

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 32/2014 (THC)  
(CWP No. 9503/2012)  
(M.A. No. 921/2018)

Kishan Paryavaran Sangharsh  
Samiti, Jaipur

Applicant(s)

Versus

State of Rajasthan &Ors.

Respondent(s)

Date of hearing: 18.12.2019

**CORAM:**

**HON'BLE MR. JUSTICE RAGHUVENDRA S. RATHORE, JUDICIAL MEMBER  
HON'BLE DR. SATYAWAN SINGH GARBYAL, EXPERT MEMBER**

For Applicant (s)

Mr. DepashChoudhary,  
Advocate

For Respondent(s)

Mr. PinakiMisra, Sr. Advocate  
Mr. Vinay Kothari, Advocate  
Mr. SanyatLodha, Advocate  
Mr. Anand Sharma, IPS, SP,  
Pali  
Mr. SubodhAgarwal, IAS ACS  
Industries  
Mr. Gopal Krishna Jain, Senior  
Advocate with Mr. Lokendra  
Singh Kachhawa and Mr.  
Adhiraj Singh, Advocates  
Mr. Pawan Kumar Goyal, IAS,  
Chairman, RSPCB  
Ms. ShailajaDeval, IFS, Member  
Secretary, RSPCB  
Mr. Anuj Bhandari, Advocate  
Mr. ShashankSaxena,  
Advocates for Mr.  
Ardendhumauli Kumar Prasad,  
Advocate  
Mr. BalenduShekhar, Mr. Vipul  
Singh and Mr. Rajkumar  
Advocates

## ORDER

1. Earlier on the submissions made by the Counsel for the applicant that CETPs are not functioning and by Counsel for respondent, particularly respondent no.5, that they are functioning and/or discharges are within the prescribed parameters, we deemed it proper to have a report of the situation at the ground level and appointed a Court Commissioner vide the order dated 18.10.2019.

2. It is to be noted that a report was earlier submitted by the Court Commissioner but in order to have the present status of CETPs, in comparison to one on the earlier visit, that it was thought proper to request the same Court Commissioner to visit the site once again and submit a report.

3. The Learned Court Commissioner submitted his report, through email, on 27.11.2019 and it was immediately got uploaded on the website of the Tribunal.

4. After going through the report of the Commissioner, we thought it proper that before proceeding further, to call the Principal Secretary Industries, State of Rajasthan, Chairman and Member Secretary of State Pollution

Control Board as well as the Collector and Superintendent of Police, District Pali.

5. In compliance, thereof, the officers are present before us and during the course of proceedings the officers did not have anything to say against the report of the Court Commissioner. As a matter of fact, the Additional Chief Secretary, for Industries, Government of Rajasthan has fairly submitted that the Court Commissioner has done a commendable job and submitted this report after having thoroughly gone into all the aspects of the matter, as prevailing at the site.

