

Item Nos. 04 to 07

Court No. 1

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

(By Video Conferencing)

Original Application No. 73/2020
(With Report dated 28.05.2020)

In re: Gas Leak at LG Polymers Chemical Plant in RR
Venkatapuram Village, Visakhapatnam in Andhra Pradesh

WITH

Review Application No. 19/2020

LG Polymers India

Applicant(s)

AND

Original Application No. 76/2020
(Earlier Original Application No. 68/2020 (SZ))

EAS Sarma

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

AND

Original Application No. 80/2020
(Earlier Original Application No. 73/2020 (SZ))

Centre for Wildlife and Environmental
Litigation Foundation

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

Date of hearing: 01.06.2020

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

For Applicant
In O.A. 76/2020:

Mr. Saurabh Sharma, Adv

For Respondent(s):

Mr. Sidharth Luthra, Sr. Adv. with Mr. Anuj
Berry, Adv. for LG Polymers India
Mr. Nikhil Nayyar, Sr. Adv. with Mr. TVS
Raghavendra Sreyas, Adv. for Andhra
Pradesh PCB
Mr. Raj Kumar, Adv. for CPCB
Mr. Satyalipsu Ray, Adv. for MoEF

ORDER

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(With Report dated 28.05.2020)
In re: Gas Leak at LG Polymers Chemical Plant in RR
Venkatapuram Village, Visakhapatnam in Andhra Pradesh
WITH
Review Application No. 19/2020
LG Polymers India Applicant(s)

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against NGT order of 8.5.2020

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Response of the Andhra Pradesh PCB
Response of the Company
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- B. Decision on merits in light of material on record
- C. Failure of Authorities and need for remedial measures
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I. Background

NGT order dated 8.5.2020

1. Vide Order dated 08.05.2020, this Tribunal initiated *suo-motu* proceedings in this matter on the basis of media reports to the effect that leakage of hazardous gas Styrene took place at 03:45 AM on 07.05.2020, from a chemical factory owned by the South Korean company LG Polymers India Pvt. Limited ("the Company"),

R.R. Venkatpuram village, Pendurthy Mandal, Vishakhapatnam resulting in death of 11 persons (now 12) and hospitalization of more than 100 people, of whom at least 25 were then reported to be serious. These fatalities and injuries were reportedly likely to increase. More than 1000 persons were reported sick. There was also damage to environment and habitat.

2. While noting reported failure of the Company to follow the mandate of the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 (“the 1989 Rules”) and failure of the statutory authorities and regulating such activities as per mandate of law. The Tribunal issued notice to Andhra Pradesh State PCB, District Magistrate, Vishakhapatnam, Central Pollution Control Board (CPCB), Ministry of Environment, Forests & Climate Change (MoEF&CC) and LG Polymers India Pvt. Limited (The Company). The Tribunal also constituted a six-member Committee headed by Justice B. Seshasayana Reddy, former Judge, A.P. High Court to visit the site and give a report on the following:
 - a. The sequence of events;
 - b. Causes of failure and persons and authorities responsible therefor;
 - c. Extent of damage to life, human and non-human; public health; and environment – including, water, soil, air;
 - d. Steps to be taken for compensation of victims and restitution of the damaged property and environment, and the cost involved;
 - e. Remedial measures to prevent recurrence;
 - f. Any other incidental or allied issues found relevant.

3. The Tribunal, having regard to the *prima-facie* material as to loss of lives, public health and environment and liability of the Company engaged in inherently hazardous activity, directed the Company to forthwith deposit an initial amount of Rs. 50 Crore with the District Magistrate, Vishakhapatnam, which would abide by further orders of this Tribunal. The amount was fixed having regard to the financial worth of the company and the apparent extent of the damage caused.

Supreme Court order dated 19.5.2020 on Company's Appeal against NGT order of 8.5.2020

4. The Company filed *Civil Appeal Diary No(s) 11327/2020* on 14.05.2020 before the Hon'ble Supreme Court which came up for hearing on 19.05.2020. The Hon'ble Supreme Court gave liberty to the Company to raise appropriate contentions before this Tribunal to be dealt with by this Tribunal as early as possible. It was observed, in relevant part:

"Mr. Mukul Rohatgi, learned senior Advocate appearing in support of the appeal submitted that soon after the fateful incident, the High Court took cognizance in Suo Motu W.P.(PIL) No.112/2020 and directed the State Government to constitute a Committee of appropriate Officers not below the rank of Principal Secretaries.

... ..

*Mr. Rohatgi further submitted that apart from this Committee, appropriate proceedings have been taken by concerned District Magistrates as well as by the Central Government and NHRC. **In his submission given the circumstances that the matter is engaging the attention of a Committee appointed pursuant to suo motu cognizance taken by the High Court, there was no occasion for the NGT to appoint a further Committee.***

He stated that in compliance of the directions issued by the NGT, the appellant has deposited the amount of Rs.50 crores and at this stage the appellant is not seeking any relief with regard to said sum but the legal issues raised by the appellant need consideration. Reliance was also placed on some of the orders passed by this Court where the question whether NGT could take suo motu cognizance

of any matter was squarely in issue. It was, therefore, submitted that the direction taking suo motu cognizance by the Tribunal be stayed.”

(emphasis supplied)

II. Response of parties to NGT's order of 8.5.2020, Committee's Report, and further petitions filed before NGT

Response of Parties

5. **Response of the MoEF&CC:** The MoEF&CC in its reply dated 14.05.2020 has stated that the gas in question is hazardous chemical under the 1989 Rules and the safety measures are to be adopted by the occupier of the company by preparing onsite and off-site emergency plans and taking other steps. As per Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996 (The 1996 Rules), Crisis Alert Systems have been established at the Central, State, District and Local levels. Among other authorities, the State Chief Inspector of Factories (CIFs) is to deal with the safety issues under the Factories Act, 1948. Petroleum and Explosives Safety Organization (PESO) is the nodal agency to approve the site of the industrial installation. MoEF&CC sought report from the State Authorities. 'Report on the Styrene gas leakage' annexed to the reply affidavit mentions about the incident. It is stated that 12 deaths have been reported and 4000 persons are affected. **The unit falls under the EIA Notification, 2006. It falls under category-A projects and the company has applied under 'violation category' for EC in 2018 to the SEIAA (State Environment Impact Assessment Authority). The MoEF&CC is yet to receive the transfer proposal from SEIAA.** On 08.05.2020, meeting of Central Crisis Group was held and suggestions were sought for dealing with the matter. Annexure-I is the report of the CPCB dated 07.05.2020 recommending follow up

action in the matter by the State PCB. Andhra Pradesh PCB is to carryout assessment of soil and groundwater. Annexure-2 is minutes of the Central Crisis Group under the Chairmanship of Secretary, MoEF&CC on 08.05.2020.

6. **Response of the Andhra Pradesh PCB:** The State PCB has stated that it issued statutory Consent for Establishment (CFE), Consent for Operation (CFO) and authorization under the Hazardous Management Rules, 1986 to the Company. In 2012, the Company increased its production capacity. Renewal of CFO and hazardous waste authorization was valid up to 31.12.2021 stands granted. SEIAA examined applicability of the EIA Notification for new product in the year 2017 and sought clarification from the MoEF&CC. **The Company moved the MoEF&CC for EC as per Notification dated 14.03.2017 dealing with the case of violation.** Management failed in understanding and managing the impact of changes due to lockdown. Directorate of Factories conducted investigation and gave its report dated 17.05.2020 recording the failures as follows:

“V.1.A The management has failed in understanding and managing the impacts of changes due to lockdown in storage of Styrene Monomer.

V.1.B When the top layer of SM in the tank is more vulnerable of polymerization, the samples were kept on taking from bottom of the tank only. Even after finding the sudden rise in polymer content in SM at the bottom, no attempts were made to understand the condition at the top.

V.1.C There was no measurement of vapour temperature of the tank.

V.1.D No monitoring mechanism was provided to ensure the minimum dissolved oxygen in SM for ensuring the functioning of TBC which is very vital requirement for safety. No attempts were made for

putting the tank in circulation with other tanks or creation of movement with nitrogen + Air mixture.

***V.1.E There is no production at the time of accident therefore, no emissions from process or utilities.”
(emphasis supplied)***

The Board withdrew the consent to the industry and issued stop production order on 07.05.2020. The company also gave letter dated 11.05.2020 that the plant will be kept under shutdown till necessary approvals and there is no production at the company. The Board monitored the styrene concentration in the ambient air and also collected surface water and groundwater and soil samples. The State of Andhra Pradesh constituted High Powered Committee. The team of Experts from CSIR-NEERI and CBRN Expert Team of 5th Battalion NDRF was constituted by the National Crisis Management Committee, New Delhi. Central Government also deployed two-member expert team to focus on-site technical issues.

7. **Response of the Company:** The company has chosen not to file any response on merits whatsoever inspite of opportunity nor any affidavit showing any difficulty in doing so, nor responded to the stand of the MoEF&CC and the State PCB with regard to its apparent failures in complying with statutory and legal obligation and not even produced onsite and off site plans statutorily required to be prepared which is very unfortunate in the face of loss of lives, public health and environment. Faced with this, the only response of learned counsel is that it has no access to relevant record, which stand on the face of it is against facts. However, it has been stated and also noted in the order of the Supreme Court that the amount of Rs. 50 crore in terms of order of

this Tribunal has been deposited. It has filed review application No. 19/2020 seeking recall of order dated 08.05.2020 insofar as constitution of the Committee is concerned and exercise of jurisdiction by this Tribunal.

The contentions raised on behalf of the Company in substance are:

- a) NGT could not have taken *suo motu* cognizance of the matter. Reliance has been placed on the orders of the Hon'ble Supreme Court dated 07.01.2019 in *Civil Appeal Nos. 12122-12123 of 2018, Municipal Corporation Greater Mumbai vs. Ankita Sinha & Anr.* and and 05.08.2019 in *Civil Appeal No. 5902 of 2019, Central Electricity Supply Utility of Odisha v. Government of India, Civil Appeal No. 5902 of 2019.* In these orders, contention has been raised that NGT does not have jurisdiction to raise *suo-motu* proceedings. Supreme Court has issued notice, and matters are pending.
- b) Cognizance of the matter has already been taken by the Andhra Pradesh High Court in *W.P. (PIL) No. 112/2020* and the State Government has constituted a Committee to look into the reasons for leakage and other issues as mentioned in the order of the Hon'ble Supreme Court dated 19.05.2020 quoted above. Apart from the High Court, Committees have also been constituted by the District Magistrate, Central Government and the National Human Right Committee (NHRC). The Tribunal should not proceed with the matter.

These contentions are dealt with in the subsequent section.

Committee's Report

8. *Report of the Joint Committee constituted by this Tribunal ("the Report")*, dated 28.5.2020: The report dated 28.5.2020 has been filed by the Committee, apart from interim report dated 17.5.2020 mentioning sequence of events, causes of failure, authorities responsible for failure, remedial measures to prevent recurrence and incidental issues. In short, the Company has been found liable apart from other authorities. We will refer to the Report in later part of this order. However, further study has been suggested to quantify damage and restorations measures.

Further Petitions filed before NGT

9. Two petitions being OA 76/ 2020 and OA 80/2020, have been filed on the same issue. The said petitions were filed before the Southern Bench of the Tribunal, and have been referred to the Principal Bench on account of pendency of the *suo-motu* proceedings. Order in these petitions follows subsequently.

III. Issues for Consideration

10. In view of above resume, the following issues need to be dealt with:
- A. Contentions of the Company in light of observations of Hon'ble Supreme Court in order dated 19.5.2020, and otherwise
 - B. Decision on merits in light of material on record.
 - C. Failure of monitoring mechanism and remedial measures
 - D. Further directions

IV. Discussion and Decision on the Issues

11. We proceed to deal with the above issues

- A. Contentions of the Company in light of observations of Hon'ble Supreme Court in order dated 19.5.2020, and otherwise

12. We have heard Shri Sidharth Luthra, Senior Advocate appearing for the Company. He has pressed two main objections noted in the order of the Hon'ble Supreme Court and the Review Application which have already been noted. We do not find any merit in either objection.

a) Suo Motu Jurisdiction

13. At the outset, two petitions having been filed before this Tribunal and the objection is rendered moot. Even otherwise, the objection is against the policy and scheme of law and binding judgements of the Hon'ble Supreme Court.

