 day at 20 °C)	mg/L	10.28	8.92	20
4	Total Coliform	MPN/100ml	183	251	< 1000

6.4 CHEMICAL ANALYSIS OF STP WATER

[JANUARY 2025]

SR. NO.	PARAMETERS	UNIT	STP-1	STP-2	GPCB NORMS
1	pH @ 25°C	--	7.17	7.18	6.5 to 9.0
2	Suspended Solids	mg/L	26.2	15.40	30
3	BOD (3 Days @ 27 °C)	mg/L	12.44	8.16	20
4	Total Coliform	MPN/100ml	236	249	< 1000





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



6.5 CHEMICAL ANALYSIS OF STP WATER

[FEBRUARY 2025]

SR. NO.	PARAMETERS	UNIT	STP-1	STP-2	GPCB NORMS
1	pH @ 25°C	--	8.06	7.35	6.5 to 9.0
2	Suspended Solids	mg/L	10.23	14.60	30
3	BOD (3 Days @ 27 °C)	mg/L	9.44	11.84	20
4	Total Coliform	MPN/100ml	219	261	< 1000

6.6 CHEMICAL ANALYSIS OF STP WATER

[MARCH 2025]

SR. NO.	PARAMETERS	UNIT	STP-1	STP-2	GPCB NORMS
1	pH @ 25°C	--	7.60	7.37	6.5 to 9.0
2	Suspended Solids	mg/L	5.40	04.40	30
3	BOD (3 Days @ 27 °C)	mg/L	10.28	17.42	20
4	Total Coliform	MPN/100ml	206	253	< 1000





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



CHAPTER 7
7.0 RESULTS OF GROUND WATER
QUALITY MONITORING
MONITORING PERIOD: OCTOBER 2024 TO MARCH 2025





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



DETAILS OF ANALYSIS METHOD:

SR. NO.	PARAMETERS	UNIT	METHOD ADOPTED	PERMISSIBLE LIMIT IN THE ABSENCE OF ALTERNATE SOURCE AS PER IS:10500 2012	MINIMUM DETECTABLE LIMIT
1	pH	--	IS 3025 (Part – 11) Electrometric Method	6.5 to 8.5 [#]	2
2	Temperature	°C	IS-3025(Part-9)	NS*	2
3	Turbidity	NTU	APHA (23 rd Edition) 2130 B	Max 5	0.02
4	Conductivity	µs/cm	IS 3025 (Part – 14)	NS*	2
5	Total Dissolved Solids	mg/L	IS 3025 (Part-16)	Max 2000	10
6	Total Suspended Solids	mg/L	IS 3025 (Part – 17)	NS*	2.0
7	Alkalinity	mg/L	IS 3025 (Part – 23)	Max 600	2.0
8	Total Hardness	mg/L	IS 3025 (Part – 21) EDTA Method	Max 600	2.0
9	Ca Hardness as Ca	mg/L	IS 3025 (Part – 40)	NS*	1.0
10	Mg Hardness as Mg	mg/L	IS 3025 (Part – 46)	Max 100	1.0
11	Chloride as Cl	mg/L	IS3025(Part-32) Argentometric Method	Max 1000	1.0
12	Nitrate as NO ₃	mg/L	IS3025(Part-34) Chromotopic Acid Method	Max 45 [#]	0.5
13	Sulphate as SO ₄	mg/L	IS 14543 IS 3025(P-24)	Max 400	1.0
14	Iron as Fe	mg/L	APHA (23 rd Edition) 3111 B	Max 0.3 [#]	0.3
15	Mercury as Hg	mg/L	APHA (23 rd Edition) 3112 B	Max 0.001 [#]	0.006
16	Cadmium as Cd	mg/L	APHA (23 rd Edition) 3111 B	Max 0.003 [#]	0.002
17	Selenium as Se	mg/L	APHA (23 rd Edition) 3114 B	Max 0.01 [#]	0.002
18	Arsenic as As	mg/L	APHA (23 rd Edition) 3114 B	Max 0.05	0.005
19	Cyanide as CN	mg/L	APHA (23 rd Edition) 4500 CN E Colorimetric Method	Max 0.05 [#]	0.001
20	Lead as Pb	mg/L	APHA (23 rd Edition) 3111 B	Max 0.01 [#]	0.005
21	Zinc as Zn	mg/L	APHA (23 rd Edition) 3111 B	Max 15	0.06
22	Hexavalent Chromium as Cr ⁺⁶	mg/L	APHA (23 rd Edition) 3500 Cr B Colorimetric Method	Max 0.05 [#]	0.05





