

**IN THE HON'BLE NATIONAL GREEN TRIBUNAL,  
WESTERN ZONE BENCH, AT PUNE**

**Appeal No 18 / 2022 [WZ]**

Pravir Prabhakar Fadte & Ors **.. APPELLANTS**

v/s

MoEF & Ors **..RESPONDENTS**

**Written Submissions of the Appellants**

1. The Appeal No. 18/ 2022 is filed to ensure that the villagers of Amona and Navelim, within whose jurisdiction the pig iron factory of M/s Vedanta Ltd., (Resp No 3) is located, do not have to suffer additional air pollution when compared to what they already suffer from the current operations of the respondent company. The two villages, existing side by side, were having pristine, clean air before Resp No. 3 set up its plant in 1992.
  
2. The Air (Prevention and Control of Pollution) Act, 1981, like the other Acts for protection of our environment (Water Act and EPA) specifically requires “the prevention, control and abatement of air pollution.” Not only should industries not be allowed to pollute the atmosphere beyond the standards fixed by the authorities, but further, and more importantly, the Act was passed to ensure that the authorities will strive to ensure that the wholesomeness of the air, water and the environment existing in the area before the contaminants appeared, is maintained. In the case of Amona and Navelim, the air was pure and uncontaminated before the factory entered the village, hence the air should return to that quality despite the existence of the factory.

3. In strict legal terms, if an industry is not able to contain the pollution to the limits permitted, despite its claim of complying with conditions, it only means that either the industry is not implementing the conditions properly, or that the recommended measures are not the right ones at all. Either way, it is not for the citizens to suffer because of either of these infirmities. Instead, the factory operations must shift elsewhere or close down altogether. We take this strict view of the law, and respectfully submit that we are entitled to do so, in the interests of our health, which is a paramount consideration as per the law of the land and various pronouncements of the Hon'ble Supreme Court relating to situations when there is conflict between environment protection and economic development.
4. From 1992 to 2022 (two decades) Amona and Navelim villagers have been compelled to repeatedly trudge to the courts (High Court, NGT and Supreme Court) with one objective – to restore the air quality in their village and protect the environment from further deterioration. Various authorities, commencing with NEERI in 2008 (**CC - p. 4, @ 80**) have issued directions and made suggestions regarding measures to be taken to control air pollution – in particular shiny black graphite dust particles emanating from the operations of the Resp. No. 3's factory. But to no avail. The factory continues to violate the Annual Ambient Air Quality Standards year after year and graphite dust pollution continues to settle on the surfaces of the peoples' homes, their vehicles, gardens, trees, roads, fields and even the air monitoring equipment (**CC - p. 848. Color photographs @ pp. 46 - 50**). The graphite dust particles seen in the village are the visible signs of the pollution. But far more dangerous is the pollution from the graphite which settles in the lungs of the residents. The people must breathe this polluted air day in and day out, as they have nowhere else to go.
5. The Appellant therefore challenges the Environment Clearance dated 24th January 2022 (**CC - p. 779**) issued to Resp. No. 3 for

*enhancement* of the production capacity of three of its blast furnaces on the primary ground that when the present state of the factory operations (i.e., at the time when grant of environment clearance was under consideration) demonstrably displayed air pollution in the village, the authorities empowered and required to control air pollution i.e., the EAC and the MoEF could not have granted an EC for expansion of the operations which would cause more suffering to the already suffering residents of the village. Likewise, the SPCB could not have granted a consent to establish for expansion of the factory units.

6. The fact that the Environment Clearance requires innumerable conditions to be complied with to reduce and control pollution and further, that some of these conditions have specific dates fixed *in the future* for implementation, is no answer to the citizens' problems (CC - p. 779, @ 784 - *Condition A. (iv)*). The conditions should have been enforced first and only after examining whether the conditions have been effective and pollution has stopped altogether or was falling within the norms, only then could expansion of the factory have been considered.
7. It is therefore immaterial that the respondent company states that it has continuously complied with all the conditions imposed by the previous ECs and further, that it is willing to comply with even more directions which may be issued. For citizens, it is not the number of conditions imposed but whether these conditions have resulted in controlling the pollution and restoring the wholesomeness of the air in Amona and Navelim village. Of course, whether or not the directions have been complied with in letter and in spirit, itself remains a question mark.
8. At the hearing of this matter before the Hon'ble Tribunal, the counsel for the Resp. No. 3 M/s Vedanta stated that it is taking the assistance of the IIT Mumbai to find further solutions to the dust pollution and it will implement them. If so, then, until the measures are demonstrably shown to be effective to contain the

existing pollution, no increase in the factory's operations, as per the EC under challenge, ought to be permitted at present by this Hon'ble Tribunal.