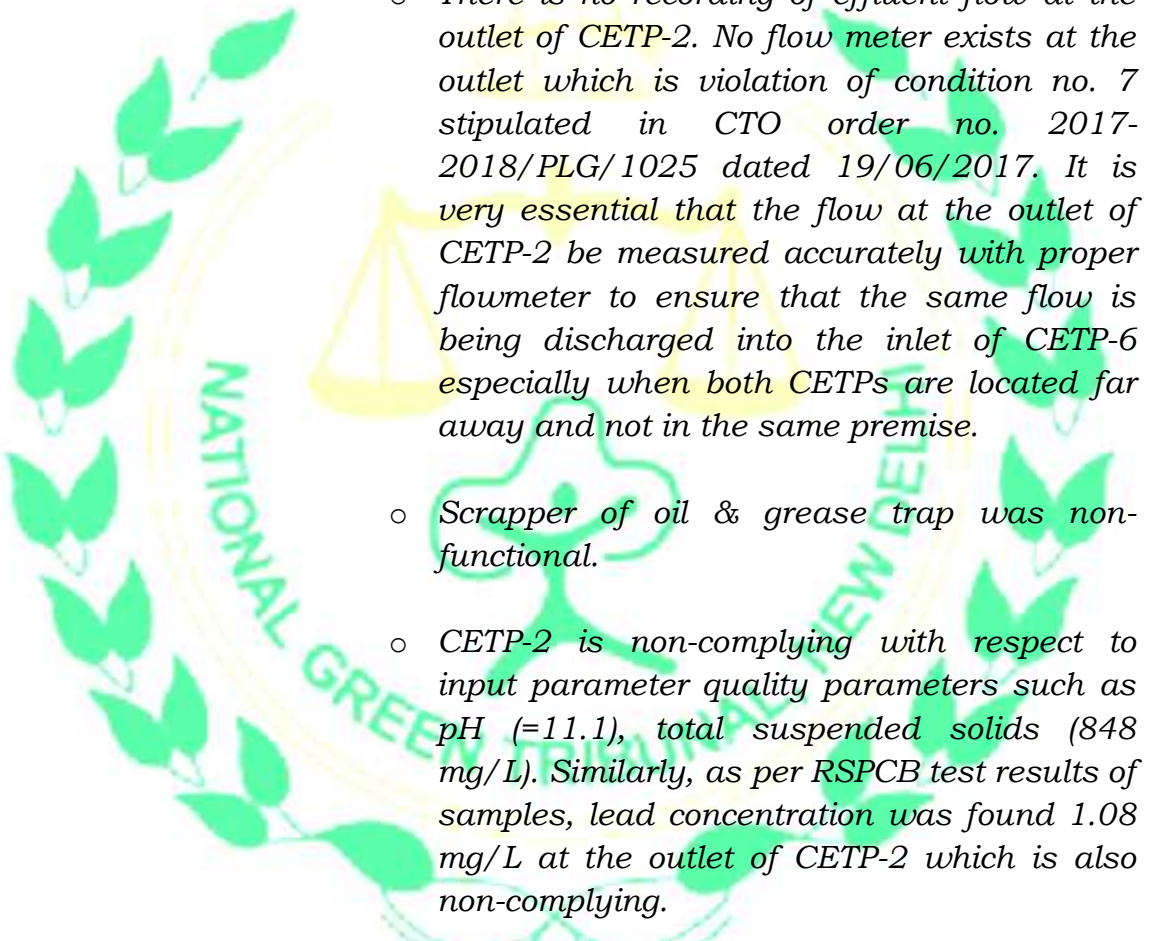
6. The Court Commissioner had made following observations on the functioning of the Common Effluent Treatment Plants (CETPs) at Pali, Rajasthan:

**“ CETP – 1:**

- *It is non-operative.*

**CETP-2:**

- *This CETP is meant for receiving effluents from 282 textile units of Mandia road industrial area, Pali. At the time of inspection on 11<sup>th</sup> November, 2019 following observations were noted:*
  - *The permitted operated capacity of CETP-2 has been prescribed as maximum up to 5.4 MLD by the State Pollution Control Board against its designed capacity of 8.4 MLD). It is surprising how the plant is running underflow at the time of inspection, especially when 282 textile units are to be served from Mandia road industrial area, Pali.*

- 
- Though the provision of an electromagnetic meter has been provided after the equalization tank (in transfer line to flash mixer section), it was initially non-functional and was installed recently just few days before the inspection visit of Commissioner. It is to be noted that the flowmeter is required to be installed at the inlet point of conveyance influent system (before Conduit Termination Pit) rather than providing it after the equalization tank (in transfer line to flash mixer section). Also, flow and effluent quality data are not being monitored through SCADA system at CETP-2 which is the violation of condition no. 16 stipulated in CTO order no. 2017-2018/PLG/1025 dated 19/06/2017.
  - There is no recording of effluent flow at the outlet of CETP-2. No flow meter exists at the outlet which is violation of condition no. 7 stipulated in CTO order no. 2017-2018/PLG/1025 dated 19/06/2017. It is very essential that the flow at the outlet of CETP-2 be measured accurately with proper flowmeter to ensure that the same flow is being discharged into the inlet of CETP-6 especially when both CETPs are located far away and not in the same premise.
  - Scraper of oil & grease trap was non-functional.
  - CETP-2 is non-complying with respect to input parameter quality parameters such as pH (=11.1), total suspended solids (848 mg/L). Similarly, as per RSPCB test results of samples, lead concentration was found 1.08 mg/L at the outlet of CETP-2 which is also non-complying.
  - Log book of operation, electric meter/water meters'/chemicals consumption etc. are not maintained properly. From the examinations of the produced log book, it has been inferred that artificial data have been created with instant entry in the log book. Consumptions of chemicals and utilities are not recorded.
  - CETP-2 is non-compliance with respect to conditions numbers 16, 17, and 18 stipulated in the CTO order no. 2017-2018/PLG/1025 dated 19/06/2017.

