



GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN
Sector 10-A, Gandhinagar 382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

NO:GPCB/ANK/CCA-1015(24)/ID-27833/

BY R.P.A.D.
DT: /08/2016

CCA NO: AWH-79601

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 Trans-boundary Movement) Rule-2016, framed under the E(P)Act-1986.

And whereas Board has received consolidated application dated **17/04/2016** with inward no. **106473** 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 LTD.,
AT: SURTI BHAGOR,
UMARWADA ROAD,
NEAR GUJARAT GAS CO. LTD,
ANKLESHWAR,
DIST: BHARUCH.

1. **Consent Order No: AWH-79601, Date of Issue **15/06/2016**, Valid up to **24/07/2021**.**
2. The consent to operate under Water Act -1974, Air Act - 1981 and Authorization under the Hazardous Waste (Management and Handling) Rules - 1989 framed under the Environment (Protection) Act, 1986 for collection of treated effluent from member industrial units of Ankleshwar, Panoli & Jhagadia industrial estates; conveyance of the collected effluent upto the inlet of FINAL EFFLUENT TREATMENT PLANT (FETP) located at Vill; Piraman, Dist: Bharuch; operation of FETP having 40 MLD capacity and use of new outlet for the discharge of treated effluent from the FETP through effluent conveyance pipeline with total length of 52.97 kms, out of that 43.6 kms onshore and 9.37 kms offshore length and having capacity to the tune of 60 MLD, into deep sea of Kantiajal village, Dist: Bharuch in the Gulf of Khambhat, through well designed diffuser at a point recommended by NIO i.e. Latitude 21° 28' 10.2"N Longitude 72° 33' 45" E.
3. **SPECIFIC CONDITIONS:**
 - 3.1 All the conditions specified in NOC, CRZ Clearance shall be complied with by the operating authority.
 - 3.2 The applicant shall install and commission continuous monitoring system at the outlet of FETP, for on-line monitoring of parameters pH, TOC, DO, BOD, COD, NH₃N etc.

Page 1 of 8

Clean Gujarat Green Gujarat

ISO-9001-2008 & ISO-14001 - 2004 Certified Organisation



GPCB

GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector 10-A, Gandhinagar 382 010

Phone : (079) 23226295

Fax : (079) 23232156

Website : www.gpcb.gov.in

- 3.3 There shall not be any industrial wastewater discharge into Amlakhadi from FETP directly or indirectly.
- 3.4 NCTL shall comply & follow time bound action plan (Short term & Long term).
- 3.5 NCTL shall carryout modification / up-gradation in FETP to achieve prescribed deep sea norms & strengthening of monitoring system for improvement of inlet quality of FETP as per action plan submitted.
- 3.6 Unit shall submit a fresh short term / long term action plan for the modification/ up gradation in FETP within 7 days.
- 3.7 NCTL shall be responsible for the collection of the treated effluent from GIDC estates of Ankleshwar, Panoli & Jhagadia and its disposal after treatment into the deep sea.
- 3.8 NCTL shall maintain the record of the member industries regarding the quality of effluent discharged into FETP.
- 3.9 NCTL shall inform immediately to the GPCB regarding termination/ suspension of the membership of their member units, if any.
- 3.10 NCTL shall have to carryout post project monitoring for effluent quality at FETP marine out fall & shall have to submit the reports to Head Office, GPCB & Regional office -Ankleshwar and CPCB every month.
- 3.11 NCTL shall have to abide by the norms evolved by the concern authority for marine disposal time to time.
- 3.12 NCTL 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.
- 3.13 NCTL shall have to take up a study to ascertain COD contributed by chlorides & Sulphates in the untreated and treated effluent at FETP & to submit a report.
- 3.14 The recommendation made by NEERI in their study report shall be complied with.

4. CONDITION UNDER THE WATER ACT:

- 4.1 The quantity of total water consumption shall not exceed **385 KL/day**. (Break up as below).
 - a) Domestic: 25 KL/Day.
 - b) Industrial: 20 KL/Day.
 - c) Gardening: 340 KL/Day.
- 4.2 The quantity of total waste water generation shall not exceed **2.8 KL/day**. (Break up as below).
 - a) Domestic: - 2.8 KL/Day
 - b) Industrial: NIL.
- 4.3 Discharge of FETP shall not exceed 40 MLD.
- 4.4 Sewage shall be disposed of through septic tank/soak pit system.
- 4.5 NCTL shall affix of water meters as per Section 4 (1) of the water (Prevention and Control of Pollution) Cess Act - 1977 for the purpose of measuring and recording the quantity of water consumed at such places as may be required, within 15 days and it shall be presumed that the quantity indicated by the meter has been consumed by the NCTL until the contrary is proved.



GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN
Sector 10-A, Gandhinagar 382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

4.6 NCTL shall operate the effluent treatment system in order to achieve the quality of the treated effluent conforming to the following standards.