**Preliminary Objections:**

9. The Respondent company raised three preliminary objections:
  - (i) That the NGT should not take up this issue because the lead appellant is also petitioner before the High Court in WP No.881/2017.
  - (ii) That Writ Petition No.881/2017 is pending in the High Court and it also deals with the issue of graphite pollution.
  - (iii) That the EAC has considered all relevant issues and unless there are procedural defects in the grant of the EC, the NGT has no jurisdiction to hear the matter on merits, or review the decision, since the EAC is an expert body and the NGT may not substitute its opinion for that of the EAC.

**Appellants' Response to objections (i) and (ii)**

10. The issue before the High Court pertains to non-implementation of NEERI recommendations made in 2008 regarding graphite pollution within the framework of the High Court's judgment dated 13.08.2013 in WP No.243/2008. In the case of the present challenge to the EC, the appellants challenge the grant of approval for expansion of the plant that has been permitted despite the fact that graphite pollution is continuing. This is not an application filed u/s 14 of the Act on a substantial issue concerning environment, viz., graphite pollution, but an appeal u/Section 16 (h) of the NGT Act. The appellants' statutory right to appeal an EC is separate and distinct cause of action, which cannot be denied to the appellants who are the affected parties. This is reiterated in the EC order itself.

Appellants' Response to objections (iii)

11. We submit that the third argument is an absurd argument, since all ECs are based on reports and recommendations of the EAC/SEIAA/SEAC. The order of the MOEF&CC is based on the recommendations made by the EAC. The NGT is an expert body set up to entertain appeals to the grant of an EC. The right to challenge an EC is not restricted to procedural defects in the grant of EC only. The EC can certainly be challenged on merits, if the appellants can make out a case that the EAC has overlooked relevant aspects or has incorrectly analyzed them. The scope and powers of the NGT are laid down in terms of the NGT Act. S. 16 is very wide in scope and permits any person aggrieved by the EC to prefer an appeal. When there are no inherent limitations to the grounds on which an EC may be challenged, such limitations may not be read into the Act and thereby shackle the powers of this Tribunal.
12. The legal position that the EC can be challenged on merits, including calling into question decisions of the EAC, is reflected in the following judgements:
- A. (2019) 15 SCC 401 - Hanumant Aroskar vs. Union of India - NGT is an expert adjudicatory body re matters pertaining to environment. The true nature of the NGT's powers under Section 16(h) is to conduct a **merits review** of EC under challenge – the Hon'ble SC disapproved of NGT dealing inadequately with submissions raised before it [**Paras 130 - 136, 160 - p. 1, @ 60, 67 - of Compilation of Judgements**]
- B. Appeal No. 17/2016 [WZ] - Gujarat Kheduj Samaj vs. Secy., Ministry of Environment Forests, and Climate Change – EC set aside due to non consideration of objections raised in Public Hearing by EAC, which amounted to non-application of mind [**pp. 70-77 - of Compilation of Judgements**]

C. *Appeal No. 39/2012 - Save Mon Federation vs. Union of India*  
 - EC suspended, EAC asked to undertake fresh appraisal after certain studies carried out [**pp. 78 - 103 of Compilation of Judgements**]

D. *Appeal 29/2022 [EZ] - Conservation Action Trust v. Ministry of Environment Forests, and Climate Change* - NGT stays ECs granted for development works in Great Nicobar island, on account of certain factors overlooked/not considered by the EAC [ *Para 33, p. 104 @ 166- of Compilation of Judgements*]

### **Substance of the Appeal**

13. Appellants Challenge to the EC dated 24-01-2022 is raised on the following two grounds:

- Consistent violation by the Resp No 3 of the Annual Ambient Air Quality Standards over the last several years, resulting in unhealthy air around the factory;
- Proven fact of existence of graphite particles emanating from the Resp No 3's factory causing pollution in the village.

