



GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN, SECTOR 10-A,
GANDHINAGAR - 382010,
(T) 079-23232152

BYR.P.A.D.

CONSOLIDATED CONSENT AND AUTHORIZATION (CC & A)

CCA AMENDMENT NO: AWH-127037

NO:GPCB/ANK/CCA-1835(7)/ID-28312/

DT: /08/2023

In exercise of the power conferred under section-25 of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution) Act-1981 and Authorization under rule 6(2) of the Hazardous & Other Waste (Management and Transboundary Movement) Rule-2016, framed under the E(P) Act-1986.

And whereas Board has received consolidated application dated 07/11/2022 with inward no. 266148 for the Consolidated Consent and Authorization (CC & A) of this Board under the provisions / rules of the aforesaid Acts, Consent & Authorization is hereby granted as under.

CONSENT AND AUTHORISATION:

(Under the provisions / rules of the aforesaid Environmental Acts)

✓ To,
M/s. NARMADA CLEAN TECH (NCT),
JAGHADIA PIPELINE PROJECT(JPP),
PLOT NO. 904/1,
GIDC ESTATE JHAGADIA,
DIST: BHARUCH.

1. **Consent Order No: AWH-127037, Date of Issue 16/06/2023, Valid up to 16/05/2026.**
2. The consent to operate under Water Act -1974, Air Act - 1981 and Authorization under the Hazardous & Other Waste (Management and Transboundary Movement) Rule-2016 framed under the Environment (Protection) Act, 1986 for collection of treated effluent from member industrial units of Jhagadia Industrial estate; conveyance of the collected effluent up to the inlet of **FINISHING FINAL EFFLUENT TREATMENT PLANT (FETP)** located at PLOT NO. 904/1, GIDC ESTATE JHAGADIA, DIST: BHARUCH, for operation of FETP having 35 MLD capacity and use of new outlet for the discharge of treated effluent from the FETP of M/s Narmada Clean Tech (NCT), Jhagadia.
3. M/s Narmada Clean Tech shall convey treated effluent from outlet of FETP-Jhagadia (35 MLD) through 61 km onshore effluent conveying underground pipeline upto the Kantiyajal Booster Pumping Station (BPS), Village: Kantiyajal, Dist: Bharuch. Ultimately this treated effluent (35 MLD) after mixing with treated industrial effluent from FETP of M/s Narmada Clean Tech (40 MLD), Ankleshwar at Booster Pumping Station (BPS) Sump at Kantiyajal shall be pumped into deep Sea discharge pipeline from there it shall be discharged at the point designated by NIO i.e. Latitude 21°28'10.2" N Longitude 72°33'45" E.
4. **SPECIFIC CONDITIONS:**
 - 4.1 **Previous Consent order issued vide CCA no. AWH-120104 & 112492 vide letter no. GPCB/ANK/CCA-1835(7)/ID-28312/680498 dated 10/08/2022 shall be considered as null & void i.e. shall be treated as cancelled.**
 - 4.2 **Unit shall receive effluent from member industry through above ground pipeline only and unit shall not receive any effluent through tankers.**

