

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

Appeal No. 89/2014

WITH

Appeal No. 90/2014

(M.A. No. 149/2016)

WITH

Original Application No. 508/2014

(M.A No. 345/2015, M.A. No. 151/2016 &

M.A. No. 702/2016)

Puducherry Environment Protection Association

Applicant(s)

Versus

Puducherry Pollution Control Committee & Ors.

Respondent(s)

Date of hearing: 29.01.2019

CORAM: **HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON**
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER

For Applicant(s):

Mr. Yogeshwaran, Advocate
Mr. Pinaki Mishra, Sr. Advocate and Mr. T.
Archana, Advocate

For Respondent (s):

Mr. Abhimanyu Garg, Advocate for PPCC

ORDER

1. The issue for consideration is the validity of consent granted in favour of M/s Chemfab Alkalis Ltd. respondent no.-3, under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981.
2. The matter has been considered in the last five years. Finally, on 30.08.2018, after considering the earlier report filed on 27.02.2015 by the Joint Inspection Team comprising of representatives of Central Pollution Control Board, NEERI, Ministry of Environment, Forests and Climate Change, Puducherry Pollution Control Committee and IIT Delhi, the Tribunal observed and directed as follows:

“ 4. The appellant has filed objections to the said report in terms of the written notes of submissions. According to the appellant there is a mis-match in the figure of production and the capacity permitted in

terms of the consent order. The production being beyond what is permitted in the order of consent, the action may have to be taken for violation of the consent terms.

5. To ascertain the factual position, we direct that a fresh inspection be done by a joint team of the following:-

- 1. Senior Scientist of Central Pollution Control Board;*
- 2. Senior Scientist from NEERI, Nagpur;*
- 3. Professor of Chemical Engineering, IIT Delhi.*

6. The inspecting team may focus on specific aspects of mass balance and capacities in the consent order.

7. The joint inspecting team will be coordinated by Central Pollution Control Board. The Puducherry Pollution Control Committee will provide all assistance to the joint inspection team to enable them to accomplish the task.”

3. Accordingly, Joint Inspection report has been filed by email dated 25.10.2018 by Central Pollution Control Board. The Expert Committee considered the manufacturing process, mass balance consented capacity, products calculations based on stock reading and found that the unit was producing caustic soda within their consented capacity. The observations of the Committee are as under:-

“1. The unit is having two consents issued under Water & Air Act which are as follows:

- i. Consent issued dt 3rd October 2016 for production of Caustic Soda Lye for 100 TPD(33000 TPA) having validity up to August 31, 2019(Annexure I)*
- ii. Consent issued dt.17th July, 2017 for production of Caustic Soda Lye for 125 TPD (45600 TPA) validity expired on 31st July, 2018 (Annexure II)*

2. The PPCC informed that the consent issued dt. 17th July 2017 shall be taken as effective consent for the unit which got expired on 31st July, 2018. The Unit has made an online application for renewal of consent on 7th May, 2018 and PPCC informed that it is under process of renewing the consent. The copy of the letter from PPCC stating renewal of consent is under process is enclosed as Annexure III.

3. On the day of inspection, the unit was operating at the production capacity of 107 TPD against the consented capacity of 125 TPD.

4. On verification on production details of last one year the unit production quantity was varying between 93.56-107 TPD since from April, 2018 due to maintenance work of electro cells at cell house 1.

5. As per record the Cell House no I and II have an installed capacity of 75 TPD and 50 TPD respectively. The catalogue from M/s Chlorine Engineers Corporation Ltd., Japanon details on installed capacity of cell house 2 i.e. 50 TPD and the self-certificate of M/s thyssenkrupp industrial Solutions (India) Pvt. Ltd., Mumbai India certifying the installed capacity of Cell house I as 75 TPD were verified.

6. On verification on production details from Excise Returns, it is inferred that the unit has enhanced their production from August, 2017 as per consent dt. 17th July, 2017.

7. The unit is not having any system for quantifying the raw salt consumption on day to day basis. The incoming stock of the raw salt is monitored through weigh bridge mechanism and stored in the closed store houses. The necessary quantity of salt is transported through conveyer system for production on the basis on brine saturation.

8. From the environmental statement submitted by the unit to PPCC for FY 2016-17 & 2017-18, the average consumption of raw salt per ton of caustic soda lye production is 1.70 tons & 1.65 tons respectively. The Annual Industry Review document for the year 2017-18 from Alkali Manufactures Association of India also states "...1.7 MT of salt is required to product 1 MT of caustic soda". Stoichiometrically, 1.46 MT of pure salt is required to produce 1 MT of caustic soda.

9. It was informed that 65 kg of Sludge is generated per ton of caustic soda lye production. The unit has not maintained any records of sludge generated on daily basis.

10. The unit informed that the chlorine cylinders received from customers for refilling contain some quantity of residual chlorine which needs to be emptied first and then refilled. During the inspection period, the unit has filled 57 cylinders of 0.9 Ton capacity each viz $(5.13 \text{ tons} - \text{residual chlorine in the cylinder}) = 51.3 - 0.75 = 50.55$. The actual chlorine filled into cylinder is 50.55 Tons. The quantity of residual chlorine emptied from cylinder is 2462 kg i.e. 2.462 tons which is vented into hypochlorite section for neutralization/ scrubbing.

11. The unit has installed 28 chlorine detectors in the premises at minimum detection limit of 0.3 ppm. In case, any chlorine leak is detected beyond 0.3 ppm, the unit is equipped with automated system to take corrective action.

12. It is observed that the hydrogen is vented out due to lack of demand or utilization. The

utilization of the hydrogen may be explored further either within the unit or outside the unit.

13. From the above observations it is confirmed that the unit is producing the caustic soda lye and other bi-products within their consented capacity.”

4. The conclusions of the Committee are as under:-

“1.PPCC shall issue modified consent including the following points

- The consent issued dt 3rd October, 2016 remains null & void.*
 - Remove the barium sulphate from products since the unit is not producing it since last two years.*
- 2. The unit may explore the possibilities to install necessary auxiliary units to quantify the consumption of raw salt on day to day basis. This will also help to verify the production details viz a viz mass balance calculation.*
 - 3. The Unit shall measure & maintain records on quantity of sludge generated on daily basis.*
 - 4. The unit may utilize the hydrogen gas vented out completely or explore the possibility of utilising in R&D/other industries.”*

5. We have noted that the Expert Committee constituted by this Tribunal comprised of Additional Director, CPCB, Joint Scientist, NEERI and Professor of the Department of Chemical, IIT Delhi.

6. We have considered the report and accept the same. The recommendations of the Committee may be acted upon at the earliest but not later than three months from today and the report of compliance be furnished to the Central Pollution Control Board and the Puducherry Pollution Control Committee.

The application is disposed of.

Adarsh Kumar Goel, CP

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

January 29, 2019
Appeal No. 89/2014
JG