14. **NGT has the purpose and power to provide relief and compensation to victims of environment damage, restitution of property, and restoration of environment. To effectuate this purpose, NGT has wide powers to devise its own procedure. In appropriate circumstances, this power includes the power to institute suo-motu proceedings and not keep its hands tied in the face of drastic environmental damage and serious violation of right to life, public health and damage to property. This is especially so when the victims are marginalized and/or by reason of poverty or disability or socially or economically disadvantaged position cannot approach the Tribunal. The power is coupled with duty to exercise such powers for achieving the enumerated objects. Failure to exercise suo-motu jurisdiction in such circumstances would render these victims without remedy, causing irretrievable injustice and breakdown of Rule of Law. If NGT were powerless to institute suo-motu proceedings where so warranted, as in the present**

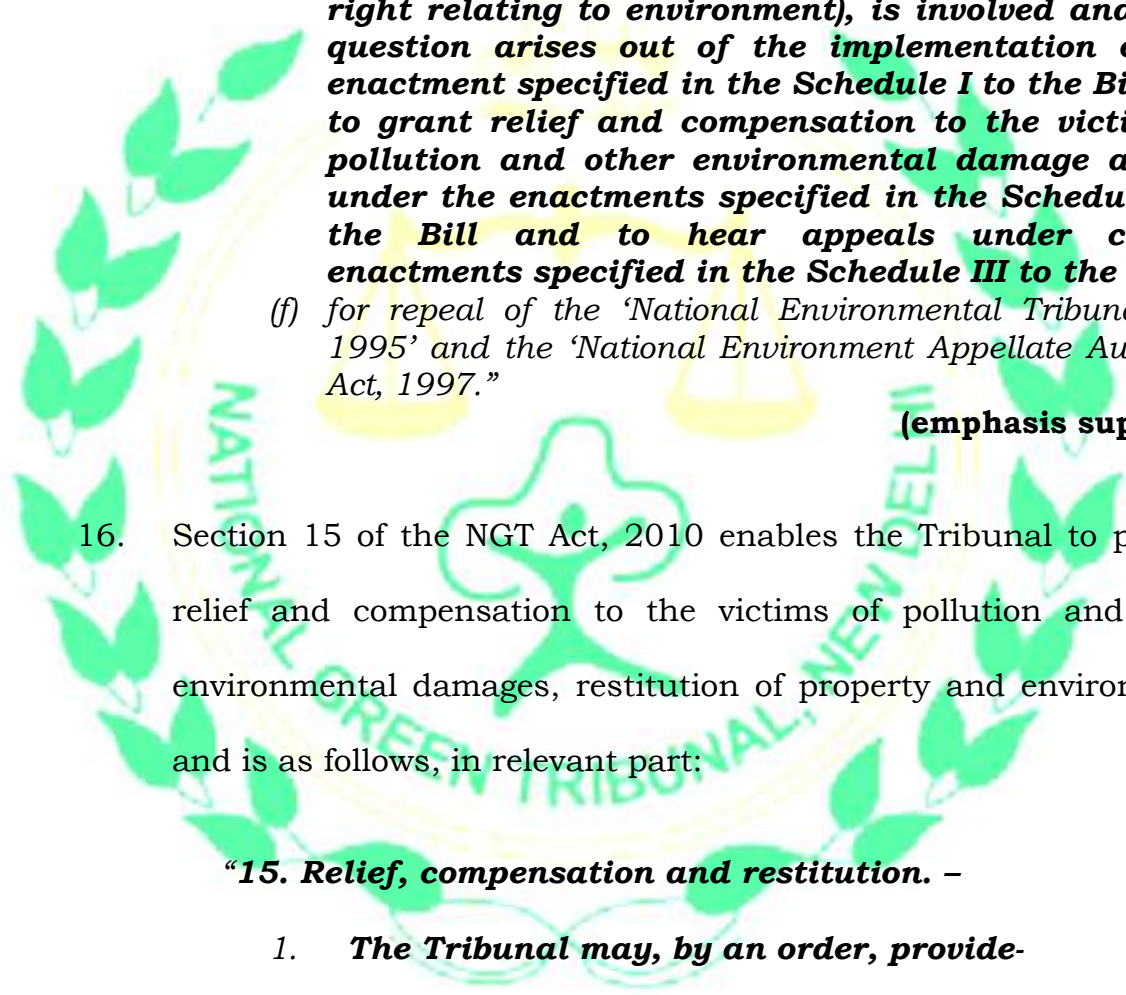
case, it would be robbed of all its efficacy, because then the situation would be that if environmental damage causes loss of life, public health and property, the court can grant relief only if the victims found the means to approach it first. Such limitation, to a large extent, would emasculate NGT's *raison-d'etre*, and render it nugatory and futile.

15. We may refer to the scheme of the NGT Act, 2010 and the observations of the Hon'ble Supreme Court on the subject. The long title of the Act suggests that the NGT has been established *inter-alia* for enforcement of legal rights relating to environment and giving relief and compensation for damage to the persons and property in pursuance of the decisions taken at the UN Conference on Human Environment held at Stockholm in June, 1972 and UN Conference on Environment and Development held at *Rio de Janeiro* in June, 1992 and decisions of the Hon'ble Supreme Court. The statement of objects and reasons states:

“5. Taking into account the large number of environmental cases pending in higher courts and the involvement of multidisciplinary issues in such cases, **the Supreme Court requested the Law Commission of India to consider the need for constitution of specialized environmental courts. Pursuant to the same, the Law Commission has recommended the setting up of environmental courts having both original and appellate jurisdiction relating to environmental laws.**

6. In view of the foregoing paragraphs, a need has been felt to establish a specialized tribunal to handle the multidisciplinary issues involved in environmental cases. **Accordingly, it has been decided to enact a law to provide for the establishment of the National Green Tribunal for effective and expeditious disposal of civil cases relating to environmental protection and conservation of forests and other natural resources including enforcement of any legal right relating to environment.**

7. Accordingly, it has been decided to introduce the National Green Tribunal Bill, 2009 which *inter alia* provides-

- 
- (a) for establishment of a National Green Tribunal which shall consist of a Chairperson and such number of Judicial and Expert Members as the Central Government may notify;
 - (b) that a person who is or has been a Judge of the Supreme Court or Chief Justice of a High Court shall be eligible for appointment as the Chairperson or Judicial Member of the Tribunal;
 - (c) that a person who is or has been a Judge of a High Court shall also be eligible for appointment as a Judicial Member;
 - (d) that a person who is either an expert in physical sciences or life sciences or engineering, or who has administrative experience in dealing with environmental matters shall be qualified for appointment as an Expert Member;
 - (e) **that the Tribunal shall have the jurisdiction over all civil cases where a substantial question relating to environment (including enforcement of any legal right relating to environment), is involved and such question arises out of the implementation of the enactment specified in the Schedule I to the Bill and to grant relief and compensation to the victims of pollution and other environmental damage arising under the enactments specified in the Schedule I to the Bill and to hear appeals under certain enactments specified in the Schedule III to the Bill;**
 - (f) for repeal of the 'National Environmental Tribunal Act, 1995' and the 'National Environment Appellate Authority Act, 1997.'

(emphasis supplied)

16. Section 15 of the NGT Act, 2010 enables the Tribunal to provide relief and compensation to the victims of pollution and other environmental damages, restitution of property and environment, and is as follows, in relevant part:

“15. Relief, compensation and restitution. –

1. The Tribunal may, by an order, provide-

- a. relief and compensation to the victims of pollution and other environmental damage arising under the enactments specified in the Schedule I (including accident occurring while handling any hazardous substance);**
- b. for restitution of property damaged;**
- c. for restitution of the environment for such area or areas, as the Tribunal may think fit.”**

17. The Tribunal has power to regulate its own procedure (Section 19). In case of an accident, no-fault liability principle applies (Section 17). Rule 24 of the NGT (Practice and Procedure) Rules, 2011 confers discretion to pass such order as may be necessary to secure ends of justice. This has been considered *inter-alia* by the Hon'ble Supreme Court in **State of Meghalaya v. All Dimasa Students Union** (2019) 8 SCC 177. In relevant part, some pertinent observations are:

“157. Rule 24 empowers the Tribunal to make such orders or give such directions as may be necessary or expedient to give effect to its order or to secure the ends of justice. Rule 24 gives **wide powers** to the Tribunal to **secure the ends of justice**. Rule 24 vests special power to Tribunal to pass orders and issue directions to secure ends of justice. **Use of words ‘may’, ‘such orders’, ‘gives such directions’, ‘as may be necessary or expedient’, ‘to give effect to its orders’, ‘order to prevent abuse of process’, are words which enable the Tribunal to pass orders and the above words confer wide discretion.**

159. **The enabling power given to the Tribunal under Rule 24 is for purpose and object to decide the subjects which are to be examined, decided and an appropriate relief is to be granted by the Tribunal. Further, subjects contain wide range of subjects which require technical and scientific inputs. The Tribunal can pass such orders as it may think fit necessary or expedient to secure ends of justice.**

160. **The object for which said power is given is not far to seek. To fulfil objective of the NGT Act, 2010. NGT has to exercise a wide range of jurisdiction and has to possess wide range of powers to do justice in a given case. The power is given to exercise for the benefit of those who have right for clean environment which right they have to establish before the Tribunal. The power given to the Tribunal is coupled with duty to exercise such powers for achieving the objects.**

(emphasis supplied)

18. We may also refer to a three-judge bench judgment by the Hon'ble Supreme Court in **Bhopal Gas Peedith Mahila Udyog vs UOI** (2012) 8 SCC 326 noting that this Tribunal is a statutory and

specialized forum to deal with any issues relating to environment.

It was observed:

*“40. Keeping in view the provisions and scheme of the National Green Tribunal Act, 2010 (for short “the NGT Act”) particularly Sections 14, 29, 30 and 38(5), it can safely be concluded that **the environmental issues and matters covered under the NGT Act, Schedule I should be instituted and litigated before the National Green Tribunal (for short “NGT”). Such approach may be necessary to avoid likelihood of conflict of orders between the High Courts and NGT. Thus, in unambiguous terms, we direct that all the matters instituted after coming into force of the NGT Act and which are covered under the provisions of the NGT Act and/or in Schedule I to the NGT Act shall stand transferred and can be instituted only before NGT. This will help in rendering expeditious and specialized justice in the field of environment to all concerned.***

41. We find it imperative to place on record a caution for consideration of the courts of competent jurisdiction that the cases filed and pending prior to coming into force of the NGT Act, involving questions of environmental laws and/or relating to any of the seven statutes specified in Schedule I of the NGT Act, should also be dealt with by the specialized tribunal, that is, NGT, created under the provisions of the NGT Act. The courts may be well advised to direct transfer of such cases to NGT in its discretion, as it will be in the fitness of administration of justice.”

(emphasis supplied)

19. It is a matter of record that pursuant to setting up of NGT, even pending matters involving environmental issues have been transferred from Supreme Court and various High Courts to NGT, in view of NGT being the appropriate forum and venue.