- 4.3 Unit shall comply with all the conditions stipulated by SEIAA in the order of Environment Clearance issued vide letter no. SEIAA/GUJ/EC/7(h)/453/2022 dated: 17/02/2022.
- 4.4 Unit shall have to comply with Hon. NGT order in the matter of Original application No.902/2019, dated: 18/02/2022.
- 4.5 In no case hydraulic load shall exceed 35 MLD from outlet of FETP-Jhagadia to Kantiyajal.
- 4.6 There shall not be any industrial wastewater discharge into nearby Natural Water bodies from FETP directly or indirectly.
- 4.7 GIDC/ NAA/ NCT shall be totally responsible for collection of treated effluent from the GIDC estate of Jhagadia and its conveyance upto inlet of FETP-Jhagadia & subsequent conveyance after finishing effluent treatment at FETP (from the outlet of FETP) up to Kantiyajal Pumping Station ultimately leading to deep Sea discharge.
- 4.8 NCT shall be responsible for the treatment of effluent received from GIDC estate of Jhagadia to achieve prescribed norms.
- 4.9 NCT shall maintain the record of the member industries regarding the quality of effluent discharged into FETP inlet and as well as treated effluent discharged into Kantiyajal Pumping Station. NCT shall submit action taken report against non-complying industry on monthly basis. Disciplinary policy shall be strictly followed by the FETP authority and member industries..
- 4.10 NCT shall inform immediately to the GPCB regarding termination/ suspension of the membership of their member units, if any.
- 4.11 No any new/additional discharge or connection shall be given in Jhagadia area without permission of the Board.
- 4.12 NCT shall prepare Monitoring mechanism to avoid any leakages in Conveyance pipeline and prepare Action Plan to ensure compliance of the same and submit to this Board.
- 4.13 NCT shall implement communication plan involving each member unit at Jhagadia / Stack holder so that respected work can be done in minimum response time in case of emergencies.
- 4.14 NCT shall freeze hydraulic load as per updated list of 113 member units with their booking quantities submitted on 16/07/2021 with total booked quantity of 35 MLD. No addition/alteration of the booked volume shall be done without permission of the Board.
- 4.15 Hydraulic load given to each member unit of Jhagadia estate and given permission to discharge treated effluent in this pipeline is non-transferrable i.e. member unit cannot sell or buy hydraulic load to/from any other units.
- 4.16 NCT shall instruct & make sure that every member provides online pH meter with recorder & magnetic flow meters for flow measurement of treated wastewater.
- 4.17 Unit shall install online continuous monitoring system in line to CPCB directions for effluent discharge ensuring norms prescribed by regulatory authority and an arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB/CPCB on real time basis.
- 4.18 PLC-SCADA system shall be installed for FETP operations and monitoring system and online pH meter, TOC meter with arrangement to reflect its reading on the CETP/FETP's server, which can be fetched by the GPCB on real time basis.
- 4.19 The Final effluent treatment collection point shall be provided with on-line monitoring instruments along with TOC, pH, TKN and flow meter actuated valve at final pumping station, furthermore a third party monitoring shall be conducted regularly.
- 4.20 All the conditions specified in NOC, CRZ Clearance shall be complied with by the operating authority.
- 4.21 NCT shall obtain CRZ clearance if required at any stage.
- 4.22 NCT shall keep provision for CETP if required in future.



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4.23 On site and off site emergency plan as required under the Rules 13 & 14 of handling, Manufacturing, storage and import of the Hazardous Chemicals Rules, 1989 shall be prepared and approval from the Board shall be obtained.

5. CONDITION UNDER THE WATER ACT:

5.1 The quantity of total water consumption shall not exceed **58.50 KL/day**. (Break up as below).

- a) Domestic: 8.50 KL/Day
- b) Industrial: 10 KL/Day
- c) Gardening: 40 KL/Day

5.2 The quantity of total waste water generation shall not exceed **7.50 KL/day**. (Break up as below).

- a) Domestic: 7.50 KL/Day
- b) Industrial: Nil

5.3 Discharge of treated effluent from FETP shall not exceed 35 MLD in any case.

5.4 Domestic wastewater (7.50 KLD) shall be treated in provided treatment facility (FETP of NCT, Jhagadia).

5.5 NCT shall affix of water meters as per for the purpose of measuring and recording the quantity of water consumed at such places as may be required.

5.6 Inlet of FETP shall conform to following standards and NCT shall operate the effluent treatment system (FETP) in order to achieve the outlet quality of the treated effluent conforming to the following standards:

Parameters	Max. permissible values (in milligram/liter except for pH and Temperature) for inlet	Max. permissible values (in milligram/liter except for pH and Temperature) for discharge of treated effluent into Sea
pH	6-9	6-9
Biological Oxygen Demand, BOD ₅ , 27° C	100	100
Chemical Oxygen Demand (COD)	500	500
Total Suspended Solids (TSS)	150	100
Temperature, ° C	Shall not exceed more than 5° C above ambient water temperature	Shall not exceed more than 5° C above ambient water temperature
Oil & Grease	10	10
Ammonical -Nitrogen	50	50
Total Kjeldahl Nitrogen (TKN)	50	50
Nitrate- Nitrogen	50	50
Flouride	15	15
Sulphides, as S	5	5
Phenolic compounds (as C ₆ H ₅ OH)	5	5
Total Residual Chlorine	1	1
Zinc	15	15