Parameters	Max. permissible values (in milligram/litre except for pH and Temperature) for discharge of treated effluent into sea
pH	6-9
Biological Oxygen Demand, BOD ₅ , 27° C	100
Chemical Oxygen Demand (COD)	500
Total Suspended Solids (TSS)	100
Temperature, ° C	Shall not exceed more than 5° C above ambient water temperature
Oil & Grease	10
Ammonical -Nitrogen	50
Total Kjeldahl Nitrogen (TKN)	50
Nitrate- Nitrogen	50
Flouride	15
Sulphides, as S	5
Phenolic compounds (as C ₆ H ₅ OH)	5
Total Residual Chlorine	1
Zinc	15
Iron	3
Copper	3
Trivalent Chromium	2
Manganese	2
Nickel	3
Arsenic	0.2
Cyanide, as CN	0.2
Vanadium	0.2
Lead	0.1
Hexavalent Chromium	0.1
Selenium	0.05
Cadmium	0.05
Mercury	0.01
Bio-assay test	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
Insecticides / Pesticides	Absent



GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector 10-A, Gandhinagar 382 010

Phone : (079) 23226295

Fax : (079) 23232156

Website : www.gpcb.gov.in

- 4.7 The above parameters are prescribed with following conditions:
- Discharge of treated effluent into sea shall be through proper marine outfall.
 - 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, CETP shall carry out periodical (atleast once in three years) study for ensuring the above parameters & submit a report to the Board.
- 4.8 The effluent conforming to the above standards shall be discharged in to deep sea through an underground on shore pipeline of 43.6 kms length with landfall point at the location LAT 21°28'10"N; LONG 72°40'10"E & off shore submarine pipeline of 9.37 kms length having well designed diffuser system at the location LAT 21° 28'10.2"N LONG 72°33'45"E in the deep sea of Gulf of Khambhat as recommended by NIO.
- 4.9 NCTL shall receive the treated effluent from member units located in GIDC estates of Ankleshwar, Panoli & Jhagadia conforming to the designed norms only so as to achieve the norms of the finally treated effluent as specified in the condition above.
- 4.10 Storm water shall not be mixed with the industrial effluent. Disposal system for storm water shall be provided separately.
- 4.11 The treated effluent shall be pumped from outlet of FETP without any intermediary storage.
- 4.12 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.
- 4.13 NCTL 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.
- 4.14 NCTL shall provide impervious tanks/ HDPE tanks/ impervious guard ponds to hold effluent for atleast 72 hours but shall never discharge any untreated effluent into the environment. 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.
- 4.15 NCTL 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.
- 4.16 Good house keeping shall be maintained within the FETP premises. All pipes, valves & drains shall be leak proof. Floor washing shall be admitted into the effluent collection system for subsequent treatment and disposal.
- 4.17 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. 4.6 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.
- 4.18 NCTL shall carry out regular maintenance of the underground pipeline to avoid any spillage or leakage during conveyance of the effluent.
- 4.19 NCTL shall constitute a monitoring committee for monitoring of the effluent discharged by member units in the GIDC underground drainage system.
- 4.20 NCTL shall have only one outlet for the discharge of treated effluent and no effluent shall be discharged without requisite treatment and without meeting with the GPCB norms. Convenient



GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector 10-A, Gandhinagar 382 010

Phone : (079) 23226295

Fax : (079) 23232156

Website : www.gpcb.gov.in

easy approach shall be provided at the outlet for ease of sampling. NCTL shall not keep any bypass line or system, or loose or flexible pipe for discharging effluent outside or even within the FETP.

- 4.21 NCTL shall monitor the ground water quality around the impervious guard ponds 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.
- 4.22 NCTL shall intimate the occurrence of any accident, event resulting in discharge of poisonous, noxious or polluting matter or the likely hood 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.
- 4.23 NCTL 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.
- 4.24 NCTL shall inspect pump station, seafloor stability, navigational aids, pipelines, diffusers, valves etc regularly as per standard code and practices. Records of all inspections, unusual findings, actions taken etc shall be maintained properly.
- 4.25 The efficiency of the marine outfall (diffuser) shall be ascertained regularly along with cleaning of the diffusers & port openings for biofoulers and sediment that might settled inside.
- 4.26 A comprehensive marine and estuarine quality-monitoring programme shall be implemented as recommended by NIO.
- 4.27 NCTL 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.
- 4.28 The printed logbooks shall be maintained and got it certified for:
- Energy/Fuel consumption/ Consumption of chemicals for treatment of effluent
 - Waste water flow at inlet & outlet of FETP
 - Quality of treated effluent being discharged into the deep sea
 - Quantity of sludge generated
 - Laboratory analysis/ reports for each of the specified parameters of liquid effluents and solid sludge samples
- 4.29 NCTL shall operate the FETP round the clock even in case of power failure also.

