

Item No. 01

**BEFORE THE NATIONAL GREEN TRIBUNAL
CENTRAL ZONE BENCH, BHOPAL**
(Through Video Conferencing)

Original Application No.20/2021(CZ)
(I.A. No. 46/2021)
(I.A. No. 47/2021)

Krishna Murari & Anr

Applicant (s)

Versus

State of Rajasthan & Ors

Respondent(s)

Date of hearing: **16.09.2021**

Date of uploading: **21.09.2021**

**CORAM: HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER
HON'BLE DR. ARUN KUMAR VERMA, EXPERT MEMBER**

For Applicant(s):

None

For Respondent(s):

Mr. Rohit Sharma, Adv
Mr. Mahendra Singh Kachawa, Adv
Mr. Shoeb Khan, Adv
Mr. Yadvendra Yadav, Adv

ORDER

1. Issue raised in this application is poor quality of air/air pollution in Bharatpur, Rajasthan due to loading and unloading of clinker (raw material of cement) at old Railway stack Yard, Bharatpur, Rajasthan without the sanction/permission leading to air pollution in Bharatpur, Rajasthan leading to various ailments such as lung cancer, asthma, bronchitis, eye or skin ailments, ingestion etc., and at time air pollution is so high leading to breathlessness and at more than danger level where the living and breathing by the human beings become very difficult and acute.
2. It is further stated that the pollution level in Bharatpur, Rajasthan in the last one year has instant increase and has reached at alarming stage which may take the shape of Natural Calamity if no immediate

action is taken at the ground level by various authorities to check the Air pollution at the urgent level.

3. The petition has been filed with the prayer for directing the Respondents to forthwith stop the loading and unloading of clinker from the railway stack yard, Bharatpur, Rajasthan and to protect the environment and life of the people of Bharatpur and flora and fauna and further to issue an order in the nature of continuing mandamus, to constitute a high level committee to monitor the environment level at Bharatpur due to loading and unloading of clinker and to submit periodical reports to the Tribunal.
4. The matter was taken up on 25th May, 2021 and this Tribunal constituted a Committee consisting (i) District Collector, Bharatpur, Rajasthan and (ii) Rajasthan State Pollution Control Board with direction to visit the place submit the Factual and Action Taken report.
5. The Committee visited the place and submitted the report with the air quality which was assessed by Lab In-charge, Rajasthan State Pollution Control Board, Regional Office, Bharatpur and the analysis report sample of 06th July, 2021, it was found that the particulate matter (PM 10) $\mu\text{g}/\text{m}^3$ was 345. The sample which was collected near Phatak of Railway no. 40 Malgodam Road, Bharatpur collected from Ambient Air Quality Monitoring at house of Ramesh Kumar during loading and unloading work of clinker was found at 697. Again the sample was taken on 12.07.2021 and the particulate matter (PM 10) $\mu\text{g}/\text{m}^3$ was 581.
6. As per report submitted by the Joint Committee, the Senior Regional Manager Central Railway, Kota was taken into confidence and on the basis of the rack provided by the concerned department, the sample was taken on 05th July, 2021 at about 8.00 AM in the presence of the villagers as well as the complainant and the air quality was found at 345. Similarly, the sample which was taken between 2.00 pm to 5.00 pm it was found as 697 mg.

7. Respondent No.7 M/s Gunesh India Pvt. Ltd has moved an application I.A. No. 47 of 2021 for early hearing which has been allowed. Another application I.A. No. 46 of 2021 has been moved with the facts that the District Collector vide letter dated 16.02.2021 has suspended the work of loading & unloading of clinkers at Bharatpur Railway Station, Old Stack Yard and the work of loading and unloading of clinker has been discontinued by the applicant respondent at Bharatpur Railway Station (Old Stack Yard).
8. It has further been submitted that in furtherance of the directions issued by the District Collector, Bharatpur vide letter dated 16.02.2021, the applicant-respondent firm has planted approx. 300 plants alongwith railway; green cover shed (cloth shed) having height of about of 30 feets, width 50 feets and length ranging from 200-700 feets has been installed, the work of loading & unloading shall be carried out within the covered shed only; water sprinkling system has been installed. It is also submitted that the applicant-respondent is also working for installation of teen cover shed within 6 months. In this regard, the Senior Divisional Commercial Manager, Kota Division vide letter dated 26.03.2021 has also requested the District Collector, Bharatpur to permit railway for loading & unloading work of clinkers as postponement of work has caused huge financial loss to railways and during the time of this pandemic approx. 250-300 laborers have lost their source of income.
9. During the course of work suspension of loading and unloading of clinkers, the officials of the Rajasthan State Pollution Control Board has carried out Ambient Air Monitoring on 05.03.2021 at Shri Ramesh Kumar, Near Phatak No. 40, Malgodan Road, Bharatpur. It is pertinent to mention here that during the work suspension period the pM10 of the area were 610 $\mu\text{g}/\text{m}^3$.
10. The local laborers have also submitted their representation to the District Collector, Bharatpur to permit the loading & unloading work of

clinkers which was suspended by District Collector, Bharatpur letter dated 16.02.2021.