Iron	3	3
Copper	3	3
Trivalent Chromium	2	2
Manganese	2	2
Nickel	3	3
Arsenic	0.2	0.2
Cyanide, as CN	0.2	0.2
Vanadium	0.2	0.2
Lead	0.1	0.1
Hexavalent Chromium	0.1	0.1
Selenium	0.05	0.05
Cadmium	0.05	0.05
Mercury	0.01	0.01
Bio-assay test	90 % Survival of fish after 96 hours in 100 % effluent.	90 % Survival of fish after 96 hours in 100 % effluent.
Colour & Odor	All efforts shall be made to remove Colour & unpleasant odour as far as possible	All efforts shall be made to remove Colour & unpleasant odour as far as possible
Insecticides / Pesticides	Absent	Absent

5.7 The above parameters are prescribed with following conditions:

- a) Discharge of treated effluent into Deep Sea shall be through proper marine outfall.
- b) There shall be minimum initial dilution of 150 times at the point of discharge and a minimum dilution of 1500 times at a point 100 m away from discharge point. In this regards, NCT shall carry out periodical (at least once in three years) study for ensuring the above parameters & submit a report to the Board.

5.8 The effluent conforming to the above standards shall be discharged in to Kantiyajal Pumping Station through an underground on shore pipeline of 61 kms length.

5.9 NCT shall receive the treated effluent from member units located in GIDC estate of Jhagadia conforming to the designed norms only so as to achieve the norms of the finally treated effluent as specified in the condition above.

5.10 Storm waster shall not be mixed with the industrial effluent. Disposal system for storm water shall be provided separately.

5.11 The treated effluent shall be pumped from outlet of FETP without any intermediary storage and conveyed to booster pumping station for further disposal into deep Sea.

5.12 All the effluent treatment units shall be operated and maintained efficiently so that the treated effluent always conforms to the specifications referred in condition above.

5.13 NCT shall have to monitor performance of every treatment unit of FETP by collecting effluent samples on a daily bases & shall have to maintain records & to submit the same as and when asked.

5.14 All pipes, valves & drains shall be leak proof.

5.15 NCT shall ensure that valves, pumps, sub-Sea pipeline, MOF system etc are periodically inspected for their integrity and to guarantee their proper functioning. Accurate records of all inspections, unusual findings, actions taken etc shall be strictly maintained as a part of the overall record system.

5.16 NCT shall inspect pump station, Seafloor stability, navigational aids, pipelines, valves etc regularly as per standard code and practices. Records of all inspections, unusual findings, actions taken etc shall be maintained properly.



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- 5.17 A comprehensive marine and estuarine quality-monitoring program shall be implemented as recommended by NIO.
- 5.18 NCT shall provide impervious tanks/ impervious guard ponds to hold effluent for at least 72 hours in case of maintenance or any other unforeseen circumstances. In the case of either maintenance of the FETP or process disturbances, effluent not complying with the specified norms shall be stored & further reprocessed in the treatment plant before final discharge.
- 5.19 NCT shall instruct & make sure that every member shall have to make storage facilities to store the effluent for at least 72 hours in an impervious acid proof brick lining tank/ HDPE tank.
- 5.20 NCT shall ensure that there shall be no unauthorized discharge of their member units and in no circumstances, clean water shall be used for dilution of trade effluent.
- 5.21 In order to enable the Board to perform its functions of ascertaining the standards of effluent laid down by it for the discharge of the effluent under the condition no. 5.6 of this order complied with by the FETP while causing discharge of effluent, the applicant shall have to submit every month the analysis report of the samples of effluent got collected and analyzed by one of the laboratories recognized by the Board.
- 5.22 The printed logbooks shall be maintained and got it certified for:
 - a) Energy/Fuel consumption/ Consumption of chemicals for treatment of effluent if any
 - b) Waste water flow at inlet & outlet of FETP
 - c) Quality of treated effluent being discharged into the Kantiyajal Pumping Station
 - d) Quantity of sludge generated
 - e) Laboratory analysis/ reports for each of the specified parameters of liquid effluents and solid sludge samples
- 5.23 NCT shall have to install the required system, keeping the provisions, with built-in measures for retrofitting, in case of the eventualities of unacceptable pollution load.
- 5.24 Regular maintenance of the above ground pipeline shall be carried out to avoid any spillage or leakage during conveyance of the effluent.
- 5.25 NCT shall constitute a monitoring committee for monitoring of the effluent discharged by its members in the GIDC drainage system.
- 5.26 NCT shall have only one outlet for the discharge of its effluent and ensured that no effluent shall be discharged without requisite treatment at its member industries end and without meeting with the GPCB norms. Convenient easy approach shall be provided at the outlet for ease of sampling. The unit shall not keep any by-pass line or system or loose or flexible pipe for discharge of effluent outside.
- 5.27 The ground water quality around the impervious guard ponds shall be monitored regularly & data shall be submitted to the Board once in six months and shall also comply with the instruction of GPCB in case of deterioration.
- 5.28 NCT shall provide state of the art composite sampler & set up testing laboratory facilities for collection, analysis of sample under the supervision of competent technical persons who shall report to the chief executive.
- 5.29 Good housekeeping shall be maintained within the individual units' premises and along the pipeline. All pipes, valves and drains shall be leak proof. Floor washing shall be admitted in to the effluent collection system for subsequent disposal.
- 5.30 NCT shall intimate the occurrence of any accident, event resulting in discharge of poisonous, noxious or polluting matter or the likelihood of the same into a stream or well to the Regional Office under the intimation to the Member Secretary in accordance with the Section 31(1) of the Water Act.