5. CONDITIONS UNDER AIR ACT:

5.1 The following shall be used as fuel.

Sr. No.	Name of Fuel	Quantity
1.	Diesel	300 Lit/Hr

5.2 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 sets - 2 Nos. Cap. 1275 KVA Each	10	---	Particulate matter SO ₂ NO _x	150 mg/NM ³ 100 ppm 50 ppm



GPCB

GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector 10-A, Gandhinagar 382 010

Phone : (079) 23226295

Fax : (079) 23232156

Website : www.gpcb.gov.in

- 5.3 There shall be no process emission from the manufacturing process as well as any other ancillary process.
- 5.4 The concentration of the following parameters in the ambient air within the premises of the FETP shall not exceed the limits specified here under:

Parameters	Permissible Limit (Microgram /M3)	
	Annual	24 Hours Average
Particulate Matter (PM ₁₀)	60	100
Particulate Matter (PM _{2.5})	40	60
Oxide of Sulphur(SO _x)	50	80
Oxide of Nitrogen(NO _x)	40	80

- Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 for hourly at uniform intervals.
- 24 Hourly or 08 hourly or 1 Hourly monitored values, as applicable, shall be complied with 98 % of the time in a year 2 % of the time they may exceed the limits but not on two consecutive days of monitoring.

- 5.5 The applicant shall install & operate comprehensive adequate air pollution in order to achieve prescribed norms control system so as to achieve standards.
- 5.6 The applicant shall operate FETP / air pollution control equipment very efficiently and continuously so that the gaseous emission always conforms to the standards specified in condition no. 5.2 & 5.4 above.
- 5.7 The consent to operate the FETP shall lapse if at any time the parameters of the gaseous emission are not within the tolerance limits specified in the condition no. 5.2 & 5.4 above.
- 5.8 The applicant 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 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.
- 5.9 NCTL 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 6a.m. and 10 p.m. and nighttime is reckoned between 10 p.m. and 6 a.m.
- 5.10 NCTL shall provide arrangement for acoustic enclosure to keep noise level within norms.
- 5.11 NCTL shall take precautionary measures to avoid fugitive emission within the premises of FETP.

6. GENERAL CONDITIONS:

- 6.1 Any change in personnel, equipment or working conditions as mentioned in the consent forms/order should immediately be intimated to this Board.
- 6.2 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.
- 6.3 NCTL shall provide all the staff with face shield gas mask, hand gloves, gumboots, helmet of green colour having logo of NCTL and adequate training for operation of FETP.



GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector 10-A, Gandhinagar 382 010

Phone : (079) 23226295

Fax : (079) 23232156

Website : www.gpcb.gov.in

- 6.4 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.
- 6.5 NCTL shall make adequate lighting arrangements all around the FETP.
- 6.6 NCTL 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.
- 6.7 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 worked 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.
- 6.8 NCTL shall operate and maintain FETP as per the guideline published by CPCB, New Delhi for "Management, operation and maintenance of CETPs".
- 6.9 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.

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

7.1 Number of authorization: **AWH-79601**, Date of Issue **15/06/2016**, Valid up to **24/07/2021**.

7.2 **M/s. NARMADA CLEAN TECH LTD** is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at **AT: SURTI BHAGOR, UMARWADA ROAD, NEAR GUJARAT GAS CO. LTD, ANKLESHWAR, DIST: BHARUCH.**

Sr. No.	Name of Hazardous Waste	Quantity/Year	Category	Facility
1	ETP Sludge / Waste	36,500 MT/Year	35.3	Collection, storage, Transportation, Disposal at TSDF-BEIL- Ankleshwar.
2	Used Oil	3 Kl./Year	5.1	Collections, storage, transportation, Disposal by selling to Registered Re-refiners.

7.3 The authorization is hereby granted to operate a facility as above.

7.4 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.

8. TERMS AND CONDITIONS OF AUTHORISATION:

- 8.1 NCTL shall comply with the provisions of the Environment (Protection) Act - 1986 and the rules made there under.
- 8.2 The authorization shall be produced for inspection at the request of an officer authorized by the Gujarat Pollution Control Board.
- 8.3 The persons authorized shall not rent, lend, sell, and transfer of otherwise transport the hazardous wastes without obtaining prior permission of the Gujarat Pollution Control Board.
- 8.4 Any unauthorized change in personnel, equipment or working conditions as mentioned in the authorization order by the persons authorized shall constitute a breach of this authorization.



GPCB

GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN

Sector 10-A, Gandhinagar 382 010

Phone : (079) 23226295

Fax : (079) 23232156

Website : www.gpcb.gov.in

- 8.5 It is the duty of the authorized person to take prior permission of the Gujarat Pollution Control Board to close down the facility.
- 8.6 An application for the renewal of an authorization shall be made as laid down in rule 6 (2).
- 8.7 NCTL 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.
- 8.8 NCTL shall have to display on-line data outside the main factory 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.
- 8.9 NCTL 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.
- 8.10 NCTL shall submit annual report within 15 days and subsequently by 31st January every year.
- 8.11 NCTL 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.
- 8.12 Handling, manufacturing, storage and transport of hazardous chemicals shall be accordance with the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.

**For and on behalf of
Gujarat Pollution Control Board**

D. M. Thaker
12/11

(D. M. Thaker)

Environment Engineer