### **Violation of AAQS:**

14. The record shows that the EAC did not peruse data of average annual PM10 and PM 2.5 ambient air quality standards (**NAAQS- CC, p.1**) while considering grant of EC. Instead it only considered compliance with the norms for daily emission as per AAQS. As a result of this limited examination of the air pollution data, the EAC concluded that the existing plant fulfills all norms for air emissions and ambient air quality under NAAQS (*See 50<sup>th</sup> EAC minutes - observations @ 50.1.26 - CC*)

**p.718 @ 758**). This is a factually wrong statement, which has fatal consequences impacting the EAC's assessment of the factory and its decision to recommend EC.

15. The EAC could not have come to such a conclusion (that the plant was compliant with norms) since even the limited data (one season data) before it (from 1-3-2019 to 31-5-2019) 26 days (**CC, @ pp. 309-311**) indicated that the plant was violating the norms. If the EAC had assessed this data correctly, it ought to have insisted that average annual AAQ data also be submitted for consideration. It is shocking that the EAC did not care to apply its mind to the data that was before it and draw proper inferences from it, which would not have permitted the EAC to make the factually wrong statement that the factory was in full compliance with the NAAQS.
16. As the Resp. No.3 attempted to dispute reliance on 26 days' data on the ground that an extrapolation of the data is not permissible, the Appellant sought information under RTI from the GSPCB, whose report shows that the average annual AAQMS was being consistently violated for fully four years 2018-2021 at DI Pipe Plant site and the Hot Metal Plant (both within the plant boundary) and also at the third monitoring station which is in Amona village (data is available for only one year: 2021).(**CC - pp. 831 - 836**)
17. The Appellants submit that since the Board had this data in its possession, it ought to have communicated this information to the EAC especially as the data showed violation of the norms for four straight years (2018-2021). Further, this data was also available with the Resp. No.3 since it is also connected with the same SPCB and CPCB servers.
18. The Resp.No.3, therefore, despite having the average annual AAQMS data, did not disclose it to the EAC as part of its EIA, or to its EIA consultant. This amounts to suppression of

information which is a ground for revocation of EC, especially when the information discloses pollution and lack of compliance with NAAQS. However the Appellant No 5, the Goa Foundation explicitly highlighted this issue vide a written communication submitted during the public hearing (CC - pp. 437 - 448)

19. The Respondent No.3 has not disproved nor denied this data provided by the GSPCB. Instead, it states that there is no mandate on the part of the EAC to consider annual AAQ data when recommending EC and that the TOR required them to generate 12-week data. The issue really is whether the village is going to be further polluted by expansion and whether such crucial data ought to have been hidden from the EAC. **If the EAC had the annual data, it could not have made a recommendation for allowing the expansion.** AAQM data is precisely required to enable decision makers to take correct steps in ensuring that if an area's air pollution norms are exceeded, further activity of the unit or setting up of new units will not be recommended.
  
20. The EIA also reports on how the proposed expansion will impact the NAAQS in the future i.e., once the factory increases its operations. At **Table 4.9, p. 273 of the CC**, the EIA produces the relevant proposed increase to be 85 ug/m<sup>3</sup> for PM 10 and 41.70 ug/m<sup>3</sup> for PM 2.5. It may be observed that while these figures are within the daily norms they are well above the annual norms. It is obvious that not only is the EIA report oblivious to the annual standards but the EAC expert body has also totally ignored the issue of annual Ambient Quality norms being met. The importance of adhering to the annual standards cannot be over emphasized. While violation of norms on individual days is a cause for concern, violation of annual standards implies gross violation putting the health of the people at risk, as it means that the population has been subjected to severe air pollution throughout the year.

21. It is for this reason that the State Pollution Control Board issued directions to the company as late as 14.01.2022, i.e., one week before the EC was granted, directing it to upgrade the air pollution control devices, upgrade the material of construction of filter bags, and correctly evaluate the situation at the workplaces to prevent the fugitive emissions. (CC - p. 767)
  
22. Both the SPCB and the MoEF had given negative reports on the expansion of the plant when the matter was first considered by the EAC in August 2021 and therefore grant of EC was in fact rejected. However, the EC granted in January 2021 only gives further dates for compliance with conditions, including setting up windshields which is a direction given to the factory **since 2008**, with little or no effect in controlling the dust pollution.
  