20. The approach of a Court in dealing with the environmental issues cannot be hyper technical, for that would defeat the ends of justice, especially in matters where Right to Life is implicated. Once patent violations affecting Right to Life are in public domain, the court cannot be debarred from remedying the same on the sole ground that the affected party has not moved the court. The court can devise its own procedure to investigate and give relief to the victims in appropriate cases. This jurisprudence can also be

discerned from the judgment of a 3-judge bench of the Hon'ble Supreme Court in **M. C. Mehta v. UOI** (1987) 1 SCC 395 as follows:

“2. .. we cannot adopt a hyper-technical approach which would defeat the ends of justice. This Court has on numerous occasions pointed out that where there is a violation of a fundamental or other legal right of a person or class of persons who by reason of poverty or disability or socially or economically disadvantaged position cannot approach a court of law for justice, it would be open to any public spirited individual or social action group to bring an action for vindication of the fundamental or other legal right of such individual or class of individuals and this can be done not only by filing a regular writ petition but also by addressing a letter to the court. If this Court is prepared to accept a letter complaining of violation of the fundamental right of an individual or a class of individuals who cannot approach the court for justice, there is no reason why these applications for compensation which have been made for enforcement of the fundamental right of the persons affected by the oleum gas leak under Article 21 should not be entertained. The court while dealing with an application for enforcement of a fundamental right must look at the substance and not the form. We cannot therefore sustain the preliminary objection raised by Mr Divan.

3. ... It may now be taken as well settled that Article 32 does not merely confer power on this Court to issue a direction, order or writ for enforcement of the fundamental rights but it also lays a **constitutional obligation on this Court to protect the fundamental rights of the people and for that purpose this Court has all incidental and ancillary powers including the power to forge new remedies and fashion new strategies designed to enforce the fundamental rights. It is in realization of this constitutional obligation that this Court has in the past innovated new methods and strategies for the purpose of securing enforcement of the fundamental rights, particularly in the case of the poor and the disadvantaged who are denied their basic human rights and to whom freedom and liberty have no meaning.**

4. Thus it was in *S.P. Gupta v. Union of India*⁸ that this Court held that (SCC p. 210, para 17):

where a legal wrong or a legal injury is caused to a person or to a determinate class of persons by reason of violation of any constitutional or legal

right or any burden is imposed in contravention of any constitutional or legal provision or without authority of law or any such legal wrong or legal injury or illegal burden is threatened and such person or determinate class of persons is by reason of poverty, helplessness or disability on socially or economically disadvantaged position, unable to approach the court for relief, any member of the public or social action group can maintain an application for an appropriate direction, order or writ in the High Court under Article 226 and in case of breach of any fundamental right of such person or class of persons, in this Court under Article 32 seeking judicial redress for the legal wrong or injury caused to such person or determinate class of persons.

This Court also held in *S.P. Gupta case*³ as also in the *PUDR v. Union of India*¹ and in *Bandhua Mukti Morcha case*² that **procedure being merely a hand-maiden of justice it should not stand in the way of access to justice to the weaker sections of Indian humanity and therefore where the poor and the disadvantaged are concerned who are barely eking out a miserable existence with their sweat and toil and who are victims of an exploited society without any access to justice, this Court will not insist on a regular writ petition and even a letter addressed by a public spirited individual or a social action group acting pro bono publico would suffice to ignite the jurisdiction of this Court.**

6. So far as the power of the court under Article 32 to gather relevant material bearing on the issues arising in this kind of litigation, which we may for the sake of convenience call social action litigation, and to appoint Commissions for this purpose is concerned, we endorse what one of us namely, Bhagwati, J. as he then was, has said in his judgment in *Bandhua Mukti Morcha case*². We need not repeat what has been stated in that judgment. It has our full approval.
7. **We are also of the view that this Court under Article 32(1) is free to devise any procedure appropriate for the particular purpose of the proceeding, namely, enforcement of a fundamental right and under Article 32(2) the court has the implicit power to issue whatever direction, order or writ is necessary in a given case, including all incidental or ancillary power necessary to secure enforcement of the fundamental right.** The power of the court is not only injunctive in ambit, that is, preventing the infringement of a fundamental right, but it is also remedial in scope and provides relief against a breach of the fundamental right already committed vide *Bandhua Mukti Morcha*

case². If the court were powerless to issue any direction, order or writ in cases where a fundamental right has already been violated, Article 32 would be robbed of all its efficacy, because then the situation would be that if a fundamental right is threatened to be violated, the court can injunct such violation but if the violator is quick enough to take action infringing the fundamental right, he would escape from the net of Article 32. That would, to a large extent, emasculate the fundamental right guaranteed under Article 32 and render it impotent and futile. We must, therefore, hold that Article 32 is not powerless to assist a person when he finds that his fundamental right has been violated. He can in that event seek remedial assistance under Article 32. The power of the court to grant such remedial relief may include the power to award compensation in appropriate cases. We are deliberately using the words "in appropriate cases" because we must make it clear that it is not in every case where there is a breach of a fundamental right committed by the violator that compensation would be awarded by the court in a petition under Article 32. The infringement of the fundamental right must be gross and patent, that is, incontrovertible and ex facie glaring and either such infringement should be on a large scale affecting the fundamental rights of a large number of persons, or it should appear unjust or unduly harsh or oppressive on account of their poverty or disability or socially or economically disadvantaged position to require the person or persons affected by such infringement to initiate and pursue action in the civil courts. Ordinarily, of course, a petition under Article 32 should not be used as a substitute for enforcement of the right to claim compensation for infringement of a fundamental right through the ordinary process of civil court. It is only in exceptional cases of the nature indicated by us above, that compensation may be awarded in a petition under Article 32. This is the principle on which this Court awarded compensation in Rudul Shah v. State of Bihar'. So also, this Court awarded compensation to Bhim Singh, whose fundamental right to personal liberty was grossly violated by the State of Jammu and Kashmir⁶. If we make a fact analysis of the cases where compensation has been awarded by this Court, we will find that in all the cases, the fact of infringement was patent and incontrovertible, the violation was gross and its magnitude was such as to shock the conscience of the court and it would have been gravely unjust to the person whose fundamental right was violated, to require him to go to the civil court for claiming compensation."

(emphasis supplied)

There is no reason to not follow the above approach in the context of exercise of NGT jurisdiction. Section 20 of the Act requires this Tribunal to enforce the principles of Sustainable Development, including Polluter Pays and Precautionary Principle. These have been held to be part of Right to Life inter-alia in **Vellore Citizens' Welfare Forum v. UOI** (1996) 5 SCC 647 (Para 11, 13, 16-18).

21. There is no other forum entrusted such jurisdiction exclusively. Several serious issues of environment, including air, water, soil, and other life-threatening pollution have been taken up by this Tribunal *suo-motu*. The citizens affected in these cases were unable to access their remedies and approach the Tribunal, limited by varying disabilities and handicaps. In many instances, agencies posing as “public spirited”, who initially filed proceedings, then abandoned the proceedings for reasons, *bona fide* or otherwise, leaving the onus on NGT to prosecute *suo-motu* (or not at all). **If this Tribunal is prevented from instituting suo-motu proceedings, these issues and violations would remain unaddressed, citizens' inalienable right to life and other rights will stand jeopardized, and the serious and irreversible environment damage would continue unchecked.** No-one may raise such issues, much less the affected individuals suffering silently specially in remote areas. If even a third person claiming to be ‘public spirited’ can be given locus, why publicly known serious violations of environment affecting the Rule of law, human and existential rights must be objected to be protected by this Tribunal on such specious plea in the face of a clear constitutional, statutory, and international law mandate. Notwithstanding Constitutional jurisdiction of the High Courts, the Tribunal is not

debarred from dealing with substantial issues of environment for which this Tribunal has been exclusively constituted, in absence of express statutory provision or binding judicial decision. Any other view may seriously hamper environmental justice and scheme of parliamentary law and judgements of the Hon'ble Supreme Court. Issue of procedure is in discretion of this Tribunal, including initiation of *suo-motu* proceedings, unless expressly barred.

22. As regards cited orders, where notice has been issued on NGT's institution of *suo-motu* proceedings, the facts of those cases may be entirely distinguishable. The matters are pending, no decision has been made on the said contention nor binding law discussed. It cannot be taken that NGT has been debarred from instituting *suo-motu* proceedings in matters of even such grave nature as the present one. There being no stay of proceedings in this case, we find no merit in the Company's contention.

b) Pendency of proceeding before High Court and other fora

23. As regards pendency of proceedings in the High Court and other fora, and the Committees appointed by the various fora, we may note that there is no conflict on the core issue being considered by this specialized Tribunal as per mandate of law in judgements of the Hon'ble Supreme Court referred to above. The fact remains that the specialized statutory jurisdiction to award compensation is conferred on this Tribunal, which also has all and wide powers, procedure and mechanisms to resolve and award appropriate relief and remedies. Our attention has not been drawn to any other committee or court going in to the issue of compensation and restitution to the victims to the environment. Only this Tribunal

has required deposit of an amount to be used for compensation, to be disbursed under orders of this Tribunal. Even the Company has deposited the amount and cannot object to abide by further orders in this regard. Thus, without prejudice to any other proceedings, the Tribunal can perform and exercise its statutory jurisdiction. This has been made clear in order dated 08.05.2020 in Para 2 as follows:

“2. ... Without prejudice to any other proceedings, this Tribunal has to perform its statutory obligation of providing relief and compensation to the victims of “environmental damage”, as statutorily enacted, and restitution of damaged property and environment. With a view to deal with the issue, it is necessary to ascertain the facts relating to the extent of damage, extent of failure and consider remedial measures. The affected parties have to be given the opportunity of being heard.”

(emphasis supplied)

24. We also find no relevance of the observations in 1986 (Supp) SCC 20, para 83, relied upon by Shri Luthra, to the effect that when an issue is pending before a higher forum, the lower forum should not deal with the matter. The observations are in the context of a particular issue dealt with in the said judgment and not identical to the issue being dealt with herein.

25. The order of this Tribunal is not in conflict with any other orders nor the findings of the Committee are in conflict with any other committee.

26. There is a further point to be noted. The stand of the Company is that it has complied with the direction to deposit the amount of Rs. 50 crores in pursuance of order of this Tribunal dated 08.05.2020. The said deposit is to abide by orders of this Tribunal. If the

Tribunal is to close the proceedings, the Tribunal will not be able to pass any order to deal with the amount.

27. The company also submitted that the it will face inconvenience in dealing with multiple proceedings. The plea of inconvenience is absurd and untenable in the face of clear and absolute liability of the company for the loss of life, public health and the environment by its hazardous activities in violation of law.

B. Decision on merits in light of material on record

28. Heard counsel for the appearing parties. We find the Company has strict and absolute liability for the environmental damage and consequential loss including to life and public health in this case.

29. The stand of the MoEF&CC and the State PCB is unequivocal that the company did not have the requisite EC. There is also clear violation of the 1989 Rules. Liability of the company is strict and absolute in the circumstances. The report of the Joint Committee constituted by this Tribunal filed on 28.05.2020 is supported by clinching material consistent with the stand of the MOEFF&CC and state PCB. A copy of the report¹ has been uploaded on the website of CPCB and has been made available to the Company on the same date. Order dated 08.05.2020 was e-mailed to the Company on the same day. It is not disputed that the same was available. The Company made a deposit in pursuance of the said order. The Company had sufficient opportunity to respond to the issue, but has chosen to not do so. The oral plea of the learned Counsel for the Company that it does not have access to the record or has not had opportunity to respond is untenable. If the

¹ <https://tinyurl.com/JtCommitteeReport>

Company could approach the Hon'ble Supreme Court on 13.05.2020 and is claiming to be cooperating with other Committees, there is no reason for the Company not to give any response, except unreasonable and irresponsible attitude of avoiding patent liability on a self-serving hyper technicality. The burden of proof in such matters lies squarely on the company, as held in M.C. Mehta and Vellore Citizens Forum (*supra*).

30. We note that against the order of the High Court dated 22.05.2020 seizing the premises of the company, the Hon'ble Supreme Court vide order dated 26.05.2020 in *SLP Civil Diary No. 11636/2020*, directed:

*“As an ad interim measure, we permit the petitioner to give a list of 30 personnel as discussed hereinabove. Upon such names being given to the District Collector, **those persons shall be afforded access to the plant round the clock to maintain adequate safety measures.**”*

This ad interim direction will continue till the High Court considers the matter. The High Court may, thereafter, pass appropriate directions.”

(emphasis supplied)

31. There is a statutory liability under the 1989 Rules to prepare on-site and off-site emergency plan and to maintain safety by any establishment dealing with the hazardous chemicals. It is undisputed that the company is covered by Rule 2(e) read with Entry No. 583 of Schedule-I to the Rules.