11. The roads around Malgodan, Old Stack Yard, Railway Station Bharatpur are damaged, the nearby industrial activities, vehicular pollution due to damaged roads have also added in the pollution. It is pertinent to mention here that the within 500 proximity of the Old Stack Yard another railway yard is operating wherein loading & unloading of Cement bags and Plaster of Paris bags is being done. Therefore, the allegations made by the applicants against the respondents are without any scientific study and valid reasoning that the pollution is being done due to loading and unloading of clinkers only.
12. The suspension of loading and unloading work during this pandemic period has lead many laborers hand to mouth for their livelihood, as for some of them this has been a full time source of income to earn their livelihood. It is pertinent to mention here that approx. 300 families are directly and indirectly dependent on this work for their livelihood.
13. That the applicant-respondent has taken due care so as to avoid any disturbance in the nearby area by installing green cover shed which shall be upgraded to teen shed cover within a period of six months in phase manner alongwith railway and as permitted by railway, water sprinkling facility has been done and plantation has also been done.
14. The Respondent No.7 submitted that the authorities concerned may be directed to conduct continuous Ambient Air Monitoring of the area at-least for a period of four weeks and during the course of continuous ambient monitoring the respondent be directed to permit loading & unloading of at least 02 racks of clinkers per week and the respondent may be directed to submit an comparative analysis report of the continuous ambient air monitoring during loading & unloading of clinkers for this period.

15. While economic development should not be allowed at the cost of ecology or by causing widespread environmental destruction, the necessity to preserve ecology and environment should not hamper economic and other development. Both development and environment must go hand in hand. In other words, there should not be development at the cost of environment and vice versa, but there should be development while taking due care and ensuring the protection of environment [Indian council for enviro-legal action v union of India [1996]5scc 281]. The traditional concept that development and ecology are opposed to each other is no longer acceptable [Vellore Citizens Welfare Forum Vs. Union of India [1996] 5 SCC 647].
16. Apart from providing smooth flow of public goods and services which contribute to the economic growth, highways also benefit regional development in the country. In the normal course, impediments should not be created in the matter of National Highways which provide the much needed transportation infrastructure. At the same time, protection of environment is important.
17. In a constitutional framework which is intended to create, foster and protect a democracy committed to liberal values, the rule of law provides the cornerstone. The rule of law is to be distinguished from rule by the law. The former comprehends the setting up of a legal regime with clearly defined rules and principles of even application, a regime of law which maintains the fundamental postulates of liberty, equality and due process. The rule of law postulates a law which is answerable to constitutional norms. The law in that sense is accountable as much as it is capable of exacting compliance. Rule by the law on the other hand can mean rule by a despotic law. It is to maintain the just quality of the law and its observance of reason that rule of law precepts in constitutional democracies rest on constitutional foundations. A rule of law framework encompasses rules of law but it does much more than that. It embodies matters of substance and

process. It dwells on the institutions which provide the arc of governance. By focusing on the structural norms which guide institutional decision making, rule of law frameworks recognize the vital role played by institutions and the serious consequences of leaving undefined the norms and processes by which they are constituted, composed and governed. A modern rule of law framework is hence comprehensive in its sweep and ambient. It recognizes that liberty and equality are the focal point of a just system of governance and without which human dignity can be subverted by administrative discretion and absolute power. Rule of law then dwells beyond a compendium which sanctifies rules of law. Its elements comprise of substantive principles, processual guarantees and institutional safeguards that are designed to ensure responsive, accountable and sensitive governance.

18. The environmental rule of law, at a certain level, is a facet of the concept of the rule of law. But it includes specific features that are unique to environmental governance, features which are sui generis. The environmental rule of law seeks to create essential tools – conceptual, procedural and institutional to bring structure to the discourse on environmental protection. It does so to enhance our understanding of environmental challenges – of how they have been shaped by humanity’s interface with nature in the past, how they continue to be affected by its engagement with nature in the present and the prospects for the future, if we were not to radically alter the course of destruction which humanity’s actions have charted. The environmental rule of law seeks to facilitate a multi– disciplinary analysis of the nature and consequences of carbon footprints and in doing so it brings a shared understanding between science, regulatory decisions and policy perspectives in the field of environmental protection. It recognizes that the ‘law’ element in the environmental rule of law does not make the concept peculiarly the preserve of lawyers and judges. On the contrary, it seeks to draw within the fold all