- *Records of generation and disposed sludge are not being maintained in the prescribed format for the last six months.*
- *Condition of secondary treatment units was clearly revealing that biological treatment is very poor and failed.*
- *Neither run hour meters are provided nor any log book is maintained for operation of influent/effluent handling pumps installed with different units of CETP. In absence of same, regulated operation of CETP may not be ascertained.*
- *Records related with routine engineering maintenance are not being maintained.*
- *Though CETP-2 is physically present, it is essentially being used as a pumping station to receive the wastewater from industries and pump the same to CETP-6 without any effective treatment.*
- *Due to above deficiencies and observations made, it is inferred that CETP-2 is non-complying with respect to various conditions stipulated in the CTO.*

**CETP- 3:**

- *The consent granted for this CETP is valid till 31<sup>st</sup> March,2022 for install capacity of 9.080 million litres per day (MLD). Though the plant has been planned to cater to the needs of 62 units located in RIICO industrial area and Mahavir Udyog Nagar, it is not in operation for the last six (6) months.*

**CETP-4:**

- *This plant is presently operational without any formal CTO letter because consent to operate under Water Act, 1974 was valid upto 30th September, 2018 and the CETP IV still needs to get consent to operate.*
- *This CETP has an installed capacity of 12.0 MLD to cater to the needs of 215 industries located in Punayata industrial area.*
- *The treated effluent from this plant goes to CETP-6 for further treatment.*
- *No correlation could be established between effluent discharged from CETP-4 into CETP-6 and influent*

received at CETP-6 from CETP-4 due to lack of appropriate flowmeters at proper location though there exists a flowmeter at the outlet of CETP-4. It is very essential that the flow coming from the outlet of CETP-4 be measured accurately at the inlet of CETP-6 with proper flowmeter to ensure that the same flow is being discharged into the inlet of CETP-6 especially when flexible pipes are being used and both CETPs are located far away and not in the same premise. There is no proper layout of piping systems/signage at the plant which ascertain whether these pipes are coming from a particular treatment unit (e.g. CETP-2, CETP-4 etc.) or coming directly from industrial units.

- Aeration system in equalization tanks has not been found effective at the time of inspection.
- Sludge drain facility has not been provided in equalization tanks.
- In the absence of metering arrangements at appropriate location in inlet of Conduit Termination Pit of CETP-4, actual quantum of influent could not be assessed /recorded accurately. Thus, it is difficult to ensure whether plant is running within the prescribed flow capacity as given in the CTO or not.
- Log book of operation, electric meter/ water meters'/chemicals consumption etc. are not maintained properly. From the examinations of the produced log book, it has been inferred that artificial data have been created with instant entry in the log book. Analysis of treated water quality is clear indicator of poor O & M of CETP.
- Records of generation and disposed sludge are not being maintained in the prescribed format for the last six months.
- Filter Press has not been provided for dewatering of sludge.
- The Programmable Logic Controller (PLC) based chemical dosing facilities have not been provided. During inspection related operations are being performed manually by unskilled labour in an unscientific manner. In the absence of any surveillance and automated system, usage of appropriate chemicals with optimum dose for treatment cannot be ascertained.

- *Condition of secondary treatment units was clearly revealing that biological treatment is very poor and failed.*
- *Record of Total Suspended Solids (inlet and outlet) and sludge drains etc. are not being maintained for primary clari-flocculator.*
- *Controlling parameters like dissolved Oxygen (D.O.) & Mixed Liquor Suspended Solids etc. are not monitored in the aeration tank.*
- *Record of sludge drains was not being maintained for secondary clarifier. In the absence of such monitoring efficiency of clarification at secondary (biological sludge) treatment could not be established.*
- *Performance of centrifuge was poor. Sludge (in Slurry form) was being filled in tractor trolley.*
- *Neither run hour meters are provided nor any log book is maintained for operation of influent/effluent handling pumps installed with different units of CETP.*
- *Bulk quantity of sludge was stored in shaded storage area. Sludge is also stored in open space as shades provided for storage of sludge are not of sufficient capacity.*
- *General house keeping all around sludge storage area was very poor. Even the yard site and other area were becoming greenish due to spillage of sludge. The dried sludge was becoming air born with movement of vehicles.*
- *Records of sludge generation and disposal are not being maintained in prescribed FORM-3 in HWMR-2016.*
- *Examination of past data revealed that disposal of sludge is almost equal to daily generation and, if a large quantity of hazardous sludge is stored in yard and lying in open lagoon over the years, it clearly indicates that sludge is not being disposed at same rate as it is being generated. It is clear indication of violation of Rule 8 of the HWMR 2016,*

*if large quantity of sludge is continuously being stored in the yard since long.*

