

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

(By Video Conferencing)

Original Application No. 447/2022

In re: News item published in Pragativadi dated 04.06.2022 titled **“Huge Explosion at Chemical Company in Gujarat’s Vadodara”**

Date of hearing: 05.07.2022

**CORAM: HON’BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON’BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON’BLE PROF. A. SENTHIL VEL, EXPERT MEMBER**

Respondent: Mr. Maulik Nanavati, Advocate for GPCB
Mr. Balendu Shekhar, Advocate for CPCB
Mr. B. Kumar, Advocate for Deepak Nitrite Limited

ORDER

1. Proceedings have been initiated in this matter in the light of media report to the effect that there was an explosion in Deepak Nitrite factory in Vadodara, Gujarat resulting in injuries to seven workers on account of inhaling the smoke and shifting of 700 people living in area.

2. The Registry issued advance notice for today’s hearing on 06.06.2022 to the State PCB, CPCB, District Magistrate, Vadodara, Director Industrial Safety & Health Department, Gujarat and Deepak Nitrite factory, Vadodara. In response to the said notice, the State PCB has filed its action taken report on 02.07.2022 to the effect that fire accident in question took place on 02.06.2022. The State PCB directed closure and levied compensation of Rs. 1 Crore. Thereafter, the closure order was revoked on 30.06.2022 to the extent of permitting operations to

the extent of 50%. Compensation has been deposited. Order of closure direction under Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 shows that the cause of incident is reaction of incompatible material in QC Lab area and boiler area.

3. The industrial unit in question has also filed its response on 27.06.2022 mentioning the safety management systems in place. It has also mentioned that it has ‘on-site’ and ‘off-site’ emergency plans and has conducted safety audit.

4. Having regard to earlier directions of this Tribunal, it is necessary for the State Administration to maintain vigilance in the interest of safety of the workers and inhabitants against potential harm on account of unscientific working of chemical and other industries, having potential for such incidents. Regular safety audits need to be conducted, apart from ensuring organizing of mock drills and implementation of ‘on-site’ and ‘off-site’ emergency plans, as per laid down statutory environmental norms as observed earlier. In this regard reference may be made to the order of this Tribunal dated 03.02.2021 in *O.A. No. 85 of 2020, Aryavart Foundation through its President v. Yashyashvi Rasayan Pvt. Ltd. & Anr.* dealing with fire incident at Vadodara whereby the Tribunal accepted the recommendations of the Committee constituted by it headed by Justice B.C. Patel, former Chief Justice of Delhi High Court as follows:

“10. xxxxxx.....xxx

xxxxxx.....xxx
7. *Recommendations to avoid future incidents and other questions are as per the report Mark Annexure 28.*

SECTION 8
STEPS REQUIRED TO AVOID SUCH INCIDENT
(NATIONALDISASTER MANAGEMENT AUTHORITY)

55. *The question is how such accidents can be avoided. There is National Disaster Management Authority (NDMA) of the Government of India, which has issued guidelines for Chemical Disasters (Industrial).*

56. *The common causes for chemical accidents, deficiencies, safety management system and human errors are noted. The chemical accidents fire, explosion and/or toxic release were resulting irreversible pain, suffering and death. To minimise such accident and to improve emergency preparedness at all levels, substantial efforts are still required to predict the occurrence of disaster. (Page xvii)*

57. *It is also stated that it has been realised that effective Chemical Disaster Management (CDM) is possible by the adoption of preventive and mitigation strategies as most chemical disasters are preventable in comparison to natural disasters that are difficult to predict and prevent. Statutory inspection, safety audit and testing of emergency plan, onsite emergency plan, offsite emergency plans, medical emergency plans, information on chemical, technical information have been given importance.*

XXX.....XXX.....XXX

5. Shortage and training of manpower:

- viii. *It is necessary to appoint adequate number of Scientists and other officers as well as other staff considering the number of industries so as to effectively monitor the manufacturing units. Shortage of staff is also referred in the report of the Comptroller and Auditor General of India on Environmental Clearances and Post Clearance Monitoring 2016 that there are shortfalls in monitoring of environmental parameters. One of the reasons mentioned in the report is the shortfall/inadequate staff. Considering the numbers of Environmental clearance by MoEF & CC, New Delhi as well as SEIAA Gujarat (No. of ECs issued by MoEF & CC, New Delhi-Approx. 1500 & by SEIAA Approx. 8300 for the state of Gujarat only), the scientific staff in Ministry's regional offices should be strengthened for post EC monitoring at regular intervals. Thus, for having an eye over all the units, the Committee feels that the government should take appropriate steps for appointing adequate staff. The PESO also pointed out the same concerned the Gujarat being most industrialized state*

having about 40,000 licensed premises covered under various Acts and Rules including 1800 Major Accident Hazards premises, this is one of the pressing problems.