stakeholders in formulating strategies to deal with current challenges posed by environmental degradation, climate change and the destruction of habitats. The environmental rule of law seeks a unified understanding of these concepts. There are significant linkages between concepts such as sustainable development, the polluter pays principle and the trust doctrine. The universe of nature is indivisible and integrated. The state of the environment in one part of the earth affects and is fundamentally affected by what occurs in another part. Every element of the environment shares a symbiotic relationship with the others. It is this inseparable bond and connect which the environmental rule of law seeks to explore and understand in order to find solutions to the pressing problems which threaten the existence of humanity. The environmental rule of law is founded on the need to understand the consequences of our actions going beyond local, state and national boundaries. The rise in the oceans threatens not just maritime communities. The rise in temperatures, dilution of glaciers and growing desertification have consequences which go beyond the communities and creatures whose habitats are threatened. They affect the future survival of the entire eco-system. The environmental rule of law attempts to weave an understanding of the connections in the natural environment which make the issue of survival a unified challenge which confronts human societies everywhere. It seeks to build on experiential learning's of the past to formulate principles which must become the building pillars of environmental regulation in the present and future. The environmental rule of law recognizes the overlap between and seeks to amalgamate scientific learning, legal principle and policy intervention. Significantly, it brings attention to the rules, processes and norms followed by institutions which provide regulatory governance on the environment. In doing so, it fosters a regime of open, accountable and transparent decision making on concerns of the environment. It fosters the importance of participatory

governance of the value in giving a voice to those who are most affected by environmental policies and public projects. The structural design of the environmental rule of law composes of substantive, procedural and institutional elements. The tools of analysis go beyond legal concepts. The result of the framework is more than just the sum total of its parts. Together, the elements which it embodies aspire to safeguard the bounties of nature against existential threats. For it is founded on the universal recognition that the future of human existence depends on how we conserve, protect and regenerate the environment today.

19. In its decision in *Hanuman Laxman Aroskar vs Union of India*, [2019] 15 SCC 401 the Court, recognized the importance of protecting the environmental rule of law. The court observed:

“142. Fundamental to the outcome of this case is a quest for environmental governance within a rule of law paradigm. Environmental governance is founded on the need to promote environmental sustainability as a crucial enabling factor which ensures the health of our ecosystem.

143. Since the Stockholm Conference, there has been a dramatic expansion in environmental laws and institutions across the globe. In many instances, these laws and institutions have helped to slow down or reverse environmental degradation. However, this progress is also accompanied, by a growing understanding that there is a considerable implementation gap between the requirements of environmental laws and their implementation and enforcement — both in developed and developing countries alike ...

156. The rule of law requires a regime which has effective, accountable and transparent institutions. Responsive, inclusive, participatory and representative decision making are key ingredients to the rule of law. Public access to

information is, in similar terms, fundamental to the preservation of the rule of law. In a domestic context, environmental governance that is founded on the rule of law emerges from the values of our Constitution. The health of the environment is key to preserving the right to life as a constitutionally recognized value under Article 21 of the Constitution. Proper structures for environmental decision making find expression in the guarantee against arbitrary action and the affirmative duty of fair treatment under Article 14 of the Constitution.”

49. *In its first global report on environmental rule of law in January 2019, the United Nations Environment Programme (“UNEP”) has presciently stated:*

“If human society is to stay within the bounds of critical ecological thresholds, it is imperative that environmental laws are widely understood, respected, and enforced and the benefits of environmental protection are enjoyed by people and the planet. Environmental rule of law offers a framework for addressing the gap between environmental laws on the books and in practice and is key to achieving the Sustainable Development Goals.

Successful implementation of environmental law depends on the ability to quickly and efficiently resolve environmental disputes and punish environmental violations. Providing environmental adjudicators and enforcers with the tools that allow them to respond to environmental matters flexibly, transparently, and meaningfully is a critical building block of environmental rule of law.”

50. *The need to adjudicate disputes over environmental harm within a rule of law framework is rooted in a principled commitment*

to ensure fidelity to the legal framework regulating environmental protection in a manner that transcends a case-by-case adjudication. Before this mode of analysis gained acceptance, we faced a situation in which, despite the existence of environmental legislation on the statute books, there was an absence of a set of overarching judicially recognized principles that could inform environmental adjudication in a manner that was stable, certain and predictable. In an article in the Asia-Pacific Journal of Environmental Law (2014), Bruce Pardy describes this conundrum in the following terms:

“Environmental regulations and standards typically identify specific limits or prohibitions on detrimental activities or substances. They are created to reflect the principles and prohibitions contained in the statute under which they are promulgated. However, where the contents of the statute are themselves indeterminate, there is no concrete rule or set of criteria to apply to formulate the standards. Their development can therefore be highly political and potentially arbitrary.

Instead of serving to protect citizens' environmental welfare, an indeterminate environmental law 10 facilitates a utilitarian calculus that allows diffuse interests to be placed aside when they are judged to be less valuable than competing considerations.”

20. However, even while using the framework of an environmental rule of law, the difficulty we face is this – when adjudicating bodies are called on to adjudicate on environmental infractions, the precise harm that has taken place is often not susceptible to concrete quantification. While the framework provides valuable guidance in relation to the principles to be kept in mind while adjudicating upon environmental

disputes, it does not provide clear pathways to determine the harm caused in multifarious factual situations that fall for judicial consideration. The determination of such harm requires access to scientific data which is often times difficult to come by in individual situations.