- *Referring to quantity of sludge stored in yard and on basis of details of sludge disposal it was concluded that final disposal of sludge, to SLF or for Co-processing, is not being done as per provisions of Rule 8 of the Hazardous and Other Waste (Management and Transboundary Movement) Rules 2016.*
- *Accumulated (Stored) sludge in the yard may become a cause of severe environmental degradation & water pollution in that vicinity.*
- *Online treated effluent quality monitoring analyzers were not in operation.*
- *Though CETP-4 is physically present, it is essentially being used as a pumping station to receive the wastewater from industries and pump the same to CETP-6 without any effective treatment.*
- *CETP-4 is non-complying with respect to water quality parameters. The samples taken from inlet and outlet of CETP-4 were tested by Rajasthan State Pollution Control Board, Head Office, Central laboratory, Jaipur.*
- *This plant is 'non-complying' with respect to:*
  - *Not meeting the standards (condition given in the consent attached as Annexure R-8, page 2966-2971 of earlier report submitted on 16th January 2019). In fact, at present this CETP is operating without valid consent of State Board as the consent granted was expired on 30.09.2018.*
  - *Not utilizing effluent with high rate transpiration system (HRTS) as specified under condition 8 of the consent.*
  - *Upgradation of CETP for ZLD and tertiary system (condition 20 and 21 of the consent).*
  - *In addition, CETP-4 is not complying with the condition no. 9, 10, 11, 16, 22, 24 & 25 of the consent.*



**CETP-5:**

- *This plant is yet to be completed.*

**CETP-6:**

- *Consent to operate to this Plant under Section 25/26 of Water Act, 1974 and under Section 21 of Air Act, 1981 was granted on 27.02.2019 and is valid up to 31.01.2023 with the condition of zero liquid discharge with scientific arrangement for disposal of RO rejects to achieve the status of Zero Liquid Discharge (ZLD). The work for installation of Zero Liquid Discharge facility is yet to be started.*
- *This CETP is meant to treat the waste water being received from CETP 2, 3 (non-functional at the time of inspection on 10.11.2019) and 4 with a total installed capacity of 12.0 MLD.*
- *The CETP-6 is based upon physico-chemical, secondary biological treatment technology followed by Tertiary treatment facility. Tertiary treatment facility is comprised of Pressure Sand Filters and Activated carbon columns only. **(At the time of surprise inspection on 21.11.2019, Pressure Sand Filters and Activated carbon columns were non-operational).***
- *As per consent granted to CETP-6; no waste water is to be disposed and it should be based on ZLD. However, it has been found that effluent wastewater from CETP-6 is being discharged and getting stored in a pool of temporary arrangement of earthen walls constructed on the bed of river Bandi itself.*
- *Neither run hour meters are provided nor any log book is maintained for operation of influent/effluent handling pumps installed with different units of CETP.*
- *The electromagnetic meter provision has been made after the equalization tank (in transfer line to flash mixer section), which is not appropriate location for capturing inflow of the plant. It should be installed at the inlet point of conveyance influent system (before Conduit Termination Pit or receiving*

*inlet sump). Also, it is not being monitored through SCADA system at CETP-6.*

- *No correlation could be established between effluent coming from CETP-2, CETP-3 & CETP-4 into CETP-6 due to lack of appropriate flowmeters at proper location. It is very essential that the flow coming from the outlets of CETP-2, CETP-3 & CETP-4 be measured accurately at the inlet of CETP-6 with proper flowmeter to ensure that the same flow is being discharged into the inlet of CETP-6 especially when flexible pipes are being used and both CETPs are located far away and not in the same premise. There is no proper layout of piping systems/signage at the plant, which can ascertain whether these pipes are coming from a particular treatment unit (e.g. CETP-2, CETP-4 etc.) or coming directly from the industrial units.*
- *Online effluent quality monitoring system is not being operated and maintained. Also, for exact metering of discharge water, outlet meter is to be installed into the discharge line of ACF & PSF section.*
- *The Programmable Logic Controller (PLC) based chemical dosing facilities have not been provided. During inspection, related operations are being performed manually by unskilled labor in an unscientific manner.*
- *Record of Total Suspended Solids (inlet and outlet) and sludge drains etc. are not being maintained for primary clari-flocculator. In the absence of such monitoring efficiency of clarification of primary (chemical sludge) effective treatment could not be ascertained.*
- *As per technical design of this CETP, clarified water tank has not been provided before SBR.*
- *Designed/Original PLC based operation of SBR is not in use. Different operations of SBR section are controlled manually.*
- *Records of regular back washing of tertiary treatment units as well as replacement of sand filter media and activated carbon columns is not being maintained.*