- 5.31 Due care shall be taken to minimize damage to marine ecology due to improper design, lack of maintenance, faulty operation and release into shallow waters due to unforeseen accidents.
- 5.32 The entire pipeline shall be protected from external corrosion.
- 5.33 Training for work safety and efficiency shall be imparted to the operations personnel for day-to-day operations as well as handling emergency situations.
- 5.34 Isolation valves shall be provided on the pipeline for better monitoring and control of flow operation.
- 5.35 All FETP members must have online monitoring system for pH, TOC and TKN.
- 5.36 All members shall have only one authorized outlet over the ground with full access from outside the premises, as per design approved by NCT.
- 5.37 NCT shall have to carry-out post project monitoring for effluent quality at pipeline outlet at Kantiyajal Pumping Station & shall have to submit the reports to Head Office, GPCB & Regional office –Ankleshwar and CPCB every month.
- 5.38 NCT shall have to take up a study to ascertain COD contributed by chlorides & Sulphates in the untreated and treated effluent at pipeline outlet at Kantiyajal Pumping Station & to submit a report.
- 5.39 The recommendation made by NEERI in their study report shall be complied with.
- 5.40 NCT shall operate the FETP round the clock even in case of power failure also.
- 5.41 NCT shall have to abide by the norms evolved by the concern authority for marine disposal time to time.

6. CONDITIONS UNDER AIR ACT:

- 6.1 The following shall be used as fuel.

Sr. No.	Name of Fuel	Quantity
1	Diesel	380 Lit/Hr

- 6.2 The flue gas emission through stack shall conform to the following standards:

Stack No.	Stack Attached To	Stack Height in Meter	Air Pollution Control Measure	Parameter	Permissible Limit
1	DG set- 1 Nos. (Cap. 1010 KVA) (emergency use)	11	---	PM SO ₂ NO _x	150 mg/NM ³ 100 ppm 50 ppm
2	DG set- 2 Nos. (Cap. 1250 KVA each) (emergency use)	11			

- 6.3 There shall be no process emission from the manufacturing process as well as any other ancillary process.
- 6.4 NCT shall install & operate comprehensive adequate air pollution in order to achieve prescribed norms control system so as to achieve standards.
- 6.5 NCT shall operate air pollution control equipment very efficiently and continuously so that the gaseous emission always conforms to the standards specified in condition no. 6.2 & 6.4 above.
- 6.6 The consent to operate shall lapse if at any time the parameters of the gaseous emission are not within the tolerance limits specified in the condition no. 6.2 & 6.4 above.
- 6.7 NCT shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection to/and for use of Board's staff. The



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chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted/displayed to facilitate identification.

- 6.8 NCT shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75dB(a) during day time and 70 dB(A) during night time. Daytime is reckoned in between 6 a.m. and 10 p.m. and nighttime is reckoned between 10 p.m. and 6 a.m.
- 6.9 NCT shall provide arrangement for acoustic enclosure to keep noise level within norms.
- 6.10 NCT shall take precautionary measures to avoid fugitive emission.