21. In an article in the Georgetown Environmental Law Review (2020), Arnold Kreilhuber and Angela Kariuki explain the manner in which the environmental rule of law seeks to resolve this imbroglio:

“One of the main distinctions between environmental rule of law and other areas of law is the need to make decisions to protect human health and the environment in the face of uncertainty and data gaps. Instead of being paralyzed into inaction, careful documentation of the state of knowledge and uncertainties allows the regulated community, stakeholders, and other institutions to more fully understand why certain decisions were made.”

The point, therefore, is simply this – the environmental rule of law calls on us, as judges, to marshal the knowledge emerging from the record, limited though it may sometimes be, to respond in a stern and decisive fashion to violations of environmental law. We cannot be stupefied into inaction by not having access to complete details about the manner in which an environmental law violation has occurred or its full implications. Instead, the framework, acknowledging the 11 imperfect world that we inhabit, provides a roadmap to deal with environmental law.

22. In a recent decision of the Court in Bengaluru Development Authority vs Sudhakar Hegde 2020 scc online sc 328, the Hon’ble Supreme Court held:

“107. The adversarial system is, by its nature, rights based. In the quest for justice, it is not uncommon to postulate a winning side and a losing side. In matters of the environment and development

however, there is no trade-off between the two. The protection of the environment is an inherent component of development and growth...

“108. Professor Corker draws attention to the idea that the environmental protection goes beyond lawsuits. Where the state and statutory bodies fail in their duty to comply with the regulatory framework for the protection of the environment, the courts, acting on actions brought by public spirited individuals are called to invalidate such actions...

“109. The protection of the environment is premised not only on the active role of courts, but also on robust institutional frameworks within which every stakeholder complies with its duty to ensure sustainable development. A framework of environmental governance committed to the rule of law requires a regime which has effective, accountable and transparent institutions. Equally important is responsive, inclusive, participatory and representative decision making. Environmental governance is founded on the rule of law and emerges from the values of our Constitution. Where the health of the environment is key to preserving the right to life as a constitutionally recognized value under Article 21 of the Constitution, proper structures for environmental decision making find expression in the guarantee against arbitrary action and the affirmative duty of fair treatment under Article 14 of the Constitution. Sustainable development is premised not merely on the redressal of the failure of democratic institutions in the protection of the environment, but ensuring that such failures do not take place.”

23. In *Lal Bahadur Vs State of Uttar Pradesh* [2018]15 SCC 407 , the Court underscored the principles that are the cornerstone of our environmental 12 jurisprudence, as emerging from a settled line of precedent: the precautionary principle, the polluter pays principle and sustainable development. This Court further noted the importance of judicial intervention for ensuring environmental protection. In a recent decision in *State of Meghalaya & others vs All Dimasa Students Union*,[2019] 8 SCC177 this Court reiterated the key principles of

environmental jurisprudence in India, while awarding costs of Rs. 100 crores on the State of Meghalaya for engaging in illegal coal mining.

The UNEP report (supra) also goes on to note:

“Courts and tribunals must be able to grant meaningful legal remedies in order to resolve disputes and enforce environmental laws. As shown in Figure 5.12, legal remedies are the actions, such as fines, jail time, and injunctions, that courts and tribunals are empowered to order. For environmental laws to have their desired effect and for there to be adequate incentives for compliance with environmental laws, the remedies must both redress the past environmental harm and deter future harm.”

The above discussion puts into perspective our decision in the present appeals, through which we shall confirm the directions given by the NGT in its impugned judgment. The role of courts and tribunals cannot be overstated in ensuring that the ‘shield’ of the “rule of law” can be used as a facilitative instrument in ensuring compliance with environmental regulations.

24. In **Goel Ganga Developers India Pvt. Ltd. vs Union of India [2018] 18 SCC 257**, the Court dealt with a situation in which the project proponent had engaged in construction that was contrary to the environmental clearance granted to it. Coming down on the project proponent, a two-judge bench, held as follows:

“64. Having held so we are definitely of the view that the project proponent who has violated law with impunity cannot be allowed to go scot-free. This Court has in a number of cases awarded 5% of the project 13 cost as damages. This is the general law. However, in the present case we feel that

damages should be higher keeping in view the totally intransigent and unapologetic behaviour of the project proponent. He has manoeuvred and manipulated officials and authorities. Instead of 12 buildings, he has constructed 18; from 552 flats the number of flats has gone up to 807 and now two more buildings having 454 flats are proposed. The project proponent contends that he has made smaller flats and, therefore, the number of flats has increased. He could not have done this without getting fresh EC. With the increase in the number of flats the number of persons residing therein is bound to increase. This will impact the amount of water requirement, the amount of parking space, the amount of open area, etc. Therefore, in the present case, we are clearly of the view that the project proponent should be and is directed to pay damages of Rs 100 crores or 10% of the project cost, whichever is more.”