32. While liability of the company stands clearly established, we may refer to the report of the six-members Committee headed by Justice B. Seshasayana Reddy, Former Judge, A.P. High Court which supports and corroborates the liability of the company for loss of lives, public health and environment. We place on record

our gratitude to the Chairman and the members of the Committee to take this assignment as public service to advance justice even in the face of frightening disease Covid 19.

33. The Report states that due to COVID-19 situation, the Committee had to face restrictions on movement and travel. An interim report was filed on 17.05.2020 a copy of which has been annexed. The Committee has opined that the Company did not take proper care of the storage tank resulting in auto polymerization of styrene releasing excess heat which escaped from the goose-neck and dip hatch in the form of vapour. It is also mentioned that the unit was operating without the requisite EC. The State PCB had no clarity in the matter while granting the statutory consents without EC. The observations and suggestions of the Committee under relevant heads are quoted below:

“2. SUMMARY OF INTERIM REPORT

In the interim report, committee has discussed about the background/history of the industrial unit i.e. M/s L G Polymer, status of its consent under Water (Prevention & Control of Pollution) Act, 1974 & Air (Prevention & Control of Pollution), 1981, grant of Environmental Clearance (EC) under Environment (Protection) Act, 1986, followed by the chemistry of styrene monomer (chemical that got leaked) and its behaviour in the storage tank. Various GOs related to the accident and compensation given by the Govt. of AP are also discussed. A copy of the interim report is given as Annexure II.

The committee, prima-facie, is of the view that the styrene gas/vapour leakage from the affected tank was due to the following reasons:

- 1. Insufficient Tertiary Butyl Catechol (IBC, used as inhibitor to ureic/polymerization at lower temperatures) concentration in styrene tank due to unavailability of IBC in the plant.***
- 2. There is no monitoring system for dissolved oxygen in the vapour space which might have fallen down below 6%.***
- 3. The tank has no provision of monitoring temperatures at lop layers of the storage.***

4. **Refrigeration system was not being operated for 24 hours.**
5. **Gross human failure and negligence of the Person in-Charge of the plant and maintenance personnel of the storage tanks.**

The interim report clearly outlined the chronological details of efforts made by different stakeholders in obtaining EC. It is a fact that the unit was operating the facility without the requirement of prior EC. The expansion of the unit from time to time, continuity of its operation, efforts made by the unit in getting EC, correspondence of State Environment Impact Assessment Authority (SEIAA) in this regard, role of State Pollution Control Board, are detailed in the interim report page no 1-4. **However, as per the correspondence of the SPCB with MoEF&CC after the incident seeking clarification on requirement of EC shows lack of clarity by the SPCB in the provisions of the EIA notification, 2006 and amendments thereof.**

The failure of management in handling the crisis, the properties of styrene monomer, the lapses by different managerial staff in maintaining the pre and post operations were detailed in the interim report page no 5 to 10. It is stated that **"Our observations revealed that the management did not take proper care of the affected storage tank and it resulted in auto polymerization of styrene releasing excess heat which escaped from the goose-neck and dip hatch in the form of vapour".**

X X X

X X X

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Findings and Suggestions:

a) The sequence of events

The unit was closed on March 24, 2020 and started preparations w.e.f. May 04, 2020 for its proposed resumption of operation on May 07, 2020. On the early hours of May 07, 2020 at about 03:00 AM, the tank with 1830 tons of storage had developed the leak of the STYRENE vapours from top of the tank and spread beyond the factory boundary towards the west side due to wind direction and affected the residents of five nearby areas namely, Venkatapuram, Venkatadri Nagar, Nandamuri Nagar, Pydimamba Colony and BC & SC colony. **It appears from an examination of nearby damaged trees that the gas plume moved at a height of about 0-20 feet from the ground towards the nearby settlements. Population within a radius of about 0.5 km was evacuated by the district administration.**

The sequence of operations carried out at the factory after the incident as per plant managers is as follows:

- 02:54 hrs: Gas detector alarm noticed in Control room (DCS).
- 03:02 hrs: High VOC alarm noticed in Control room (DCS).
- 03:02 hrs: Immediately DC'S operator informed to operator / safety person / Night duty officer.
- 03:02 hrs: M6 Tank temperature started rising.
- 03:03 hrs: Night duty Officer informed everyone about the high vapours at tank farm area.
- 03:03 hrs: Immediately night duty Officer tried to reach the fire hydrant sprinkler valve to open it, but due to high vapour cloud it was impossible to reach it.
- 03:04 hrs: Alerted all other members to bring Self-contained breathing apparatus (SCABA) sets to assembly point.
- 03:07 hrs: Informed plant safety head/Director Operations& others about the emergency.
- 03:07 hrs: Alerted security in-charge to get help from outside agencies (Fire services and Ambulance etc.). Root cause was identified as self-polymerization due to stagnant high polymer content.
- 03:30 hrs: Director Operations& Safety heads & plant officials arrived at site.
- 04:30 hrs: Two members went to open fire hydrant sprinklers using SCABA sets for MS /M6 /Pentane storage tank.
- 04:32 hrs: Emergency chemicals such as NDM, TDM, Antioxidant (Eunox-76) arrangements done.
- 05:15 hrs: Chemical inhibitors (N-Dodecyl Mercaptan, Tertiary Dodecyl Mercaptan and Eunox-76) dosing arrangements started immediately. About 2200 litres was pumped inside the tank.
- 06:30 hrs: 10 tonnes and 15 tonnes of Styrene was pumped to feed preparation & feed solution tanks, respectively.
- 07:30 hrs: 70 tonnes of Styrene pumped to one spare storage tank. Water poured through foam pourer & hydrant water sprinklers kept open for affected tank to cool down the tank.
- 09:30 hrs: Neighbouring residential areas of Venkatapuram, Janata Colony, SC & BC Colony, Padmanabhapuram are most affected.
- 22:45 hrs: Tank temperature reached 154°C.
- 08.05.2020 (Friday)03:30 AM: Temperatures started reducing from 154° C to 120° C by evening. Water has been continuously poured inside & outside tank.
- 09.05.2020 (Saturday)
- Water has been continuously poured inside & outside tank.
- At 09:00 AM tank temp reached to 100° C.
- As reported following chemicals were added to affected tank:
 - Eunox-76: 289 kgs
 - N-Dodecyl Mercaptan: 1059 kgs
 - Tertiary Dodecyl Mercaptan: 2487 kgs

A special aircraft was arranged for airlifting the NDRF joint team of 09 experts from Pune and Nagpur including CSIR-NEERI members. They reached on May 07, 2020, 23:00 Hrs. Apart from this, scientists from NEERI, Hyderabad also reached the site for further coordination. A central committee of Mr Shantanu Gite, an industrial expert in handling of styrene from Mumbai, and Dr Anjan Ray, Director CSIR-Indian Institute of Petroleum, Dehradun reached the affected site on evening of May 9, 2020 to assess the situation. This Central Committee made two inspections - one upon arrival and another in the morning of May 10, 2020, the latter along with the AP state-appointed committee constituted for investigating the incident.

The following industry personnel were present during the time of the accident:

S. No	Name	Position	Education	Experience
1	Sh. M Rajesh	Operator	Diploma in Chemical	2 Years
2	Sh. N Sudhakar	Asst. Manager	M. Sc. Organic Chemistry	13 Years
3	Sh. P Balajee	Manager	M. Tech in Chemical Engg.	6 Years
4	Sh. S Atchyut	Engineer	Diploma in Chemical Engg.	2 Years
5	Sh. K Chakrapani	Engineer	B. Sc. Chemistry	7 Years
6	Sh. U V Ramana	Asst. Engineer	B. Sc. Chemistry	5 Years
7	Sh. N Jayaram	Jr. Engineer	B. Sc. Chemistry	4 Years
8	Sh. KS Kiran Kumar	Asst. Manager	Intermediate	30 Years

b) Causes of failures and authorities responsible thereof.

The industrial unit has been closed since March 24, 2020 due to the COVID-19 lockdown. As on the day of lockdown, the raw material, Styrene was available in 4 storage tanks in the factory with the inventory of 1830 tons, 2725.9 tons, 242.6 tons, 242.5 tons. The unit was permitted for daily maintenance activities during the lockdown period with 15 persons per each shift with a total of 45 personnel working per day.

Govt. of Andhra Pradesh announced the resumption of operation of industries from May 04, 2020 and the management had proposed to resume their operations w.e.f. May 07, 2020. On the early hours of May 07, 2020, the tank with 1830 tons of storage had developed the leak of the styrene vapours from the top of the tank and spread beyond the factory boundary towards the west side due to wind direction and affected the residents of 5 nearby areas

namely, Venkatapuram, Venkatadri Nagar, Nandamuri Nagar, Pydimamba Colony and BC colony.

The leaked tank was old and does not have temperature sensors at middle and top surface of the tank except only provision to measure the temperature at the bottom of the tank where refrigeration is provided. Due to lockdown, the storage tank was stand still. The styrene polymerises to polystyrene even at ambient temperature, in the absence of inhibitor, which itself is an exothermic reaction with very slow reaction rates. Although the reaction rates are slower, it will cause major operating issues, because of heat liberation and blockages in the tank. The rate of this reaction doubles every 10 °C. The combination of polymerisation- heat liberation- temperature rise- and further polymerisation can lead to rapid reaction and heating, which is called as a 'run-away reaction'. As the temperature rises, styrene starts vaporising. The pressure in the storage tank will progressively increase, and the safety valves released the styrene vapour into the atmosphere. The increase in temperature and pressure was not observed by the industry. Had the safety valve failed, the whole tank would have been exploded and still bigger catastrophe would have been happened.

Styrene monomer with a boiling point of 145 °C, in liquid state remains monomer if it is maintained at low temperature preferably 15-18 °C. If the temperature approached 20 °C the tank must be cooled and under no circumstances the temperature should exceed 25 C. If its temperature is increased, self-polymerization starts slowly, which is an exothermic reaction, thereby liberating heat, which further increases the rate of polymerization and the chain reaction begins. This leads to exponential increase in polymerization. The monomer styrene is stored without letting self-polymerization by adding inhibitor substance like Tertiary Butyl Catechol (TBC). This inhibitor works at low temperature below 25 °C. TBC is not effective as inhibitor of monomer Styrene at high temperature. Another chemical named N dodecyl mercaptans (DDM) is used as inhibitor at high temperature. Since the content (styrene) is in closed container, rise in temperature increases the tank pressure. To avoid structural failure of tank, safety valves are provided, which gets opened at high pressure and releases the contents thereby reducing the pressure. Five valves are provided at the top of the affected tank roof. During the stagnant storage period, apparently the monomer styrene started self-polymerization leading to increase in temperature as the process is exothermic. The increased temperature further increased the rate of reaction resulting in increased pressure in the tank. Safety valves on the tank (M6) roof top got opened due to high pressure and started emitting styrene vapours. As per CCTV record, the emission started at about 02:42 hrs from M6 tank having 1830 tonnes of styrene. No alarm generated when vapour leakage


occurred and auto sensor of styrene is failed to detect the conc. in ppm.

There is no interlock system arrangement between the temperature and refrigeration system. There is no external water spray arrangement over the storage tank for exceeding ambient air temperature and also any unmanned hose arrangement.

It should be noted that in climate zones and in seasons with significant temperature difference between night and day, the styrene vapours evolved in the headspace at higher temperatures will condense on roofs, walls and internal fittings of storage tanks when it cools off. The phenolic inhibitors have high boiling points and stay in the liquid phase, resulting in the condensed styrene vapours containing no inhibitor. Also, the condensation will result due to long term storage of styrene monomer during 'zero process operation' without maintaining required cooling throughout the tank. **The leaked tank does not have any provision for measuring the vapour space temperature. Due to this, building-up of temperatures in top surface could not noticed by the industry. This reflects the clear cut case of negligence on Industry part.**

The incident is tragic but it could have been far worse had the affected tank, Tank M6, ruptured and the temperature of the tank contents had shot up far beyond the 154° C, well over the boiling point of styrene. An estimated 800 tons (8 lakh kg) of styrene escaped into the surroundings in the incident. It is reported that unit's inability to access personnel protective equipment in a timely manner, safety response preparedness of the site had impact in the early stages of safety operations. Further, the public siren system also could not be activated as it was manual and in an area rendered inaccessible by the vapour cloud else people in surrounding areas could have been alerted quickly and lives saved.

