

BEFORE THE HONOURABLE NATIONAL GREEN TRIBUNAL

SOUTHERN ZONE, CHENNAI

Original Application no. 71/2021

Applicant :: National Green Tribunal Southern Zone
(SuoMoto by Court)

Vs

Respondent(s)::: The Chief Secretary, Government
of Kerala and 9 others

Report filed by the Environmental Engineer, Kerala State Pollution Control Board (KSPCB), District Office, Thiruvananthapuram , on behalf of the 5th respondent in the matter of Original Application No. 71/2021.

1. I, Ramya G, Environmental Engineer, Kerala State Pollution Control Board (KSPCB - hereinafter referred to as Board), District Office, Thiruvananthapuram, am representing the 5th respondent, the Chairman of the Board. I have been authorized to file report on behalf of the Chairman of KSPCB. Copy of the Authorization letter is produced herewith as Annexure 1.
2. The Original application is registered as SUO MOTO by the Hon'ble Tribunal based on the reports in the New Indian Express, the Hindu and the Mathrubhumi Newspapers , dated 10.02.2021, regarding Oil Leak from Travancore Titanium Products Limited(herein after referred to as TTPL)at KochuVeli in Thiruvananthapuram. The Honourable Tribunal vide order dated 17.02.2021 has appointed a Joint Committee comprising of The District Collector, Thiruvananthapuram District, a Senior Scientist from Kerala State Pollution Control Board, a Senior Officer from the Tamil Nadu Coastal Zone Management Authority, a Senior Scientist from Central Pollution Control Board, Regional Office Bangalore and a Senior Scientist from National Institute of Ocean Technology, Chennai as the members. Hon'ble Tribunal has ordered the committee to inspect the site in question and to submit a factual as well as action taken report. The Central Pollution Control Board, Regional Office, Bangalore is entrusted as the nodal agency in this regard. It is submitted that Sri Baburajan P.K., the Chief Environmental Engineer, Head Office, KSPCB,(Now working as

Chief Environmental Engineer, Regional Office, Thiruvananthapuram) is nominated to the Joint Committee as per the aforementioned order.

3. TTPL is a Public Sector undertaking under Government of Kerala engaged in the production of Titanium Dioxide(TiO_2) Pigment. The Company also have a Sulphuric acid plant to produce acid for captive consumption. Titanium Dioxide is manufactured by the Sulphate process from Ilmenite. Ilmenite which is a mixture of Titanium Dioxide and Iron Oxide is reacted with Sulphuric acid and disintegrated into ionic state in solution. The Titanyl Sulphate on hydrolysis gives Hydrated Titanium Dioxide. On Calcination at elevated temperature the Hydrated Titanium Dioxide is transformed to Crystalline form.
4. Information was received from the public regarding an incident of furnace oil spillage from Travancore Titanium Products Ltd. at Kochuveli on 10.2.2021 morning at around 09.00am. A team of Board Officers rushed to the site immediately and the matter was communicated to Fire and Rescue Department, Indian Coast Guard Vizhinjam and Kochi. As informed by the factory officials, 5kilolitre of Furnace oil was spilled over to the effluent discharge drain in the factory leading to the sea. After reaching the oil through the effluent outlet to the sea, oil was spread along the shoreline due to the action of sea waves. Samples of effluent and oily sand were collected from different points along the shore line and from the source of discharge. The industry premises were also visited and the discharge into the sea was completely stopped .The industry representatives informed that the pipeline carrying furnace oil had a leak which caused spillage into the discharge drain leading to the sea.
5. The following instructions were issued to the unit by Chairman of the Board vide letter dated 10.02.2021. Copy of the letter is produced herewith as Annexure 2.
 1. Removal of oil contaminated beach sand from the entire contaminated beach length.
 2. As the waves are transferring the leaked oil continuously to the sea shore, the removal of the contaminated sand till the last drop of oil is removed, should be ensured.
 3. Absorbents like saw dust, rice husk etc shall be spread on the beach from the northern oil spread end, till the point where the spread has reached.

Sufficient labour, trucks and other equipments shall be employed to complete the works on a war footing.