7. GENERAL CONDITIONS:

- 7.1 Any change in personnel, equipment or working conditions as mentioned in the consent forms/order should immediately be intimated to this Board.
- 7.2 In case of change of ownership/management, the name and address of the new owners/partners/directors/proprietor should immediately be intimated to the Board.
- 7.3 NCT shall provide all the staff with face shield gas mask, hand gloves, gumboots, helmet of green colour having logo of NCT and adequate training for operation of pipeline.
- 7.4 Periodic medical checkup of the workers shall be done and records shall be maintained as a measure to provide occupational health protection to the workers.
- 7.5 NCT shall carry out The Environmental Audit half yearly and the Environmental Statements pertaining to the previous year shall be submitted to the GPCB latest by 30th September every year. The Environmental Management Cell shall be set up to ensure implementation and monitoring of environmental safe guards and other conditions stipulated by the statutory authorities. The Environmental Management Cell/Unit shall directly report to the Chief Executive of the organization and shall work as a focal point for internalizing environmental issues. This Cell/Unit also coordinate the exercise of the Environmental Audit and preparation of the Environmental Statements.
- 7.6 The funds earmarked for the environmental protection measures should not be directed for any other purpose and year wise expenditure should be reported to this Board & to the Government.

8. AUTHORISATION FOR THE MANAGEMENT & HANDLING OF HAZARDOUS WASTE Form-2 (See rule 6 (2)).

- 8.1 Number of authorization: AWH-127037, Date of Issue 16/06/2023, Valid up to 16/05/2026.
- 8.2 M/s. NARMADA CLEAN TECH (NCT) is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at JAGHADIA PIPELINE PROJECT (JPP), PLOT NO. 904/1, GIDC ESTATE JHAGADIA, DIST: BHARUCH.

Sr. No.	Name of Hazardous Waste	Category	Quantity in Year	Facility
1	ETP Sludge / Waste	35.3	36500 MT	Collection, storage, Transportation, Disposal at common TSDF.
2	Used Oil	5.1	3MT	Collection, Storage, Transportation and Disposal by selling to authorized re-refiners / recycler or reuse.

Sr. No.	Name of Hazardous Waste	Category	Quantity in Year	Facility
3	Discarded drums/bags	33.1	6 MT	Collection, Storage, Transportation and Disposal by selling to authorized decontamination facility or send registered recycler after in-house decontamination.

- 8.3 The authorization is hereby granted to operate a facility as above.
- 8.4 The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act-1986.

9. TERMS AND CONDITIONS OF AUTHORISATION:

- 9.1 The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
- 9.2 The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the Gujarat Pollution Control Board.
- 9.3 The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.
- 9.4 Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.
- 9.5 The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
- 9.6 The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"
- 9.7 It is the duty of the authorised person to take prior permission of the Gujarat Pollution Control Board to close down the facility.
- 9.8 The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
- 9.9 The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
- 9.10 The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorisation.
- 9.11 The importer or exporter shall bear the cost of import or export and mitigation of damages if, any.
- 9.12 An application for the renewal of an authorisation shall be made as laid down under Hazardous & Other Wastes (Management and Transboundary Movement) Rules-2016.
- 9.13 Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
- 9.14 NCT shall have to manage waste oil, discarded containers etc., process waste as per Amended Rules - 2016 and shall apply Authorization for all applicable waste as per Amended Rules-2016.



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- 9.15 NCT shall store generated hazardous solid waste in a secured double lined storage with impervious liner and leachate collection facility within the premises. The leachate from the storage facility of hazardous solid waste shall be sent back to the FETP for further treatment.
- 9.16 Handling, manufacturing, storage and transport of hazardous chemicals shall be accordance with the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.
- 9.17 Annual return shall be filed by June 30th for the period ensuring 31st March of the year.
- 9.18 NCT shall have to display online data outside the main gate with regard to and nature of Hazardous chemicals being handled in the plant including waste water and air emission and solid hazardous waste generated within the factory premises.
- 9.19 Unit shall have to display the relevant information with regard to hazardous waste as indicated in the Court's order in W.P. No. 657 of 1995 dated 14th October 2003.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

Chugh
11/09/2023
(Arun G. Patel)
ENVIRONMENT ENGINEER

Outward No: 752893, 11/09/2023