Root cause analysis showed that the problem possibly began on April 20, 2020 when the polymer concentration in Tank M6, which was idled at full capacity since March 25 post-lockdown. It is known that styrene monomer can exhibit reaction runaways because of their exothermic and auto-accelerating nature even at adiabatic conditions. The polymerization runaway "onset" temperature inversely increased with the monomer mass fraction and generally observed to be 66 C. Styrene polymerization reaction is relatively highly exothermic with a heat generation at around 71 kJ mol⁻¹. At the same time, even without an initiator, two styrene molecules can undergo a Diels—Alder type of reaction and generate radicals to start self-polymerization upon heating. The polymerisation reaction being exothermic, if contained may become uncontrolled and the bulk styrene temperature may rise to a level at which polymerisation is self-sustaining and very rapid. This results



in evolving the release of large quantities of heat together with volumetric expansion and set off an undetected, slow but steady formation and growth of a hotspot within the tank where an exothermic (heat-generating) reaction of polymerization started. By early morning of May 7, the hotspot probably reached critical mass. Somewhere between 1:45 am and 2:40 pm, this led to a runaway reaction and the temperature shot up in the tank. However, the only two parameters being monitored in the tank - the temperature and the tank level were being measured through gauges at the bottom of the large tank (18m in diameter and 12 m in height) - presumably far from the hotspot, and these picked up the problem after it occurred at 2:40am. The first sign that anything was amiss was picked up the control room operator through a vapour release alert at 2:54 am, and the temperature alert only came 8 minutes later. **Mitigation of the impact could have been more effective had the chillers servicing Tank M6 been running. It was switched off at 5pm earlier that evening as per routine site practice as ambient night temperatures required little or no chilling. There was also no automated sprinkler arrangement for vapour loss as this had never been anticipated; the fire water sprinklers had to be manually activated. Another reason for the accident, TBC (inhibitor of the polymerization reaction) is not effective after liquid styrene temperature in storage rises above 52° C. Under these conditions, a short-stopper chemical should be added. It seems LG Chem did not consider this possibility. Also, no TBC was topped up in the affected tank M6 since April 1 since there was no stock at site and the tested TBC level of the contents was apparently in range. Clearly, it can be realized that the TBC level is not a good indicator of safety margins; the polymer content is a better measure for an early alert. With the experience world over of Styrene, it takes considerable amount of idle time to have polymerization inside tank if effective inhibition and chilling is maintained. The unit failed to assess this situation due lack in handling experience by trained man-power.**

The root cause thus appears to be the lack of experience of LG Polymers India and their Korean principal. LG Chem, in monitoring and maintaining full tanks of styrene that were idled for a long period of several weeks without operation. Further, M6 is an old tank in design terms and this possibly contributed to the problem. The breather vent through which the boiling styrene escaped was 8 inches in diameter, enabling very significant outflow at the high temperature and pressure generated by the runaway reaction. Operators and any industrial persons are not aware of control measures in such situation is the main cause.

The above scenarios definitely point towards the accountability for lapses on part of the Industry, which rest with Managing Director of the unit, Certified Safety Officer, Safety Department, and Production Department. The role of issuing necessary safety certificate to the industry, the periodic inspections is the primary responsibility of Department of Industries, Factories and Boilers.

c) Extent of damage to life, human and non-human; public health; and environment — including, water, soil, air;

The Ambient Air Quality Monitoring was carried out by APPCB for the parameter Styrene and TVOC in and around M/s L.G. Polymers from May 07, 2020 using hand held meter with minimum detection limit of 0.1 ppm styrene. Monitoring was carried out at eight locations in and around the industries. Venkatapuram village is 100m downwind of industry, Janatha Colony is 200m from opposite to industry, Gopalapatnam is 1.5 km upwind of industry and Pendurthy is around 1.5 km upwind of industry. During monitoring average wind speeds were 1.1 m/s having predominant wind direction from South West to North East. The concentrations of styrene were high at the time of accident in the villages. The concentrations could not be measured at the time as there were lethal and villages were inaccessible. Subsequently, the concentrations of styrene were measured in the ambient air at 9:30 am. The APPCB officials started the Ambient Air Quality Monitoring with handy samplers from 9.30 am on May 07, 2020 and Ambient Air Quality Monitoring was taken up on regular basis and the results are presented in the below table;

Styrene values (ppm) range recorded at various locations around M/s. LG Polymers

Station	07.05.2020		08.05.2020		09.05.2020		10.05.2020	
	Min	Max	Min	Max	Min	Max	Min	Max
Venkatapuram	0.0	461	0.0	374	0.0	3	0.0	1.5
Janatha Colony	0.0	1.3	0.0	6.2	0.0	0.9	0.0	0.2
Industry main gate	14.2	365	0.0	242	0.0	0.7	0.0	0.4
Gopalapatnam petro bunk	0.0	0.6	0.0	1.7	0.0	0.2	0.0	0.1
Pendurthy Road near way to LG polymers	0.0	1.2	0.0	3.0	0.0	0.2	0.0	0.2
Vepagunta	0.0	22.3	0.0	5.7	0.0	0.1	0.0	0.2
Venkatadri nagar	--	--	0.0	22.7	0.0	1.1	0.0	2.3
Storage tank	--	--	4.9	17.5	2.8	18	0.0	2.5

The team from CSIR-NEER1 Hyderabad Zonal Centre arrived at site on May 12, 2020 and conducted extensive sampling and monitoring of ambient air and water bodies of the affected area. The report is given as **Annexure-IV**. From the

data available with District Authorities, 12 people and 22 animals have died and estimated 3000 are affected. Venkatapuram village is near to the unit at a distance of 0.1 km. The committee also discussed about the extent of damage to life, human and non-human; public health; and environment - including, water, soil and air. Since the NEER' team has already conducted preliminary studies they may be engaged for further studies.

d) Steps to be taken for compensation of victims and restitution of the damaged property and environment, and the cost involved;

Compensation cost to be paid by industry shall be of two components; (i) Compensation paid by government and (ii) Environmental Compensation and restitution of the damaged property.

i) Compensation announced by Govt.

Government of Andhra Pradesh has announced Rs. 1 crore as compensation to the families of each of the deceased. Government will also compensate victims on ventilator support with Rs. 10 lakhs, and victims hospitalized but not on life-support with Rs. 1 lakh each. This will be provided in addition to the entire expenses of their hospitalization, critical care and recovery, which will be borne by the government.

Victims, who received primary care treatment due to surface injuries arising out of this gas leak, will be given Rs. 25,000 each. Many animals had also died after inhaling the gas, the government will give compensation of Rs. 20,000 per animal to their owners.

ii) Environmental Compensation and restitution of the damaged property

An elaborate scientific study is required to calculate the actual cost for environmental damage and restoration. The services of NEERI may be utilised since they have conducted the preliminary studies and also have such expertise.

iii) Deposit of Rs. 50 crores by NIA LG Polymers P Ltd

M/s LG Polymers Pvt Ltd failed to deposit Rs. 50 crores as per the Hon'ble NGT order. It is reported that the unit has approached Hon'ble Supreme Court seeking exemption in payments.

e) Styrene Transportation after the incident;

In consultation with LG Chem, South Korea, Govt. of AP, East India Petroleum Private Ltd, who maintain the facility at onshore, with NDRF team started transfer of

approx. 12800 tons of Styrene from T-2, T-23, (onshore tanks of 5500 KL capacity and 7300 KL capacity) M5, 111A & 111B tanks at Vizag port and LG Polymers plant in Vizag into vessels, which will carry them to South Korea.

On May 12, 2020, approx. 7900 tons of Styrene was loaded on a vessel and transported to South Korea. Till May 15, 2020 morning, out of 3000-ton Styrene at LG Polymers plant, 2143 tons has been transported to Vizag sea port tank. Remaining 857 tons is being transported. Sea Port storage tank at Vizag holds 4043 tons of Styrene. Once all the Styrene reaches Sea port storage tank from LG Polymers plant, a Second vessel will carry all this remaining 4900 tons Styrene to South Korea. For the complete transparency and accountability of the process, the permissions obtained to send the material back to South Korea, actual quantity and protocol followed shall be submitted immediately by Govt. of Andhra Pradesh, industries department, APPCB and District Magistrate.

f) Suggestions for restoration:

1. The affected tank poses no further risk but the polymerised mass has to be taken out and disposed at TSDF preferably incinerated. Alternate arrangements for converting to useful products may be explored after consultation with experts in the field so that incineration impact can be lowered.
2. Suggested to have all styrene inventories in the storage tanks of LGPI, including two outsourced shore tanks, having no chilling facility.
3. The unit shall be directed to empty all storage tanks with other chemicals, waste-residues, hazardous wastes, spill-material, intermediates, by-products and final product. The unit must share the material safety data sheets of the hazardous chemicals handled by it to concerned departments.

g) Remedial measures to prevent recurrence;

- 1) Hazard identification and evaluation in a local community, Preparation of Guiding Principles for Accident Prevention, Preparedness and Response for onsite and offsite emergency plans has to be reviewed.
- 2) A detailed study of the risk assessment and disaster management studies to be carried out by the industry
- 3) The styrene metabolites are of genotoxic and can cause carcinogenic health impacts to the population exposed based on different factors. It is suggested that the industry shall prepare a

comprehensive health monitoring programme along with reputed hospitals for the suspected population at least for five years. Based on the data and health results of the study the monitoring may further continued. The District Administration shall monitor the whole programme for its proper implementation.

- 4) Preparation of a comprehensive EIA report in accordance with the MoEF&CC guidelines.
- 5) Safety audit to be conducted by certified third party regularly for onshore facilities under Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 (MSIFIC Rules) for styrene import.
- 6) The distancing criteria for Storage tank of styrene has to be followed as per schedule 1 of MSIHC Rules, 1989.
- 7) Installation of the automatic siren when any parameter goes out of control. The siren needs to be done within and outside the industry so that the villages around are alarmed about the same
- 8) Emergency ambulance services to be arranged in the industry premises along with an experienced doctor.
- 9) Awareness campaigns in the villages around the industry to make them aware of the measures to be taken in case of any accident/ damage from the industry to the area around the industry.
- 10) Readymade PPE to be placed at the emergency points in case of any accident.
- 11) Separate safety manual to be prepared for each equipment along with the accidental management plan.
- 12) Periodic inspection by Department of Factories & Safety to assess the safety measures and documents maintained by the industry. If failed, necessary action shall be initiated against the industry.
- 13) API RP 575 protocol should be followed for inspection.
- 14) Design of storage tank should fulfil MoEF&CC notification dated 09.11.2012 with vapour control system.
- 15) Automatic styrene sensor should be installed in the different direction and residential with minimum detection limit of 1 ppm.
- 16) Carbon steel and stainless steel are suitable for handling styrene and Blanketing of tanks for fire protection should be considered.
- 17) The tank must have the capacity to contain the styrene product as well as enough volume for adding diluents to quench the reaction.
- 18) The administrative failures such as not obtaining Environmental Clearance from MoEF&CC. not implementing the recommendations of APPCB and factories of inspectors in time (based on inspection reports), failure of replacing the old storage tanks and having no safety measures for

temperature recordings, no safety audit reports are to be further investigated.