4. The contaminated sand shall be kept in the premises of the unit without causing any further contamination and the disposal of the same shall be in the presence of the Board officials and in accordance with direction of the Board. The drain inside the premises leading to the sea, still holding the leaked oil sludge shall be emptied, cleaned and the removed sludge shall be stored inside the industry premises without causing any further contamination.
5. The contaminated sludge, saw dust and sand collected shall be properly quantified; proof of which shall be submitted to the Board
6. The proof of quantity of furnace oil leaked shall be submitted.
7. The oil collected in a pond in factory premises shall be transferred safely to leak proof tanks and contaminated soil shall be transferred along with soil sludge, and kept safely; the disposal shall be as per the direction of the Board.
8. There shall not be any discharge of effluent from the industry to the sea through authorized or any other outlet till the above works are completed. Prior permission from the Board shall be obtained before resuming production in the unit.
9. The industry shall install online effluent monitoring system in the open drain to the sea.
10. The industry shall provide leak detection facility for furnace oil line and for other hazardous materials.
6. The Chairman of the Board had also submitted a report to the Central Pollution Control Board vide letter dated 11.02.2021. Copy of the report is produced herewith as Annexure 3.
7. The Coast Guard Department intimated that they had deployed Interceptor Boat EX-VIZHINJAM to ascertain the situation and they observed that spillage had not spread to the sea. Fortunately due to direction of prevalent wind the oil slick had been observed along shoreline only. Copy of the said communication is produced herewith as Annexure 4.
8. The officers of the Board visited the site regularly and under their supervision, the unit collected oil contaminated sand along a stretch of about 4.5 km except in the area near the discharge point. It was informed by

the industry that the premises of the discharge point could not be cleared due to protest from the local people. The oil contaminated sand of about 12 MT was removed and stored within the premises of the company in a specific area earmarked and covered with plastic sheet. The same was handed over to the Common Hazardous Waste Treatment, Storage and Disposal Facility at Ambalamedu, Kochi.

9. A meeting with the company representatives was held by the Chairman of the Board on 18.02.2021. A direction was issued to the company by the Chairman on 18.02.2021 instructing to remove the oil and oil contaminated sand from the effluent outlet leading to sea. Copy of the direction is produced herewith as Annexure 5. In reply to the direction, the company informed that they were not in a position to remove the oil contaminated sludge from the drain exit point, since the public protest from local fishermen were still continuing. The matter was brought to the notice of the District Administration vide letter of Chief Environmental Engineer of the Board dated 18.02.2021 and subsequently a meeting was convened by the District administration on 25.02.2021 and 26.02.2021.
10. The TTPL authorities informed on 01.03.2021 that the Furnace oil contaminated sand and other waste materials had been completely removed from the drain discharge point. It was requested vide their letter dated 04.03.2021 to allow operation of the plant for the production of 10T of TiO₂ and 240 T of H₂SO₄ per day. Board officers inspected the site and verified compliance. 22.270 tonnes of oil contaminated sand and 36.13 tonnes of oil contaminated Ilmenite sludge were seen to be handed over to KEIL. As per letters no. PCB/HO/TVM/ICO/18/07 dated 03.03.2021 & 09.03.2021, permission was granted to Travancore Titanium Products Limited to operate the plant on trial run basis for 5 days to produce 10 TPD of Titanium Dioxide and 240 TPD of Sulphuric Acid with strict observance of proper storage of Sulphuric acid and without any effluent discharge to outside of company premises through the outlet. Trial run was conducted from 16.03.2021 to 20.03.2021. Continuous monitoring was conducted by a team of Board officers during the period of trial run and no effluent had been discharged outside the company premises through the outlet during the said period.


RAMYA. G
Environmental Engineer



11. Subsequently the company had requested permission to enhance production of Titanium Dioxide to 30TPD. The matter was examined in detail and a meeting had been convened with the representatives of the unit. Mass balance and water balance submitted by the unit were examined. Permission was granted upto 31/05/2021 to enhance production of Titanium Dioxide to 30TPD with a condition not to discharge any effluent outside the company premises. Copy of letter dated 05.05.2021, granting permission is produced herewith and marked as annexure 6. It is respectfully submitted that during the period of resuming production in the plant no abnormalities could be noticed by the Board. The company could manage the discharge of effluent so far by irrigation of their own land even though the outlet was blocked. However due to the onset of the monsoon, the management of storm water along with effluent may become a problem and the company need to chalk out a plan for confronting the situation. The Board is monitoring the situation with due vigilance and shall take necessary follow up action in this regard

All stated above are true to the best of my knowledge, information and belief.

Dated this the 07th day of June 2021



RAMYA. G
Environmental Engineer

Ramya G

Environmental Engineer
Kerala State Pollution Control Board