25. The Court in *State of M.P. vs Centre for Environment Protection Research & Development*, [2020] 9 SCC 781 held as follows:

“41. The Tribunal constituted under the NGT Act has jurisdiction under Section 14 of the said Act to decide all civil cases where any substantial question relating to environment including enforcement of any right relating to environment is involved and such question arises out of the implementation of the enactments specified in Schedule I to the said Act, which includes the Air (Prevention and Control of Pollution) Act, 1981 and the Environment (Protection) Act, 1986.

“42. In view of the definition of “substantial question relating to environment” in Section 2(1)(m) of the NGT 14 Act, the learned Tribunal can examine and decide the question of violation

of any specific statutory environmental obligation, which affects or is likely to affect a group of individuals, or the community at large.

“43. For exercise of power under Section 14 of the NGT Act, a substantial question of law should be involved including any legal right to environment and such question should arise out of implementation of the specified enactments.

“44. Violation of any specific statutory environmental obligation gives rise to a substantial question of law and not just statutory obligations under the enactments specified in Schedule I. However, the question must arise out of implementation of one or more of the enactments specified in Schedule I.”

26. It cannot be disputed that no development is possible without some adverse effect on the ecology and environment, and the projects of public utility cannot be abandoned and it is necessary to adjust the interest of the people as well as the necessity to maintain the environment. A balance has to be struck between the two interests. Where the commercial venture or enterprise would bring in results which are far more useful for the people, difficulty of a small number of people has to be bypassed. The comparative hardships have to be balanced and the convenience and benefit to a larger section of the people has to get primacy over comparatively lesser hardship”.

This indicates that while applying the concept of “sustainable development” one has to keep in mind the “principle of proportionality” based on the concept of balance. It is an exercise in which we have to balance the priorities of development on one hand and environmental protection on the other hand.

27. The economic growth in the country has brought along rapid increase in the urbanization & Industrialization. Subsequently, there has been considerable increase in demand of material/ commodities to cater the needs of growing economy which is channelized through different means of transportation, however the railways plays a vital role in the same. Freight services constitute the most important segment of activity of railway business. Indian Railways have carried 970 million tonnes of revenue earning freight traffic during fiscal 2011-12. There is increase of 48 million tonnes i.e. 5.24 % over the freight traffic of 922 million tonnes carried during the corresponding period last year. Indian Railways carries bulk freight viz. ores and minerals, iron and steel, cement, mineral oils, food grains and fertilizers, containerized cargo etc.
28. In Indian Railway freight traffic is operated through Sidings. A railway siding is a place/ area which are used to receive, temporarily store, load / unload material in the rakes. Sidings may be used for marshalling, stabling, storing, loading and unloading vehicles. The materials/commodities are loaded and unloaded here with the linked network of rail track and roads. The loading and unloading activities of pollution intensive commodities creates immense nuisance in and around the site. Sidings have attracted attention in India particularly due to pollution generated during loading and unloading activities and their locations mainly in urban areas. The pollution control measures have not been provided in substantial manner at sidings thereby adversely affecting the environment. Over the years no data are available on management of pollution from sidings although there are environmental impacts on water, air, human health, soil degradation and vegetation etc.
29. Central Pollution Control Board (CPCB) has been frequently receiving Public Complaints from the nearby residents of the Railway Sidings regarding problems of Air Pollution mainly due to the loading/ unloading activities as well as transportation activities from Railway

Sidings. CPCB has initiated a study on Inventorization of all the major sidings in the country and on the basis of the data collected through field surveys as well as Questionnaires the Guidelines on Environmentally Sound Management of Railway Sidings have been developed. CPCB hired the services of Rail India Technical and Economic Service(RITES), Gurgaon for carrying out this study.

30. On the basis of the studies the Central Pollution Control Board has issued certain guidelines which have been quoted hereunder and must be strictly observed in case of railway siding for loading and unloading.

“5.2.1 Air Pollution Control

The sources of pollution are mostly from loading and unloading and haul roads. The dust control plan for various activities at siding is as follows:

*5.2.1.1 **Loading & Unloading:** The intensity of dust pollution largely depends on the loading and unloading process at siding which has significant impact on environment. The adoption of following practice will provide significant control on dust pollution:*

- Mechanized wagon loading system*
- Loading and unloading should be directly from trucks to wagons and wagons to trucks*
- All storages & material handling systems should be under closed shed*

*5.2.1.2 **Haul Roads:** It was observed that during transportation of materials by road which causes spillages of material resulting dust formation. The most of the reviewed literatures and reports reveals that the major source of dust generation is due to wheel contact with road during vehicular movement. The management plan for minimizing haul road dust generation is as follows:*

- An unpaved roads should be paved at the existing sidings,*
- Higher grading of main haul roads and service roads to clear accumulated loose material,*
- Regular sprinkling of water on haul roads for dust suppression,*
- Dust dislodgement from vehicular movement must be minimized by implementing speed limits,*
- The trucks carrying cement should be covered with the Tarpaulin.*
- Truck body washing system before entering and outing from siding area*
- Vehicular movement at the siding area, shall be regulated effectively to avoid traffic congestion and to protect the workers from dust due to exposure in dusty environment,*
- Emissions from the heavy duty vehicles operating in and out of siding shall follow the standard under Motor Vehicles Rules.*
- Afforestation with dust filtering trees around siding area for control of dust.*

Dust emission from the various activities at siding is in the form of Particulate Matter PM10 and PM2.5. The permissible limit for these parameters is given in the National Ambient Air Quality Standards, CPCB. All the air pollution parameters at sidings should comply with this standard.