- 19) The role of factories and inspectors to be specified and their inspection protocol are to be assessed Pan-India. Since safety aspects are part of their mandate an independent audit is required in the light of many accidents reported due to failure of safety measures and lack of training.
- 20) In order to prevent such accidents, a District Crisis Group (DCG) needs to be established under the chairmanship of District Collector. This group has to meet every 45 days to review the safety and hazard issues of each and every industry. Similarly, State Crisis Group (SCG) needs to be established under Chief Secretary. This committee should meet every 3 months and review the onsite/offsite District emergency plan prepared by DCG and suggest the measures to be taken to minimize the accidents. Both DCG and SCG should make plans to create awareness among the people living in the surrounding area of the industry about chemical hazards and measures to be taken for accidents.
- 21) It is suggested that each State shall take responsibility in implementing the Chemical Disasters Management, protocol (March 2009 publication) and NIHDC remedial measures and submit Action taken Report.
- 22) Responsibility Matrices for Disaster Risk Mitigation as per National Disaster Management Plan (May 2016) has to be taken up and assess the implementation schedule by each States and UTs.

h) Any other incidental or allied issues found relevant;

The NGT Committee members conducted a public consultation meeting on May 12, 2020 at 10:30 hrs in GVMC Conference Hall with NGOs, residents from affected villages and Industrialists. The Committee requested to offer suggestions/representations/remarks on the mishap of LG Polymers Styrene gas leakage issue and further consequences in that locality including preventive measures.

The Committee has taken opinion of the participants by interacting with each and every individual, and the main observations of the participants are stated below.

1. The compensation must be paid both by the company and the Government since company is responsible for the accident. Compensation shall be based on Global Compensation norms.
2. The Company should conduct local public awareness campaigns about Do's/ Don'ts during, emergency.
3. **Since the NEERI team have already conducted preliminary studies and a report has been prepared,**

it is suggested to engage the services of NEERI, for studies related to environment including water, soil and air.

4. Adjacent to the L.G. Polymers company, VUDA approved layouts also there, hence habitations are developed around the company over a period of time. District administrations shall take more care in approving such layouts.
5. Material auditing, safety inspection reports shall be made online for public
6. **All the affected families should be given identity cards and Health cards by the Government and the expenditure on medical bills shall be borne by the unit. District Administration shall make necessary instructions and coordination.**
7. In the R.R. Venkatapuram surrounding villages, pregnant women also affected, hence the government has to take necessary monitoring mechanism for the pregnant woman.
8. **At the time of gas leakage, the villagers started to run away towards Vizianagaram, but the Police at Kothavalasa check post stopped all the people and directed them to stay in the nearby school. Lack of coordination between the district administrations of Visakhapatnam and Vizianagaram Districts was clearly visible during the incident.**
9. **The L.G. Polymers company management should be prosecuted under relevant sections Cr.P.C.**
10. All factories should be monitored through C.O cameras. The Companies as well as the Government neglected the Community Based Disaster Response system.
11. **The Government should ensure that hereafter all companies should take precautions and not to repeat such incidents. Awareness programme should be conducted in the surrounding areas of the industry.**
12. The first information was given by civilians to the police control room, but not by the company.
13. Why should building plan approvals given in 200 metres radius adjacent to the Factory. The Urban Development is also responsible for this incident.
14. All companies should have Public Addressing system, so that the public can be warned during the Disaster.
15. The Representatives of industry and CII have stated that The Government should take action for bringing World Class Disaster Management system.
16. Many people opined that neither the Inspector of Factory nor Fire officials are aware how to deal with chemical disasters.
17. Maintenance of buffer zone for all industries, stoppage of encroachments and policy of not allocating residential houses near to industry should be strictly followed.
18. The mapping has to be made for the Risk Assessment. It may be gas leakage, solvent firing, explosion etc.
19. Sensitization of public to deal with emergency in local and factory premises.

20. All factories should have mitigation plans for gas leakage solvent fire and should have emergency ward with medical staff for treatment.

The NGT Committee visited all five affected villages (R R Venkatapuram/Venkatapuram, Nandamuri Nagar, Janatha Colony, SC/BC colony and Kancharapalem and physically seen the extent of damage at all places. Also, the committee interacted with local people about the sequence of events due to gas leakage.

i) Scope for further studies;

CSIR-NEERI, Hyderabad Zonal (HZC) has already taken up an independent research study and the sampling work for various environmental components conducted from May 12-16, 2020. Since the NEERI team have already conducted preliminary studies and a report has been prepared, the services of NEERI may be utilised for further studies for calculating the cost of environmental damages related to flora and fauna. **The other suggested scope for studies are:**

- a) **Monitoring of the environmental parameters viz., air, groundwater, surface water, soil for the next 10-12 months to assess the long term concentration of styrene**
- b) **Vapour cloud dispersion studies**
- c) **Assessment of the environmental components for styrene concentration**
- d) **Remedial measures for contaminated soil, water**
- e) **Risk assessment studies for the accident**
- f) **Prediction of the effect of the accident over long term and short term through modelling studies**
- g) **Bio-assay test to understand the level of toxicity in the water.”**

(emphasis supplied)

34. The observations of the Committee are based on site inspection by independent experts of unquestioned credibility. Observations to the extent of holding that the Company is liable for the damage caused on account of leakage of gas to the life, public health and the environment corroborate the stand of the MoEF&CC and the State PCB. The company has operated without EC and the State PCB on account of its ignorance of law or otherwise gave ‘Consent to Establish’ and ‘Consent to Operate’ in violation of law. There is

violation of 1989 Rules. Liability of the Company is strict and absolute under the law. Burden of proof to show that it has no liability is on the company. Overwhelming material establish the liability of the company. The amount deposited has thus to be appropriated towards part liability and interim compensation subject to further orders after giving further opportunity to the company. This is without prejudice to final liability being quantified based on further study and proceedings under any other law.

C. Failure of Authorities and need for remedial measures

35. We are of the view that further remedial action needs to be taken in the matter of bringing to justice erring officers of authorities in the State of Andhra and liability of the State or officers being further gone into. There is also need for rehabilitation plan utilizing the interim and further compensation. Lastly regulatory framework needs to be reviewed and strengthened, apart from identifying steps to ensure compliance of laid down safety norms and laying down further norms and procedure to avoid recurrence of such failures in future.

36. Safety of citizens and environment are of prime concern. Any economic or industrial activity, however necessary, has to be consistent with the safety of human beings and the environment. The damage to human life, human health and environment has to be restored by applying the 'Sustainable Development' principle, of which 'Precautionary' and 'Polluter Pays' principles are part. In this regard, significant role has to be played by the statutory authorities constituted under the Water (Prevention and Control of

Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and the Environment (Protection) Act, 1986.

37. Dealing with environmental issues, including unfortunate incidents, the Tribunal has found need to revamp the existing regulatory framework quantitatively and qualitatively. The Tribunal has noted the observations of the CAG and parliamentary Committees on the subject. Reference may be made to order dated 22.11.2019 in O.A. No. 837/2018, *Sandeep Mittal vs. Ministry of Environment, Forests & Climate Change & Ors.* after noting the status of current monitoring mechanism of the MoEF:

“5. Further affidavit has been filed on 25.09.2019 on behalf of the MoEF&CC stating as follows:-

“1 to 6 xxx xxx xxx

7. That according, if only the projects issued EC during 2013-2019 are taken, then the best case scenario in terms of their monitoring could be 2.5 yrs with 50% enhancement in sanctioned staff strength and worst case scenario would be 4.5 years with Man in Position (MIP) which is 32 at present across the ten (10) ROs in the country. Accordingly, the repeat inspection of a unit can only happen after 2.5 yrs and 4.5 yrs, respectively in the above two scenarios. That if all the projects issued EC since 1994 onwards are taken then the best case scenario is 6.5 yrs with 50% enhancement in sanctioned staff strength and worst case scenarios is 13 years with MIP indicating that. The repeat inspection of a unit can only happen after 2.5 yrs and 4.5 yrs, respectively in these two scenarios.

8. That for Category ‘B’ projects for which compliance monitoring has been directed to be responsibility of SEIAA and SPCB, following to be taken note of:

- a. Sanctioned staff strength and MIP of SEIAAs and SPCBs/PCCS are still not available.*
- b. SEIAA and SPCBs are under the administrative control of State Government.*
- c. There is ambiguity with respect to their present involvement in monitoring of EC conditions.*
- d. Accordingly, it has been difficult to speculate the timeframe for taking up and completion of monitoring of Cat B projects at present.*

- e. *The SEIAAs and SPCBs have been asked to provide information so that the above timeframe may be calculated.*
9. *That as directed, a Six Monthly Action Plan has been prepared to reduce the timeline, enhance coverage and transparency, reduce requirement of additional human resources while ensuring comprehensive compliance of environmental conditions, thereby resulting in greater protection of the environment on a continuing basis. The Six Monthly Action Plan is placed at Annexure R-2.*
10. *That as enumerated in the Action Plan, the Ministry plans to carry out a thorough assessment of the quantum of work involved and available human resources and accordingly take up the initiatives for comprehensive refining of the existing monitoring mechanism. Based on this exercise the following action are to be undertaken:*
- a. **Filling up of vacant posts wherever applicable.**
 - b. **Creation of additional posts in all the agencies to be involved in monitoring and compliance viz. ROs, CPCB, SEIAA and SPCBs; if required.**
 - c. **Hiring of young professionals as per feasibility.**
 - d. **Creation of new ROs, if required.**
 - e. **Utilizing services of CPCB and SPCBs to effectively discharge responsibilities of monitoring.**
 - f. **Strengthening Monitoring Cell within the Ministry.**
 - g. **Develop web based online mechanism to automate the entire process of inspection and compliance monitoring.**
11. *That the Action Plan provides a detailed roadmap for the coming months which includes:*
- a. **Hiring of an Independent Agency to assess the work requirement.**
 - b. **Constitution of Monitoring Evaluation Committee (MEC) to steer and supervise a new monitoring mechanism.**
 - c. **Engagement of Consultant for development of web based mechanism for end to end digitization.**
12. *That in the interim, till the larger Action Plan is implemented, in order to improve the monitoring process, following actions has been/will be taken up:*
- a. **Filling up on nine vacant posts of Scientists in the ROs.**
 - b. **Strengthening the Monitoring Cell in the Ministry.**
 - c. **Delegation of the action on monitoring reports of Category 'B' projects to SEIAA as per the**

Notification no. SO 637 (E) dated 28th February 2014.

- d. Evolving a mechanism for online maintenance of monitoring and compliance data with regard to Category-A and Category-B projects and integrating it with the existing PARIVESH portal of the Ministry.”**

6. We have considered the above averments as well as contents of annexures R-I and R-II giving data of the projects and ‘six monthly action plan’. We are of the view that the mandate of law is not complied with by the above stand of the MoEF&CC. **It is well acknowledged that there is rampant violation of the Environmental Clearance (EC) conditions. This Tribunal has, in order dated 21.11.2019, noticed serious violations of EC conditions with respect to A Category ‘housing projects’ in Haryana and found monitoring of conditions of EC ineffective.² The said order also refers to earlier orders wherein similar serious violations have been noticed. The violations include absence of scientific management of sewage and solid waste, not having open spaces, illegal drawal of ground water, construction in excess of sanctioned plan etc. It is difficult to say such violations are limited to State of Haryana. In absence of adequate mechanism, such rampant violation are bound to continue defeating the environmental principle of precautionary and sustainable development. In this regard, it is apt to note that this aspect was considered by the Hon’ble Supreme Court in T.N. Godavarman Thirumulpad Vs. Union of India & Ors. (2014) 4 SCC 61. Reference was made to the observations in Lafarge Umiam Mining Private Limited Vs. Union of India, (2011) 7 SCC 338 that power of the regulator under Section 3(3) of the Environment (Protection) Act, 1986 is coupled with duty and that the monitoring mechanism for the clearance conditions was not satisfactory. The Hon’ble Supreme Court also referred to a report on ‘Scope, Structure and Processes of National Environment Assessment and Monitoring Authority (NEAMA)’ for the Ministry of Environment and Forests, Government of India prepared by Department of Management Studies, Indian Institute of Technology, Delhi. Therein it was found that there are huge gaps in monitoring and enforcement of clearance conditions which defeats the purpose of Environmental Clearance process. The said finding quoted in the judgment is as follows:**

“Several studies have pointed toward the poor monitoring of the clearance conditions. Huge gaps in monitoring and enforcement of clearance conditions actually defeats the very purpose of grant of conditional environmental clearance.”³

² Order dated 21.11.2019, O.A. No. 506 / 2019, Mukund Dhote v. UOI & Ors.