- *Record of replacement of filter media is not available with CETP operator. It was reported that the media was replaced long back. Further, the result of treated effluent is clear indicator of poor efficiency of ACF & MGF.*
- *Sludge generation from CETP-6 unit is about 700 MT/month. Examination of the past data revealed that disposal of sludge is almost equal to daily generation. However, about 6750 MT sludge has been found stored at common sludge yard of CETPs at time of inspection, which is a clear indication that generation and disposal data provided in the record is not authentic. It was told that even more than 10000 MT of sludge have been stored in similar manner for a very long time, which is violation of provisions of Haz. Waste (M, H & TBM) Rules 2016. The Management of CETPs does not has any action-plan for the lifting & disposal of the stored sludge in prescribed time frame under H & OW (M &TM) Rules, 2016.*
- *Records of generation and disposed sludge are not being maintained in prescribed format.*
- *Filter Press has not been provided for dewatering of sludge.*
- *Bulk quantity of sludge was stored in shaded storage area. Sludge is also stored in open space as shades provided for storage of sludge are not of sufficient capacity.*
- *General house keeping all around sludge storage area was very poor. Even the yard site and other areas were becoming greenish due to spillage of sludge. The dried sludge was becoming air born with movement of vehicles.*
- *Accumulated (Stored) sludge in the yard would become a cause of severe environmental degradation & water pollution in that vicinity.*
- *As per R.O., Pali, CETP authorities are not maintaining and sharing complete record of effluent treated, chemicals consumed, energy consumption, records of sludge disposal and disposal etc. They*

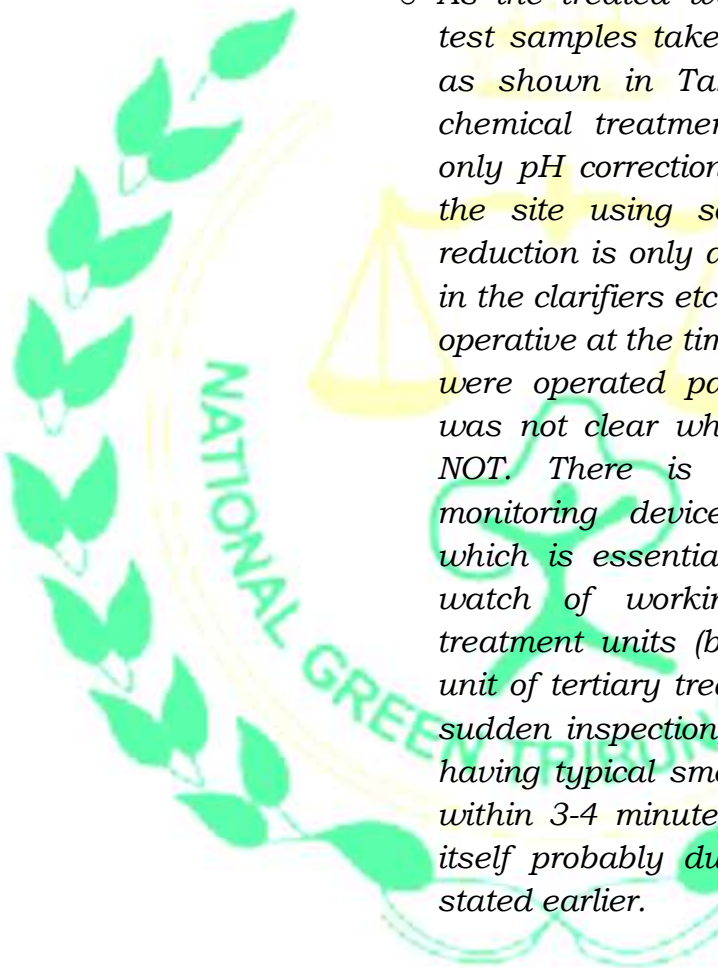
do not share such data on monthly basis which is violation of point no. 10 & 16 stipulated in the CTO order dated 27/02/2019.

- The quality of treated effluent is not within the prescribed standards limit. For example, concentration of Chloride is 2560 mg/L and Fluoride is 3.78 mg/L which are non-complying to the standards.
- Observations made by the RSPCB in last few months reveal that quality of treated effluent from CETP-6 is not complying with respect to other parameters as well.
- Also, online treated effluent quality monitoring analyzers were not in operation.
- The working different treatment units at CETP-6 has been found poor. Also, Routine maintenance of the plant is very poor. Records related with routine engineering maintenance are not being maintained properly.
- A lot of noise pollution occurs if D.G. sets are functioning. Intense noise was observed from compressor house. Acoustic enclosure for control noise level has not been provided.”