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



7.1: RESULTS OF GROUND WATER QUALITY

[FEBRUARY 2025]

Sr. No.	Parameter	Unit (SI)	Borewell (Ground Water Bore Well B/4-SW 00USA)	Borewell (Ground Water Bore Well B/5-SW 51URA)	Borewell (Guard Pond SW)	Borewell (Near Guard Pond NE)
1	pH(@25°C)	-	7.80	7.89	8.31	7.52
2	Conductivity	µs/Cm	1162	756	965	1045
3	Temperature	°C	29.3	29.6	30.5	30.2
4	Turbidity	NTU	0.7	0.9	0.9	0.5
5	TDS	mg/L	528	320	443	623
6	TSS	mg/L	27.45	10.41	16.06	18.60
7	Total Alkalinity	mg/L	383	249	290.54	261
8	Total Hardness	mg/L	325	356	330.57	425
9	Chloride	mg/L	318	260	495	219
10	Sulphate	mg/L	185	31.43	65.17	184
11	Iron	mg/L	0.06	0.08	0.19	0.06
12	Hexavalent Chromium	mg/L	BDL (<0.001)	BDL (<0.001)	BDL (<0.001)	BDL (<0.001)
13	Calcium Hardness	mg/L	250	275	250.46	338
14	Magnesium Hardness	mg/L	75	81	80.11	87
15	Nitrate	mg/L	07.21	6.10	04.38	7.29
16	Mercury	mg/L	BDL (<0.0001)	BDL (<0.0001)	BDL (<0.0001)	BDL (<0.0001)
17	Cadmium	mg/L	BDL (<0.001)	BDL (<0.001)	BDL (<0.001)	BDL (<0.001)
18	Selenium	mg/L	BDL (<0.001)	BDL (<0.001)	BDL (<0.001)	BDL (<0.001)
19	Arsenic	mg/L	BDL (<0.001)	BDL (<0.001)	BDL (<0.001)	BDL (<0.001)
20	Cyanide	mg/L	BDL (<0.001)	BDL (<0.001)	BDL (<0.001)	BDL (<0.001)
21	Lead	mg/L	BDL (<0.001)	BDL (<0.001)	BDL (<0.001)	BDL (<0.001)
22	Zinc	mg/L	BDL (<0.001)	BDL (<0.001)	BDL (<0.001)	BDL (<0.001)





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



CHAPTER 8

8.0 RESULTS OF SOIL QUALITY MONITORING

MONITORING PERIOD: OCTOBER 2024 TO MARCH 2025





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



8.0 SOIL QUALITY MONITORING:

ANALYSIS METHOD DETAILS:

SR. NO.	TEST PARAMETER	UNIT	Minimum Detection Limit	REFERENCE
1	Bulk Density	g/cm ³	--	USDA / IS 2720 etc.
2	Organic matter	%	0.2	
3	Water Holding Capacity	%	2	
4	Colour	--	--	
5	pH (20% slurry)	--	--	
6	Clay	%	--	
7	Silt	%	--	
8	Sand	%	--	
9	Bicarbonates	mg/Kg	50	
10	Chlorides	mg/Kg	5	
11	Conductivity	µmho/cm	--	
12	Potassium	mg/kg	5	
13	Phosphorus	%	0.05	
14	Nitrogen	%	0.02	





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



8.1: RESULTS OF SOIL QUALITY MONITORING
[FEBRUARY 2025]

SR NO	PARAMETER	UNIT	RESULT Monitoring Date: [25.02.2025]			
			SL1	SL2	SL3	SL4
			01UPQ	02UPQ	Water Treatment Chemical Storage (UGD)	Chemical Yard
1	Bulk Density	g/cm ³	1.20	1.24	1.27	1.30
2	Organic matter	%	0.310	0.231	0.180	0.236
3	Water Holding Capacity	%	38.45	46.10	45.21	44.70
4	pH (20% slurry)	--	7.62	7.43	7.91	7.63
5	Colour	--	Dark Brownish	Dark Brownish	Dark Brownish	Dark Brownish
6	Texture	%	Sandy	Sandy	Sandy	Sandy
7	Bicarbonates	mg/Kg	180.4	120.4	144.6	180.9
8	Chlorides	mg/kg	213.4	187.42	238.2	200.1
9	Conductivity	mmho/cm	239	241	241	283
10	Potassium	mg/kg	402.71	353.2	420.8	274.06
11	Phosphorus as P ₂ O ₅	%	0.0156	0.0169	0.0231	0.0207
12	Nitrogen	%	0.0270	0.0248	0.0320	0.0321

Continue...