³ Para 10

7. **We also note the observations from Report of the Comptroller and Auditor General of India on Environmental Clearance and Post Clearance Monitoring 2016 that there are shortfalls in monitoring of environmental parameters. Reasons for such shortfalls are inadequate staff, inadequate database, not assigning clear responsibility for post EC monitoring, absence of monitoring at regular intervals particularly for critically polluted areas.**
8. **Thus, there is dire need for revamping the monitoring mechanism by MoEF&CC as well as SEIAAs, CPCB and State PCBs Post EC monitoring processes need revamping in quantitative as well as qualitative terms. There is need to prioritize the projects where potential environmental degradation is high on account of nature of activity as well as area being ecologically sensitive. In respect of such projects and in such areas, monitoring may have to be more intensive and at higher frequency. In no case frequency of monitoring should be less than once in a year.**
9. **The present scenario of monitoring once in 4.5 years and planned modification resulting in monitoring in 2.5 years is farce and does not meet the requirement of law by any standards. As already observed monitoring has to be, as far as possible, quarterly and in no case less than twice a year.**
10. **Data of environmental degradation in the form of air, water and soil pollution reflected in the form of 351 polluted river stretches, 122 non-attainment cities and 100 polluted industrial clusters is eloquent testimony of such degradation and failure of monitoring mechanism. Statistics of deaths and diseases on account of such degradation are well known and need not be elaborated here.**
11. **On being asked, learned counsel for MoEF&CC is unable to even mention the percentage of compliance as according to him there is no such data available, which is shocking. With a view to plan such monitoring, the percentage of compliance must be ascertained. Trend over a period of time in terms of increase in compliance or otherwise must be studied so that there can be corresponding review of mechanism based on correct data. Experience so far shows that with the increasing developments, in absence of adequate monitoring mechanism it would be difficult to check such violations thereby defeating 'precautionary' principle.**
12. **In view of the above, remedial action may be planned at the earliest. The plan should cover all the sub categories of projects, including B category.**

Monitoring mechanism needs a also to be evolved for SEIAAs, regional offices of the MoEF&CC and the regional offices of CPCB. Since these steps are inalienable constitutional obligations, steps need to be taken to suitably augment the requisite manpower in these establishments for effective monitoring by MoEF&CC, CPCB and SEIAAs.

13. **There is no information about the result of steps taken in terms of 'six monthly action plan' so far. Making of such plan may be of no value unless it is resulting in improvement of the ground situation in terms of strengthening of monitoring, which is not shown to be happening. Expressing difficulties in improving the situation is not a solution. If there is an EC regime, compliance has to be monitored. The principle of Sustainable Development and the Precautionary principle, which have been held to part of 'Right to Life' require that EC conditions are fully complied.**

14. **No satisfactory mechanism exists at present, as shown by the above affidavit itself. It is stated that, at present, it takes 4.5 years for monitoring which means that for such long period the non-compliance continues making mockery of law. There has to be speedy monitoring and speedy action, wherever necessary. There has to be a robust plan for the purpose which is the responsibility of the concerned Government Departments. We place on record our disapproval for the present sorry state-of-affairs and expect meaningful improvement.**

15. **We are, thus, of the view that for meaningful monitoring, all Category A projects are monitored not less than twice in a year and all Category projects are monitored not less than once in a year.**

16. **Let the Secretary, MoEF&CC and Chairman, CPCB hold a meeting with such other experts as may be found necessary and establish and/or augment the institutional setups in MoEF&CC, CPCB and SEIAAs for meaningful monitoring of Category A and B projects in the light of the above observations. Compliance report may be filed before this Tribunal by e-mail at judicial-ngt@gov.in by MoEF&CC and CPCB. The MoEF&CC may also furnish compliance status by SEIAAs."**

(emphasis supplied)

38. Similarly, vide order dated 11.01.2019 in O.A. No. 95/2018, *Aryavart Foundation vs. M/s Vapi Green Enviro Ltd. & Ors.*, following observations may be noted:

“37. ..The SPCB has not shown that it took any stringent action as required which can act as deterrent against violation of pollution norms. Simply issuing notice has not brought about the desired results. No closures have been ordered, nor prosecution launched nor other adequate preventive and remedial measures, including assessment and recovery of damages taken. In this respect, there is failure of GPCB. We may only observe that even a regulatory authority may be held accountable if it colludes with polluters by being required to pay damages or errant officers being held liable for action, including prosecution. **Frequent failures of regulatory bodies need to be remedied for meaningful enforcement of environmental norms.** This Tribunal in Threat to life arising out of coal mining in South Garo Hills district Vs. State of Meghalaya & Ors.⁴, held that **State machinery is also required to compensate for their negligence and failure which may act as deterrent against the officers who neglected their basic duty of protecting the environment or colluded with the polluters and law violators. The polluters as well as colluding officers are to be made accountable not only by prosecution or closure of industry but also by assessing and recovering such damages for loss to the environment as it may not only compensate the environment or victims but also act as deterrent to prevent further damage.**

38. It is well acknowledged that there is serious threat to the environment in this country. Studies show huge number of pollution related deaths and diseases⁵. Any violation of laid down environmental norms has to be seriously viewed and sternly dealt with.

39. It was in the year 1974 that the Water (Prevention and Control of Pollution) Act, 1974 was enacted after noticing that problem of pollution of rivers and streams had assumed considerable importance and urgency on account of growth of industries, threatening the sources of drinking water, the aquatic life and sources of irrigation. After considering the Expert Committee reports on the subject, the statutory framework was adopted giving enormous powers to the Pollution Control Boards (PCBs) for closure, prohibition or regulation of any industries operation or process as well as filing of complaints for prosecution. Minimum sentences have been laid down for violation of the norms. Polluter Pays Principle is an accepted norm

⁴ O.A. No. 110(T_{HC})/2012 Order dated 04.01.2019 para 28-29

⁵ https://niti.gov.in/writereaddata/files/new_initiatives/presentation-on-CWMI.pdf- India ranks 120th in 122 countries in Water Quality Index as per Niti Ayog Report, <https://www.thehindu.com/sci-tech/energy-and-environment/india-ranked-no-1-in-pollution-related-deaths-report/article19887858.ece>- Most pollution-linked deaths occur in India, <https://www.hindustantimes.com/india-news/delhi-world-s-most-polluted-city-mumbai-worse-than-beijing-who/story-m4JFT063r7x4Ti8ZbHF7mM.html>- Delhi's most polluted city, Mumbai worse than Beijing as per WHO; http://www.un.org/waterforlifedecade/pdf/global_drinking_water_quality_index.pdf- WHO Water Quality Index.

within the purview of regulatory regime. The statutory functions of the PCBs, include programs for prevention, abatement and control of pollution and exercise all incidental powers. The CPCB has powers to issue directions to the State Boards. Needless to say, that similar provisions have been made for protection of air quality under the Air (Prevention and Control of Pollution) Act, 1981 as well as for other environmental issues under the Environment (Protection) Act, 1986.

40. As already noted, the SPCB is equally accountable for its failure and in appropriate cases can be prosecuted for conspiracy or collusion with other offenders causing pollution. The pollution cannot be allowed to be profitable activity and deterrent action must be taken wherever pollution is found so as to render causing of pollution unprofitable and unacceptable to prevent damage to the health and lives of the citizens. Any polluter must be subjected to heavy and deterrent economic sanctions. Unfortunately, this is not happening as expected for which failure the regulatory authority cannot disown their responsibility.

41. **We note that the State of Environment in the country, even as per official figures, is alarming. As many as 351 river stretches have been declared to be polluted by the CPCB. Vide order dated 20.09.2018 in Original Application No. 673/2018, News item published in 'The Hindu' authored by Shri. Jacob Koshy Titled "More river stretches are now critically polluted: CPCB", this Tribunal considered the issue of such polluted stretches and noticed the directions of the Hon'ble Supreme Court from time to time for stopping discharge of untreated sewage and effluents in water bodies. Such discharge causes serious diseases, including Cholera and Typhoid. Sewage treatment capacity was disproportionate to the sewage generated. As per some studies noted in the order, 75 to 80% water is polluted in India. Pollution of River Yamuna⁶, Ganga⁷, Hindon⁸, Ghaggar⁹, Sutlej and Beas¹⁰, Son¹¹, Subarnarekha¹², Ami¹³ were also noted. The States were directed to prepare action plans to make the water of the polluted river stretches atleast fit for bathing within six months from the dates of preparation of approved action plans. When the matter was reviewed on 19.12.2018, it was found that only 16 States had**

⁶ Manoj Mishra Vs. Union Of India O.A. No. 6/2012 order dated 26.07.2018

⁷ M.C. Mehta vs. Union of India O.A. No. 200/2014 order dated 06.08.2018

⁸ Doaba Paryavaran Samiti vs. State of U.P. and Ors. O. A. No. 231/2014 Order dated 08.08.2018

⁹ Stench Grips Mansa's Sacred Ghaggar River (Suo-Motu Case) and Yogender Kumar O.A. No. 138/2016 Order dated 07.08.2018

¹⁰ Sobha Singh and Ors. Vs. State of Punjab and Ors. O.A. No. 916/2018 Order dated 14.11.2018

¹¹ Amarshakti vs. State of Bihar and Ors. O.A. No. 596/2016 Order dated 24.08.2018

¹² Sudarsan das vs. State of West Bengal and Ors. O.A. No. 173/2018 Order dated 04.09.2018

¹³ Meera Shukla vs. Municipal Corporation, Gorakhpur and Ors. O.A. No. 116/2014 Order dated 25.10.2018

prepared action plans, most of which were not complete. The direction was issued for payment of environmental compensation per month by every State/UT for failure to prepare action plan and also to furnish Performance Guarantees for execution of the action plans within the stipulated time.

42. *This Tribunal in News Item Published in “The Times of India’ Authored by Shri Vishwa Mohan Titled “NCAP with Multiple timelines to Clear Air in 102 Cities to be released around August 15”¹⁴ has dealt with the issue of 102 air polluted cities identified by the CPCB. Taking into account eminent threat to human health as a result of air pollution, this Tribunal directed all the States/UTs with non-attainment cities to prepare action plans for bringing down the standards of air quality within the prescribed norms within six months. The Tribunal further constituted the Air Quality Monitoring Committee to ensure implementation of such action plans. The CPCB and the SPCBs were entrusted with the responsibility to design a robust nation-wide ambient air quality monitoring program to strengthen the existing monitoring network.*
43. *In re: Compliance of Municipal Solid Waste Management Rules, 2016¹⁵, the Tribunal directed preparation of action plans for solid waste management consistent with the Solid Waste Management Rules, 2016 in view of the fact that as per annual report of the CPCB prepared in April 2018, most of the States were not complying with the statutory rules.*
44. *As already noted earlier, this Tribunal considered the matter of polluted industrial clusters in News Item published in “The Asian Age” Authored by Sanjay Kaw titled “CPCB to rank industrial units on pollution levels” vide order dated 13.12.2018. It was noted that 43 industrial clusters in 16 States were identified as Critically Polluted Areas and 32 industrial clusters were categorized as Seriously Polluted Areas. In 2017-18, the number of identified polluted industrial clusters went upto 100. Accordingly, the Tribunal directed the State Pollution Control Board to finalize time bound action plan to restore the environmental quality as per the norms laid down by the CPCB and directed CPCB and SPCBs to take coercive measures against the violators on the basis of ‘Precautionary Principle’ and ‘Polluter Pays Principle’.*

¹⁴ Original Application No. 681/2018 Order dated 08.10.2018

¹⁵ Original Application No. 606/2018 Order dated 31.08.2018

45. In *Techi Tagi Tara Vs. Rajendra Singh Bhandari & Ors.*¹⁶, the Hon'ble Supreme Court noted that the State Pollution Control Boards (SPCBs) continued to be manned by persons not having expertise or professional experience. The State Governments were not able to appoint qualified, impartial, and politically neutral persons of high standing to the crucial regulatory posts. Political appointments were being made in blatant violation of Apex Court guidelines to debar favorable persons being appointed.¹⁷ The appointments being made did not inspire the confidence of the people. The Hon'ble Supreme Court directed all the States to frame guidelines and recruitment rules within six months. It may be pertinent to lay emphasis on the following observations of the Hon'ble Supreme Court in the aforesaid judgment:

“Unless corrective measures are taken at the earliest, the State Governments should not be surprised if petitions are filed against the State for the issuance of a writ of quo warranto in respect of the appointment of the Chairperson and members of the SPCBs. We make it clear that it is left open to public spirited individuals to move the appropriate High Court for the issuance of a writ of quo warranto if any person who does not meet the statutory or constitutional requirements is appointed as a Chairperson or a member of any SPCB or is presently continuing as such.”