7. The Court Commissioner also made a surprise visit to CETP-6 on 21.11.2019 and has observed as follows:

- “Just after arrival at the plant, all incoming pipes coming to the inlet sump were running full of flow. However, just within 5 minutes, inlet flow from one of the pipes was stopped and flow was reduced in other pipes. It is felt that it was done intentionally to reduce the inflow. The flow meter reading was observed as 420 m<sup>3</sup>/hr. Surprisingly there was no variation observed in the flow meter during this time. Probably it is because it is placed at the wrong location to capture inlet flow or flowmeter might not be working accurately or it might have been calibrated to show a particular fixed range of flow only. It may be recalled that flowmeter was recording similar range of flow of (about 427 m<sup>3</sup>/hr) during the inspection on 10.11.2019 when there was low inlet flow observed as compared to that during the surprise visit on 21.11.2019. The difference in water level in inlet sump can be seen on both inspection dates.

- One additional flexible pipe line discharging raw influent into inlet sump has also been observed during the surprise visit which was not there during a visit on 10-11<sup>th</sup> November 2019. On enquiry, it was told that it is laid down from Punayata Industrial Area to inlet sump of CETP-6 to carry the industrial wastewater influent directly to CETP-6 without pretreatment in CETP-4, which is violation of the order of Hon'ble NGT Dated 26/05/2017.
- Samples were taken at inlet, just after secondary clarifier (ACF & PSF units) and at the outlet of CETP-6. Few critical parameters were tested in the Laboratory by the Commissioner. The results were quite alarming as shown in Table 1. The analysis report of treated wastewater of CETP collected at the final outlet of CETP-6 indicates that six important parameters out of eight, which were tested, are exceeded much beyond the prescribed limit of design parameters. These are COD with observed value of 940 mg/L against the prescribed limit of 250 mg/L; Chloride value of 3757 mg/L against the prescribed limit of 1000 mg/L; Total Suspended solids (TSS) value of 155 mg/L against the prescribed limit of 100 mg/L; Oil and grease value of 30 mg/L against the prescribed limit of 10 mg/L. BOD<sub>3</sub> (at 27 °C) value of 320 mg/L against the prescribed BOD limit of 20 mg/L; The values of other parameters were found to be pH = 8.0 (within limit); Total Dissolved Solids = 11140 mg/L, Total Hardness = 280 mg/L. The detailed analysis report is given in Table 1.
- Immediately, observations were made at the outlet to get effluent flow data. It was further surprising to note that the flow meter reading of outflow which was observed as 124 m<sup>3</sup>/hr reduced to 111 m<sup>3</sup>/hr which was further reduced to 92 m<sup>3</sup>/hr within 3-4 minutes. The colour of effluent at the outlet was also changed very dramatically from dark green to pale yellow within 3-4 minutes. At the time of surprise inspection, the sudden change in outlet flow and its colour from dark green to pale yellow within 3 to 4 minutes shows that-
  - The outlet treated effluent flow was possibly diverted and some clear water of same TDS might be introduced.
  - The flow was possibly reduced by sludge decanting from secondary clarifier to reduce the surface over flow rate.

- 
- Chances of introduction of any bleaching agent (Like sodium hypochlorite etc.) in the outlet pipe at the time of inspection may not be ruled out.
  - As stated earlier, the sludge generation is out of limit so probably, a part of the sludge might be recirculated to raw water or equalization tank or somewhere in the process of flow through pipes, which might be one of the reason of high COD at the outlet.
  - The BOD is also too high at the inlet of CETP-6, hence reduction is not as per the stipulated limits. The main cause of BOD might be that some waste water stream be fed directly to the pipe/stream coming from primary CETPs (CETP-4 or CETP-2).
  - As the treated water has high COD in the test samples taken during the surprise visit as shown in Table 1, it shows that the chemical treatment is ineffective. Probably only pH correction might have been done at the site using some acid. The parameter reduction is only due to settling of the sludge in the clarifiers etc. PSF/ACF are initially non-operative at the time of sudden inspection and were operated partially after some time, it was not clear whether they were in line or NOT. There is no pressure gauge/flow monitoring device available in PSF/ACF, which is essential in order to keep regular watch of working conditions of tertiary treatment units (basically it is only primary unit of tertiary treatment). Also at the time of sudden inspection, effluent at the outlet was having typical smell which was disappeared within 3-4 minutes at the time of inspection itself probably due to reduction in flow as stated earlier.