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



8.2: RESULTS OF SOIL QUALITY MONITORING
[MARCH 2025]

SR NO	PARAMETER	UNIT	RESULT Monitoring Date: [25.02.2025]			
			SL5	SL6	SL7	SL8
			Oil Yard	Oil Separator 03UBH (Behind 53)	Behind URD 04UBH (Behind 53)	Switch yard 06UBH (Behind 53)
1	Bulk Density	g/cm ³	1.18	1.15	1.24	1.28
2	Organic matter	%	0.186	0.247	0.210	0.241
3	Water Holding Capacity	%	37.40	46.71	40.81	47.85
4	pH (20% slurry)	--	8.10	7.28	7.50	7.43
5	Colour	--	Dark Brownish	Dark Brownish	Dark Brownish	Dark Brownish
6	Texture	%	Sandy	Sandy	Sandy	Sandy
7	Bicarbonates	mg/Kg	194.2	173.4	130.4	127.6
8	Chlorides	mg/kg	201.5	280.6	219.67	174.20
9	Conductivity	mmho/cm	249	232	235	229
10	Potassium	mg/kg	320.62	341.7	431.52	302.41
11	Phosphorus as P ₂ O ₅	%	0.017	0.0198	0.0212	0.0190
12	Nitrogen	%	0.0283	0.0324	0.0289	0.0259





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



CHAPTER 9

9.0 RESULTS OF NOISE MONITORING

MONITORING PERIOD: OCTOBER 2025 TO MARCH 2025





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



9.0 NOISE LEVEL MONITORING
MONITORING DETAILS:

THE NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2010

LIMIT	Day Time	Night Time
Ambient Air Quality Standards in respect of Noise for Industrial Area	75 dB[A]	70 dB[A]
Ambient Air Quality Standards in respect of Noise for Residential Area	55 dB[A]	45 dB[A]
Ambient Air Quality Standards in respect of Noise for Silence Zone	50 dB[A]	40 dB[A]

Note Silence zone is defined as an area comprising not less than 100 meters around hospitals, educational institutions and courts.

The silence zones are zones which are declared as such by the competent authority.

1. Day time shall mean from 6.00 a.m. to 10.00 p.m.
2. Night time shall mean from 10.00 p.m. to 6.00 a.m.





TORRENT POWER LTD.
DGEN MEGA POWER PLANT
ENVIRONMENTAL MONITORING REPORT
OCTOBER 2024 TO MARCH 2025



9.1 RESULTS OF NOISE MONITORING [OCTOBER 2024 TO MARCH 2025]

SR NO	PARAMETER	NOISE MONITORING – dB(A) [DAY TIME]					
		21.10.2024	25.11.2024	14.12.2024	06.01.2025	25.02.2025	18.03.2025
1	N1 # Near 03UEN	68	69	71	68	66	63
2	N2 # In between 51&52 UMC	62	64	65	64	68	69
3	N3 # In between 52&53 UMC	66	67	63	61	64	67
4	N4 # Near URA SW	61	63	64	65	69	70
5	N5 # Near URA SE	63	65	69	70	71	68
6	N6 # Pravesh Gate	67	69	72	69	67	69
7	N7 # Pahechan Gate	69	67	62	65	69	71
8	N8 # Meghdhanush Colony – Near Main gate	66	64	65	67	65	68

SR NO	PARAMETER	NOISE MONITORING – dB(A) [NIGHT TIME]					
		21.10.2024	25.11.2024	14.12.2024	06.01.2025	25.02.2025	18.03.2025
1	N1 # Near 03UEN	55	53	57	58	60	62
2	N2 # In between 51&52 UMC	52	50	53	54	57	59
3	N3 # In between 52&53 UMC	51	52	56	53	52	50
4	N4 # Near URA SW	50	54	54	51	54	52
5	N5 # Near URA SE	52	56	58	59	58	55
6	N6 # Pravesh Gate	55	51	52	50	51	56
7	N7 # Pahechan Gate	53	54	53	54	53	57
8	N8 # Meghdhanush Colony – Near Main gate	52	50	52	51	56	58