¹⁶ (2018) 11 SCC 734 para 3-4, 28-34: The judgment takes into consideration various Committees appointed laying down guidelines for the functioning of SPCBs viz.,

- (a) Bhattacharya Committee (1984) proposed that the structural organization of SPCBs should consist of technical services, scientific services, planning, legal services, administrative services, accounts, training cell and research and development.
- (b) The Belliappa Committee (1990) - Recommended (i) introducing elaborate monitoring, reporting and organizational systems at the national level along with four regional centres and one training cell in each Board, (ii) effecting suitable changes in the Boards recruitment policy to enable them induct persons with suitable academic qualifications, and (iii) ensuring that the Chairman and Member-Secretary are appointed for a minimum of three years.
- (c) The Administrative Staff College of India (1994) - Recommended, inter alia, that (i) the SPCBs be reoriented for implementing the instrument mix of legislation and regulation, fiscal incentives, voluntary agreements, information campaigns and educational programmes.
- (d) The Menon Committee – Recommending that the State Governments should not interfere with recruitment policies of the SPCBs, especially where the Boards are making efforts to equip their institutions with more and better trained engineering and scientific staff.

¹⁷ *Ibid.* The judgment notes the report of the Tata Institute of Social Sciences published in 2013 titled “Environmental Regulatory Authorities in India: An Assessment of State Pollution Control Boards” which stated about the appointments to the SPCBs that time and again across state governments have not been able to choose a qualified, impartial, and politically neutral person of high standing to this crucial regulatory post. The recent

appointments of chairpersons of various State Pollution Control Boards are in blatant violation of the Apex Court guidelines. The primary lacuna with this kind of appointment was that it did not evoke any trust in the people that decisions taken by an ex-official of the State or a former political leader, appointed to this regulatory post through what appeared to be a totally non-transparent unilateral decision. Many senior environmental scientists and other officers of various State Pollution Control Boards have expressed their concern for appointing bureaucrats and political leader as Chairpersons who they feel not able to create a favourable atmosphere and an effective work culture in the functioning of the Board.

46. **In addition to this, the Parliamentary Standing Committee on Science and Technology, Environment and Forest, August 2012 in its recommendations on the working of the SPCBs was perturbed to note that the SPCBs were not performing their duties vigilantly and recommended that MoEF&CC must ensure proper and effective coordination between the CPCB and SPCBs and take necessary steps to make the Pollution Control Boards functional and ensure that the discharge their duties effectively and efficiently.¹⁸**

47. **During the hearing it was stated by the learned Counsel for the GPCB that guidelines in terms of Techi Tagi Tara (supra) have been issued and thus, the judgment has been complied with. However, he has not been able to dispute that the persons appointed are not having technical or professional qualifications or background as expected.**

48. This Tribunal, on 20.07.2018, in *Satish Kumar vs. U.O.I & Ors.*¹⁹ also observed that persons of judicial background may be required in key position in PCBs as several functions of the SPCBs are quasi-judicial.

49. The order of this Tribunal dated 07.08.2018 in *Stench Grips Mansa's Sacred Ghaggar River (Suo-Moto Case)*²⁰ noted that a task force must be constituted in every district and State to give reports on the environmental issues which should be published on the websites.

50. **The Tribunal in the order on 08.08.2018 in *Doaba Paryavaran Samiti Vs. State of U.P. & Ors.*²¹ noted that statutory authorities had miserably failed and were required to be held accountable for their failure.**

51. In view of the fact clean environment, apart from other statutory provisions, is a mandate of Article 21 of the Constitution, causing of pollution having serious implications on health of the citizens cannot be accepted and no responsible authority could simply throw its hands in despair.²²

52. Thus, there being far from satisfactory governance on the part of the SPCBs, as depicted by the compiled data, resulting in large number of deaths and diseases in the country, remedial measures are required. Lack of effective governance in the present case is patent from absence of

¹⁸ Accessible at:
<http://164.100.47.5/newcommittee/reports/EnglishCommittees/Committee%20on%20S%20and%20T,%20Env.%20and%20Forests/230.pdf>

¹⁹ O.A No. 56 (THC) of 2013

²⁰ O.A. No. 138/2016 (T_{NHRC})

²¹ O.A. No. 231/2014

²² *Supra* note 18

steps for prosecution of the guilty persons or recovery of damages for restoration of the environment which is primary responsibility of the SPCB. Appointment process does contribute to such ineffectiveness.

53. *There is, thus, urgent need to review the qualification and appointment procedure so as to realistically comply with the mandate of the judgment of the Hon'ble Supreme Court. There is also need to carry out performance audit of functioning of all the Pollution Control Boards and Pollution Control Committees in the country and to identify remedial steps required in manning and functioning of SPCBs and PCCs or otherwise. Unless strong effective regulatory regime is in place, and shortcomings identified and remedied to expect clean environment would be unrealistic and merely a dream."*

(emphasis supplied)

39. Vide order dated 28.08.2019 in O.A. No. 95/2018, *Aryavart Foundation vs. M/s Vapi Green Enviro Ltd. & Ors.*, following observations may be noted:

"13. Report dated 10.07.2019 filed by the CPCB is on the subject of performance audit of the State PCBs/PCCs. The report merely ranks the PCBs/PCCs, without proper assessment of the functioning.

14. **What is expected is performance audit on issues such as adequacy with regard to environmental monitoring, efficacy of regulatory setup/mechanisms, staffing both technical and scientific manpower, scientific equipments, logistics support, competence etc. rather than ranking the States. Let the same be done and state-wise reports submitted based on thorough analysis in terms of statutory functions. CPCB may devise an appropriate mechanism for the purpose. We also direct that all vacant positions in the SPCBs/PCCs may be filled up at the within four months and the Chief Secretaries of the States/UTs may ensure that there is no embargo in doing so, so that effective steps for protection of environment can be taken. It is also necessary to direct that the laboratories established by the SPCBs/PCCs, at headquarters as well as regional centers, are duly recognized for purposed of enforcement of environmental laws. The concerned authorities may take further steps accordingly. The CPCB may compile a report and file before the next date. SPCBs/PCCs may utilize the funds available with them, under EC/Consents or other heads instead of approaching other authorities and on that pretext**

not performing their essential function. The MoEF&CC may consider constituting an appropriate authority for the purpose with representatives from Central and State authorities on the pattern of Compensatory Afforestation Fund Management and Planning Authority (CAMPA) or otherwise. A compliance report be filed by the MoEF&CC before the next date.

.....

Directions:

iii. Performance audit be done with reference to issues such as adequacy with regard to environmental monitoring, efficacy of regulatory setup/mechanisms, staffing both technical and scientific manpower, adequacy of laboratories and scientific equipments, logistics support, competence etc. rather than ranking the States and state-wise reports submitted along with recommendations based on thorough analysis in terms of statutory functions before the next date. CPCB may devise an appropriate mechanism for the purpose. CPCB and MoEF&CC may file a compliance report with reference to observations in para 14 above.”

(emphasis supplied)

D. Further Directions:

40. In view of above, we issue following directions in the matter:

- i. The amount of Rs. 50 crores deposited by the Company with the District Magistrate, Vishakhapatnam will stand appropriated towards part liability and interim compensation to be spent for restoration of the environment and compensation for victims in accordance with the restoration plan to be prepared.
- ii. Restoration plan may be prepared by a Committee comprising two representatives each of MoEF&CC, CPCB and three representatives of State Government to be named by the Chief Secretary, including the District Magistrate, Vishakhapatnam and such other concerned Departments

within two months from today. MoEF&CC will be the nodal agency for the purpose.

iii. Final quantification of compensation may be assessed by a Committee comprising representatives of MoEF&CC, CPCB and NEERI. The said Committee will be at liberty to associate/co-opt any other expert institution or individual. The Secretary, MoEF&CC may ensure constitution of such Committee within two weeks from today. The Committee may give its report within two months thereafter. MoEF&CC will be the nodal agency for the purpose.

iv. The Chief Secretary, Andhra Pradesh may identify and take appropriate action against persons responsible for failure of law in permitting the Company to operate without statutory clearances within two months and give a report to this Tribunal

v. In view of the stand of the State PCB and the Company that it will not recommence its operation without requisite statutory clearances, we direct that if any such statutory clearances are granted and the Company proposes to recommence, this aspect must be brought to the notice of this Tribunal so that compliance of law is ensured.

vi. The MoEF&CC may also constitute an Expert Committee to suggest ways and means to revamp monitoring mechanism to check and prevent violation of environmental norms and preventing any such recurrence in future in any of the establishments dealing with hazardous chemicals. A special

drive may be initiated in this regard. An action taken report may be furnished within three months from today.

vii. This order will not prejudice any criminal or other statutory proceedings in accordance with law.

41. A copy of this order be sent to the Chief Secretary, Andhra Pradesh, MoEF&CC, CPCB, District Magistrate, Vishakhapatnam and NEERI by e-mail.

42. Reports may be furnished by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image/PDF.

List for further consideration on 03.11.2020.

Original Application No. 76/2020 (Earlier Original Application No. 68/2020 (SZ))
EAS Sarma vs. Union of India & Ors.

43. According to the averments in the application, the applicant is a former Secretary to the Government of India residing at Vishakhapatnam. This application was filed on 07.05.2020 before the Southern Zone Bench of this Tribunal at Chennai with following prayers:

“i. Direct for immediate closure of the plant of respondent No.04.

ii. Direct the fixing of Responsibility of the officials of Respondent No.3 and direct further for action to be taken against them for permitting Environment Pollution in connivance with the Unit/Project Proponent-Respondent No.4

iii. Direct the Project Proponent-Respondent No. 4 to pay environmental damages for polluting the environment.

iv. Direct for setting up of a Committee for settling of claims of local inhabitants who are victims of the Pollution caused by unit-Respondent No.4”

Case of the applicant is that respondent no. 04 (L.G. Polymers India Pvt. Ltd.) was operating without requisite EC. During its operation, inherently dangerous gas called styrene (PVC gas) leaked resulting in death of about 10 persons and disease of about 1000 persons. The said company was thus liable to compensate the victims and the environment. The State PCB was negligent in permitting the unit to operate. The applicant relied upon newspaper reports and photographs.

44. The Southern Bench of this Tribunal took up the matter on 13.05.2020 and noted that this Tribunal was considering the issue in *suo moto* proceedings in O.A No. 73/2020. Accordingly, the Bench directed that the matter be referred to the Principal Bench for further action.

45. Since this present application does not raise any additional issue, it is not necessary to pass any further order at this stage. However, if it becomes necessary, further order will be passed later in due course.

List again on 03.11.2020.

Original Application No. 80/2020 (Earlier Original Application No. 73/2020 (SZ))
Centre for Wildlife and Environmental Litigation Foundation vs. Union of India & Ors.

46. This application also involves the same issue as O.A 76/2020 with no additional issue or material.

List again on 03.11.2020.

Adarsh Kumar Goel, CP

Sheo Kumar Singh, JM

Dr. Nagin Nanda, EM

June 1, 2020
Original Application No. 73/2020
and other connected matters
DV