- Above observations clearly shows that CETP-6 is 'noncomplying' with respect to:
  - Not meeting the effluent standards and several other conditions given in the consent.
  - As per the technical data of CETP-6 provided at Annexure R-10 (page 2973-2977 of earlier report submitted to Hon. NGT on 16.01.2019). It is inferred that though this CETP-6 is designed based on raw water characteristics with BOD 700-1000 mg/L; COD 3000-3500 mg/L, Oil and grease 100 mg/L, the actual average values of these

parameters at the inlet sump during the surprise visit has been found as 2360 mg/L (BOD); 4351 mg/L (COD); 460 mg/L (Oil & Grease) respectively (Table 1). These values are much higher than the designed values of parameters which clearly shows that the flow coming from CETP-2 and CETP-4 to inlet sump of CETP-6 is not complying the standards. Not only CETP-2 & CETP-4 are noncompliance with respect to their effluent (outlet) meeting requirement standards but also CETP-6 does not meet its input design parameters. CETP-3 was also found non-functional at the time of inspection.

- o Similarly, CETP-6 does not meet its effluent design parameters standards as explained under item no. (iv) mentioned above (Table 1). It clearly indicates that the all CETPs are not complying with the standards.”

8. The Court Commissioner has also made observations on the status of River Bandi (Jodhpur by-pass) from a site located at NH-62 Jodhpur By-pass Bridge (upstream location of the river in Pali town) where ditches/pools in the river bed were seen.

9. Channelization work was going on to separate out effluent of industrial wastewater with natural river flow. From the By-pass Bridge, ponding of industrial treated effluents were observed in large area.

10. It has been found that effluent wastewater from CETP-6 is being discharged and getting stored in the pools (4 Nos.) of temporary arrangement of earthen walls (Dhora) construction on the bed of river Bandi itself. As

this storage facility is spread in the area of about 107650 m<sup>2</sup> without any lining, the possibilities of leakage and seepage of stored effluent from earthen pool into the river cannot be denied, in addition to its seepage into the groundwater. This is vulnerable to contamination of fresh water resources especially when it accumulates highly contaminated treated effluent as can be observed in sampling test results conducted by RSPCB on 11.11.2019.

11. Interestingly, the concentration of some of the parameters of the sample taken from the Cess Pool (located at back side of plot no. 18, PIA Pali) is of similar order of magnitude as was measured by the commissioner for a sample taken at the final outlet of CETP-6 (within the premise) on 21.11.2019 during his surprise visit.

12. The following concluding observations were made with respect to performance of the CETPs:

*“ None of the CETPs is meeting the standards. These plants are ‘non-complying’ with respect to designed influent and effluent characteristics as described in section 6.0.*

- a. Not meeting the standards with respect to some parameters such as BOD, COD, Oil & Grease, Chloride etc.*
- b. The consent granted to CETP-2 for Collection, Generation, Reception, Storage of Chemical Sludge (Cat-34.3) @ 10 TPD was valid up to 31/07/2019.*
- c. CETP-4 is presently operational without any formal CTO letter because consent to operate under Water Act, 1974 was issued vide letter dated 26.11.2015 and the same was valid*



- up to 30.09.2018. Agency has applied for renewal of consent to operate vide online application dated 30.06.2018. Agency has applied for renewal of consent to operate vide online application dated 30.06.2018.
- d. Plantation in the CETP premises was not found adequate.
  - e. Untreated wastewater discharged from RIICO drain has been contaminating Bandi river. RSPCB should ensure that no industrial and sewage effluent is discharged into the river (even treated) and instead, it should be utilized by the industries as directed by the Hon'ble Tribunal vide its order dated 31.01.2019.
  - f. Six out of total eight parameters tested by the Commissioner during his surprise visit on 21.11.2019, have alarming values, much beyond the permissible one, in the effluent of CETP-6 at the outlet. Trade effluent after treatment by the CETPs do not meet the prescribed standards as was noticed during the surprise visit on 21<sup>st</sup> November 2019.
  - g. In fact, all the CETP units have been found as prolonged noncompliance of consent conditions. These plants are 'non-complying' with respect to designed influent and effluent characteristics, and Operation and Maintenance issues, such as chemical's consumption, energy usage, handling, disposal and management of sludge, acoustic for D.G. sets etc. as described in Section 6.
  - h. The electromagnetic meter provision has been made after the equalization tank (in transfer line to flash mixer section), which is not appropriate location for capturing inflow of the plant. It has to be installed at the inlet point of conveyance influent system (before Conduit Termination Pit or receiving inlet sump).
  - i. The present tertiary treatment available at CETP-6 and provision of PSF & ACF at the plant is eyewash.
  - j. SCADA online monitoring system in any of the CETPs are non-functional.
  - k. As per the earlier CTO issued dated 23.03.2015, CETP trust, Pali was asked to install Reverse Osmosis (R.O.) Plant of adequate capacity supported with scientific arrangement for disposal of RO rejects to achieve the status of ZLD within 10 months to ensure compliance of E.C. conditions and consent conditions, which was not fulfilled and the earlier time frame given for installing ZLD system was expired in January 2016. The deadline to achieve the status of ZLD has been extended in the revised CTO upto 31.08.2020.
  - l. As per consent granted to CETP-6; no waste water is to be disposed and it should be