7.2.10 Environmental Monitoring

Environmental monitoring should be the major component of the environmental policy formulated for sidings.

- Environmental monitoring will be undertaken by the concern siding owner on periodic basis,
- This monitoring will be undertaken in order to ensure compliance with all aspects or requirements of the Environmental Measures.
- Undertake external audits.
- Visual monitoring must be carried out periodically to ensure that the concerned activities create no impacts in and around the siding area.

7.2.11 Implementation of Environmental Management

The protection of environment will be the responsibility of siding owners. Siding owner shall develop an environmental management unit. The task of the unit would be to supervise and co-ordinate implementation of environmental mitigation measures.

8.2.1 Air Pollution Control

Dust control plan for loading and unloading mostly requires at coal, mineral and loose materials handling sidings. The dust control plan for various activities at siding is as follows:

Loading & Unloading: The intensity of dust pollution largely depends on the loading and unloading process at siding which has significant impact on environment. The adoption of following practice shall provide significant control on dust pollution:

- Provision of mechanized loading and unloading.
- An independent water spraying system should be established before loading and unloading.

Storage:

- Provide dust protection network i.e. wind screens all around the siding area for dust protection,
- Open storages may become sources of wind-generated dust hence these must be covered with polyethylene/canvas sheets during windy periods.

Haul Roads: The major source of dust generation is due to wheel contact with road during vehicular movement. The management plan for minimizing haul road dust generation is as follows:

- An unpaved roads should be paved at the existing sidings on priority basis,

- Higher grading of main haul roads and service roads to clear accumulated loose material,
- Regular sprinkling of water on haul roads for dust suppression, • The chemical suppressant can be used at the water scarcity places,
- Truck body washing system before entering and exiting from siding area
- The trucks carrying minerals should be covered with the Tarpaulin.
- The trucks should not be filled to the top i.e. it should not be overloaded,
- Dust dislodgement from vehicular movement must be minimized by implementing speed limits,
- Vehicular movement at the siding area, shall be regulated effectively to avoid traffic congestion and to protect the workers from dust due to exposure in dusty environment,
- Emissions from the heavy duty vehicles operating in and out of siding shall follow the standard under Motor Vehicles Rules.
- Mineral transport through conveyors within siding shall have to be done under enclosed conditions,
- Afforestation with dust filtering trees around railway siding area for control of dust.

Dust emission from the various activities at siding is in the form of Particulate Matter PM10 and PM2.5. The permissible limit for these parameters is given in the National Ambient Air Quality Standards, CPCB. All the air pollution parameters at sidings should comply with this standard.

8.2.2 Noise Pollution Control

Noise dispersion is based upon the distance it travels. The major noise generating machineries/equipments are within definite boundary of railway siding area. Hence, noise has insignificant impact on the surrounding area. The major noise activities at siding are loading and unloading of wagons, loader vehicle and trucks movement.

However, due to some sidings which comes within city limits have some possibility of noise disturbance which can be protected through the following practices:

- Proper and timely maintenance of loading & unloading machineries,
- Provision of Green Belt for noise control,
- The operators and workers working in the high-noise areas shall be provided with ear-muffs/ear-plugs,

- *The operator's cabins (control rooms) shall be properly (acoustically) insulated with special doors and observation windows,*
- *Acoustic laggings and silencers shall be provided in equipment wherever necessary,*
- *The silencers and mufflers of the individual machines shall be regularly checked,*
- *If generators will be used it should ensure that these machine /equipment meet the desired noise/vibration standards by providing noise absorbing material in enclosures,*
- *Provision of wind dust wall also acts as noise barrier to some extent,*
- *Restricting speed and preventing idling of transport vehicles,*
- *Use of high pressure horns operating within the siding and surrounding area shall be avoided*

The permissible limit for noise is given in the National Ambient Noise Quality Standards, CPCB. The Noise quality at sidings should comply with this standard.