- ix. The manpower of the DISH in the industrial area must be related to the numbers of units in the area. Considering the incident and the quality of the inquiry made by DISH, it is desirable that proper training should be imparted to the officers of the DISH. This will improve the efficiency of DISH.*

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7. Management & study:

- xiii. HAZOP study direction / instruction must be carried out strictly and regularly by the unit.*
- xiv. Management to educate the staff on Materials Safety Data Sheet (MSDS) and engineers & operators in the plant must study the same.*

7. DCG, Hospitals:

- xv. All Industrial Zone/SEZ should have their own Local Crisis Group. The District Crisis Group should give surprise visit to the factories regularly at least once in a quarter and check the operation of factories. At the end of the visit, they should generate a report and submit to the State Crisis Group.*
- xvi. As per the Chemical Accidents (Emergency, Planning, Preparedness, Response) Rules, 1996, brought out under the Environment Protection Act 1986, it is mandatory to have State Crisis Group (SCG) and District Crisis Group (DCG) to help the State Disaster Management Authority (SDMA) and District Disaster Management Authority (DDMA) under the Disaster Management Act, 2005 in advisory roles to deal with Chemical Disaster Management (CDM). There is no emergency response centre / disaster management centre within the SEZ. Therefore, the authorities must provide urgently such centers. As the Industry in the instant case failed to report in this behalf there must be a provision for not reporting immediately to the DCG and DDMA or at emergency control room for chemical disasters in the state (as in the instant case it is at Vadodara). The Rule making authority though having prescribed 48 hrs. time limit within which the competent authority is required to be informed but there is no provision for the breach with regard to non-informing immediately or within 48 hrs. (In the instant case it is admitted the report was submitted on 9th June, 2020 against the incident on 3rd June, 2020).*

- xvii. **The requirement of a Hospital in an industrial zone or SEZ and particularly industries are engaged in hazardous chemicals is a must. Even Hospitals at distance of 50 kms are general hospitals and not specialised in chemical burns and injuries arising out of accident on account of hazardous materials.**
- xviii. District crisis group must undertake mock drill under off site emergency plan and crisis management in every industrial cluster or SEZ on failure action should be taken against DCG. (In the instant case they were satisfied with mock drill in one place in a district. In the instant case in one district there are more cluster of industries. Therefore, in each cluster an exercise aforesaid is a must – DISH has admitted that such exercise is not carried out in all clusters).
- xix. As at other places in the state of Gujarat in the industrial clusters, the GPCB has provided tower for air quality monitoring and same is being monitored by the GPCB. Dahej – I & II or the SEZ being an industrial town and factories are particularly engaged in hazardous chemicals, the committee is of the opinion that there should be Continuous Ambient Air Quality Monitoring Systems (CAAQMS) at all strategic locations. So that everyone in that area is aware about the air pollution.

8. Safety audit:

- xx. **For the purpose of auditing the safety, the government must make a panel of safety auditors to inspect the factory independently twice in a year and they should submit their report directly to the DISH. The safety auditor should be made answerable to the government.**
- xxi. The committee is of the opinion that sub-rule (9) of Rule 68(J) of the Gujarat Factories Rules 1963, refers to safety report and safety audit reports, under that Rule sub rule 2 gives a choice to industry to select the auditor for the purpose of the safety audit. The committee of the opinion that the state government be requested to consider the case and particularly safety report from independent auditor and to amend the Rule as below:
 - 2). After the commencement of these Rules, the occupiers of both the new and existing industrial activities and isolated storage must be checked by the government through the safety auditor which is accredited by an accreditation board to be constituted by the Ministry of labour, Government of India.
 - 3). The auditor within 30 days of audit shall send the report to the chief inspector with respect to the audit

recommendations and which shall be examined by the government within a period of 1 month and the industry shall be directed to carry out within the period specified the recommendation that may be made by the Government in this behalf.”

The application is disposed of.

A copy of this order be forwarded to the Chief Secretary, Gujarat and State PCB by e-mail for compliance.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

Prof. A. Senthil Vel, EM

July 05, 2022
Original Application No. 447/2022
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