based on ZLD. However, it has been found that effluent wastewater from CETP-6 is being discharged and getting stored in a pool of temporary arrangement of earthen walls (Dhora) constructed on the bed of river Bandi itself. The accumulated effluent received from the outlet of CETP-6 at Cess Pool (Dhora) is highly contaminated and has non-compliant quality as discussed in Table 2. The temporary and non-engineered structure of such kind would be vulnerable to both groundwater contamination and river Bandi due to seepage of stored effluent.

- m. The Programmable Logic Controller (PLC) based chemical dosing facilities have not been provided at any of the CETPs. During inspection related operations are being performed manually by unskilled labor in an unscientific manner. In the absence of any surveillance and automated system, usage of appropriate chemicals with optimum dose for treatment cannot be ascertained.
- n. Neither run hour meters are provided nor are any log book is maintained for operation of influent/effluent handling pumps installed with different units of CETP.
- o. Accumulated (Stored) sludge in the yard has become a cause of severe environmental degradation & water pollution in the vicinity.
- p. General house keeping all around sludge storage area was very poor. Even the yard site and other area were becoming greenish due to spillage of sludge. The dried sludge was becoming air born with movement of vehicles.
- q. Examination of past data revealed that disposal of sludge is almost equal to daily generation and, if a large quantity of hazardous sludge is stored in yard and lying in open lagoon over the years, it clearly indicates that sludge is not being disposed at same rate as it is being generated. Sludge generation from CETP-6 unit is about 700 MT/month. Examination of the past data revealed that disposal of sludge is almost equal to daily generation. However, about 6750 MT sludge has been found stored at common sludge yard of CETPs at time of inspection, which is a clear indication that generation and disposal data provided in the record is not authentic. The Management of CETPs does not has any action-plan for the lifting & disposal of the stored sludge in prescribed time frame under H & OW (M &TM) Rules, 2016.
- r. There is no pressure gauge/flow monitoring device available in PSF/ACF, which is essential in order to keep regular watch of working conditions of tertiary treatment units.

*s. There is no proper layout of piping systems/signage at the plant, indicating details of inflows/outflows carrying out by the piping system. It is not clear whether some of these pipes are coming from a particular treatment unit (e.g. CETP-2, CETP-4 etc.) or coming directly from the industrial areas.”*

13. In view of the observations made by the Court Commissioner after his inspection of the functioning of the CETPs, it is clear that only three CETPs were functioning that too very unsatisfactorily, in other words, the discharges from the 559 industrial units which were connected to the CETPs were not being treated properly and the untreated effluents were being discharged in the open agricultural fields or in the river Bandi giving rise to disastrous environmental consequences. In view of this we direct as under:

- (i). The Additional Chief Secretary (Industries), Government of Rajasthan who has stated that he had studied the report of the Court Commissioner, should come out with a comprehensive action plan to deal with the situation on or before 31st January, 2020 positively. The CETP trust shall provide necessary data information as may be required, within a week from today to the Collector Pali / Additional Chief Secretary (Industry).

(ii). The State Pollution Control Board shall inspect all the 559 industrial units by 31st January, 2020. Chairman, State Pollution Control Board (SPCB) has submitted that the SPCB has already inspected 38 units of which 22 units were found to be non-compliant and the environmental compensation of approximately Rs. 5 lakhs in total has been imposed on those units. We direct that SPCB shall impose environmental compensation of Rs. 10 lakh each against all the units which are found to be non-compliant of environmental standards.

(iii). The CETP trust will pay environmental compensation of Rs. 10 crores for their failure to function properly and allowing the untreated effluent to be discharged in open thereby contaminating the agricultural fields and river Bandi. This Environmental Compensation will be paid to Center Pollution Control Board (CPCB), within a week from today.

(iv.) The CETP trust shall furnish a performance guarantee of Rs. 25 crores with CPCB to ensure implementation of the comprehensive

action plan which would be submitted by  
Additional Chief Secretary, by 31.01.2020.

14. List the matter on 03<sup>rd</sup> February, 2020.

Justice Raghuvendra S. Rathore, JM

Dr. Satyawan Singh Garbyal, EM