8.2.4 Solid Waste & Hazardous Waste management

Solid Waste Management:

- *Solid wastes should be collected, segregated, transported and disposed at an authorized waste disposal facility,*
- *Temporarily storage facility should be designed in such a way that waste stored are not exposed to open atmosphere and are aesthetically acceptable,*
- *Storage bins should be painted green for biodegradable, blue for recyclable and red for non-biodegradable,*
- *Specific precautions must be taken to prevent refuse from being dumped on or in the vicinity of the siding,*
- *Waste bins should be cleaned out on a regular basis to prevent any windblown waste and/or visual disturbance.*
- *Under no circumstances, waste is to be burnt or buried on siding area.*

Hazardous Material Storage & Waste Management:

- *The storage area must be secured with restricted entry and all hazardous substances such as fuel, oils, chemicals, etc., must be stored therein. Drip trays, a thin concrete slab or a facility with PVC lining, must be installed in such storage areas with a view to prevent soil and water pollution,*

- *Soil contaminated by fuel leakage shall be removed and disposed of in an approved manner,*
- *Petrochemicals, oils and identified hazardous substances shall only be stored under controlled conditions,*
- *Material Safety Data Sheets (MSDS) for onsite chemicals, hydrocarbon materials and / or waste and hazardous substances must be readily available. MSDS should include information pertaining to environmental impacts and measures to minimize and mitigate against any potential environmental impacts which may result from a spill,*
- *The management should prepare a method statement and plans for the storage of hazardous substances and emergency procedure,*
- *Storage of hazardous substances must not be within 100m of any drainage lines;*
- *Provide proper warning signage to make people aware of the activities within the designated areas,*
- *Spills should be cleaned up immediately to the satisfaction by removing the spillage together with the polluted soil and by disposing of it at a specified site,*
- *Training to staff on the safe disposal of hazardous waste and the use of spill kits.*
- *Hazardous waste is to be disposed at a Permitted Hazardous Waste Landfill Site.*

8.2.5 Soil Erosion

Soil erosion at siding site must be prevented by adopting proper measures at all times. Visual monitoring should be carried out through manual inspection and photographic records. Visual monitoring should be carried out by staff with good observational skills and the ability to collect the reliable data for record and report. It should identify the areas where immediate action is required. The soil erosion should be controlled by the following actions:

- *Suitable erosion control measures must be implemented in areas sensitive to erosion such as open areas and edges of slopes,*
- *The exposed soil areas should be vegetated to ensure that soil is protected from the erosion,*
- *The removal of vegetation, only if it is necessary,*
- *Preventing the unnecessary removal of vegetation especially on steep slopes,*
- *The suitable use of sand bags or jute sheets.*

8.2.6 Green Belt Development

The greenbelt development plan aims at overall improvement in the environmental conditions of the region. The green belt helps to capture the fugitive emissions and attenuate the noise generated at site along with improving the aesthetics of the area. Green vegetation cover is beneficial in many ways, such as retention of soil moisture, prevention of soil erosion, recharge of ground water and moderation of microclimate. Another important role of green belt relates to containment of air pollution.

Keeping in view the climatic conditions and quality of soil, the types of species shall be selected for plantation around the siding and along the roads. In addition to above some flowering plants, shrubs, herbs, and climber species shall also be planted for beautification of the siding area. Selected species should have faster growth, and helpful in soil and water conservation. At existing railway sidings, a green belt of at least 15 meter width needs to be developed with immediate effect. Also, trees planted all along the connecting and approach roads restrict dust pollution due to movement of vehicles.

Greenbelt Development Plan: In order to capture the pollutants, a greenbelt along the periphery of siding area should be developed. The general plan for development of greenbelt is summarized below:

- *Native species having characteristics of attenuation of pollution & Fast growing trees shall be planted,*
- *Trees growing up to height of 10 m or more should be planted around the siding area,*
- *Row planting pattern of trees should be undertaken around the installation to prevent horizontal dispersion of pollutants,*
- *Trees should also be planted along roadsides, to arrest auto exhaust and noise pollution*
- *Turfing of grass (lawn) for effective trapping and absorption of air pollutants,*
- *The species identified for greenbelt development shall be planted using pitting technique.*

TABLE 8.2

PLANTS SUGGESTED FOR GREEN BELT DEVELOPMENT

| <i>Sr. No</i> | <i>Botanical name</i> | <i>Common name</i> |
|---------------|---------------------------|--------------------|
| 1 | <i>Azadirachta indica</i> | <i>Neem</i> |
| 2 | <i>Syzygium cumini</i> | <i>Jamun</i> |
| 3 | <i>Acacie nilotica</i> | <i>Babul</i> |
| 4 | <i>Dalbergia sisso</i> | <i>Shisham</i> |

| | | |
|---|----------------------------|--------|
| 5 | <i>Emblica officinalis</i> | Amla |
| 6 | <i>Pongamia pinnata</i> | Karanj |
| 7 | <i>Tectona grandis</i> | Sagwan |
| 8 | <i>Acacia arbacia</i> | Baboo |

TABLE 8.3

PLANTS SUGGESTED FOR GREEN BELT DEVELOPMENT

| Sr. No | Botanical name | Common name |
|--------|----------------------------|-------------|
| 1 | <i>Azadirachta indica</i> | Neem |
| 2 | <i>Aegle marmelos</i> | Bel |
| 3 | <i>Saraca indica</i> | Sita-Ashoka |
| 4 | <i>Dalbergia latifolia</i> | Shisham |
| 5 | <i>Albizzia lebeck</i> | Siris |
| 6 | <i>Tectona grandis</i> | Teak |
| 7 | <i>Polyathiaa</i> | Ashoka |
| 8 | <i>Ficus religiose</i> | Peepal |
| 9 | <i>Magnifera indica</i> | Mango |

8.2.9 Public Complaints

Despite widespread pollution intensive activities and receipt of numerous complaints, siding owners need to frame comprehensive guidelines relating to handling and transportation of pollution intensive commodities. To address the community complaints on pollution due to freight traffic and siding operation are the responsibility of siding owners. Appropriate response to the community complaints is likely to reduce the number of both ongoing and new pollution related community issues. Siding owners should prepare specific guidelines for handling of community complaints and this should include:

- *Clear and regular communication with community groups, councils, forums and individuals to discuss the issues,*
- *Recording and attending the complaints, coordinating the response and providing a solution,*
- *Information on pollution mitigation initiatives being undertaken,*
- *Improved relations with local communities, councils and forums that raise the social responsibility profile and provide opportunity to better focus solutions to root cause of community perception and concerns*

8.2.10 Environmental Monitoring

Environmental monitoring should be the major component of the environmental policy formulated for sidings.

- *Environmental monitoring will be undertaken by the concern siding owner on periodic basis,*

- *This monitoring will be undertaken in order to ensure compliance with all aspects or requirements of the Environmental Measures.*
- *Undertake external audits.*
- *Visual monitoring must be carried out periodically to ensure that the concerned activities create no impacts in and around the siding area.*

8.2.11 Implementation of Environmental Management

The protection of environment will be the responsibility of siding owners. Siding owner shall develop an environmental management unit. The task of the unit would be to supervise and co-ordinate implementation of environmental mitigation measures.

8.2.12 Education and Awareness Programs

Siding Owners must initiate the internal as well as external awareness programs involving all the stakeholders in controlling and enhancing the environment. This will include meetings, environmental forums on and off site to analyse dust generation events. Internal/External education and awareness for the management of pollution from siding activities shall help to improve operational proficiency in the handling of materials. Improved loading competency leads to reduce pollution.

Develop environmental awareness among operational and maintenance personnel associated with siding activities. Development of operator procedural training to implement revised and new unloading practices should be ensured to maintain the consistent work practices among all work personnel's involved in loading & unloading activities. An Environmental Awareness programme shall be implemented for all siding personnel to acquaint about the key environmental issues and potential impacts thereof. It will be ensured that employee information posters, outlining the environmental "do's" and "don'ts" (as per the environmental awareness training course) are erected at prominent locations within the siding area.

Environmental Awareness Plan should be such that, the goals setup by the management for pollution abatement be met. Management is responsible to formulate the procedure to carry out the pollution abatement program. Responsibility of management should be in strict compliance with the comprehensive training and programs. General environmental training is to ensure that employees and contractors 9 at each relevant function and level

should receive environmental training and be aware of the environmental management initiatives undertaken during operations. Progress on compliance with the training program must be verified during the Management meetings. The various parameters for the training programs should include:

- *Dust management*
- *Water management*
- *Waste management*
- *Spill management*
- *Complaint Management*
- *Incident reporting*

31. In light of the contention raised by the learned counsel of the parties, we are of the view that commercial activities which are within the concept of sustainable development cannot be restricted and a balance should be made between the sustainable development and maintenance of environmental laws. The public health and maintenance of air quality is the constitutional mandate while sustainable development is also required for economic development of the nation. Accordingly, we are of the view that State Pollution Control Board should periodically monitor the air quality index and during the period when air quality is not within the control only in those period the necessary directions be issued restricting the loading and unloading the racks of clinkers. During the period when the air quality is within the parameter laid down by the State Pollution Control Board, the functioning of the loading and unloading should not be restricted. A scientific study is required to be taken about the contribution of ratio of load of pollution caused by loading and unloading, the clinker at the place. If the pollution load is for other reasons, the Railway Department should not be solely accounted for that reason. Decisions are required to be taken after considering all relevant factors causing increase of pollution. In view of the above facts, I.A. No. 46 of 2021 moved by Respondent No.7 is allowed to the extent that during the period when the Ambient Air Quality is as per prescribed standard and increase is not solely for the

reasons of siding work, the loading and unloading of the clinkers should not be restricted. The State Pollution Control Board should periodically monitor the Ambient Air Quality within the area and necessary remedial action should be taken immediately and the regulation issued by the name “inventorisation of railway siding and guidelines for their environment management” must be strictly observed with.

With the above directions, the Original Application No. 20 of 2021 is finally **disposed of**.

Sheo Kumar Singh, JM

Arun Kumar Verma, EM

September 21st, 2021
O.A. No. 20/2021(CZ)
PU