23. The Environment Audit conducted by the Board, report of which was available in August 2021 – Summary and Conclusions (CC - p. 576) – categorically states that the CAAQMS and the CEMS were showing erratic results due to a variety of reasons which include malfunctioning, and the performance evaluation of the Air Pollution Control Devices could not be accepted as scientific assessment of the air pollution control. Significant factors such as wind direction, wind speed, humidity, etc., remained unchanged and hence the reports needed to be re-checked. All this shows that the data produced by the company is not entirely reliable. The proof of whether or not air pollution is controlled lies in whether one can actually see the clean air once again.
  
24. In paragraph 22 of the Sur-Rejoinder [**p. 1892 of paperbook**], the Resp. No. 3 company informs that data available for the period of 2 August 2021 until 31 July 2022 from an additional Continuous Ambient Air Quality Monitoring Station installed shows that all values including PM<sub>10</sub> and PM<sub>2.5</sub> are within

prescribed statutory limits. Vedanta provides the air quality data @ CC pp. 859-866.

25. It may first be noted that this data was not before the EAC when it considered the grant of EC. It is therefore irrelevant to these proceedings. NGT cannot be the authority to evaluate this data. If this data is to be considered as relevant to the grant of EC it should be placed before the EAC along with the data of the four previous years for the EAC to take a fresh decision on the grant of EC. In the meanwhile the EC should be suspended until the EAC has made a fresh assessment.

26. Without prejudice to the above, appellant submits that examination of this data shows many failings:

- PM<sub>10</sub> and PM<sub>2.5</sub> are both well above and therefore violate statutory limits.
- The NAAQS requires that the 24-hour average of PM<sub>10</sub> concentrations may only exceed 100 µg/m<sup>3</sup> on 2% of days (a maximum of 7 times a year), and never on successive days.<sup>1</sup> Yet the daily average PM<sub>10</sub> levels exceed this limit on 33 days (over 9% of all days), and these exceedances are very often consecutive.
- For PM<sub>2.5</sub>, the daily average PM<sub>2.5</sub> levels exceed the statutory limit of 60 µg/m<sup>3</sup> on 16 days (over 4% of days), and these are often consecutive as well.
- The PM 2.5 levels are shown to be above the PM10 levels. Appellant submits that it is physically impossible for PM<sub>2.5</sub> levels to exceed PM<sub>10</sub> levels, since the PM<sub>10</sub> concentrations include the PM<sub>2.5</sub> fractions. The following instances are provided:

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		PM 10	PM 2.5
8	2021-08-09	9.9	17.9
9	2021-08-10	10.4	21
10	2021-08-11	8.5	20
11	2021-08-12	8.6	20.9
12	2021-08-13	7.8	21.8
13	2021-08-14	11.2	26.9
14	2021-08-15	9.9	32.5

- Many recorded levels of PM<sub>10</sub> and PM<sub>2.5</sub> are unrealistically low. For long stretches of days, PM<sub>10</sub> and PM<sub>2.5</sub> are recorded as being below 10 µg/m<sup>3</sup>, as illustrated below:

		PM 10	PM 2.5
312	2022-06-09	7.4	2
313	2022-06-10	9.2	2.1
314	2022-06-11	7	2.3
315	2022-06-12	7.6	2.1
316	2022-06-13	8.4	2

323	2022-06-20	9.9	3.1
324	2022-06-21	9.6	3.2
325	2022-06-22	7.9	2.8
326	2022-06-23	9.1	3
327	2022-06-24	8.9	2
328	2022-06-25	9	2.4

- Daily average levels of PM<sub>10</sub> below 10 µg/m<sup>3</sup>, and daily average levels of PM<sub>2.5</sub> below 2.5 µg/m<sup>3</sup>, are virtually impossible in the real world, let alone near a large industrial facility. It would be unbelievable, and certainly suspect, that for days on end, average levels of PM<sub>10</sub> and PM<sub>2.5</sub> recorded near an industrial facility in Goa were below even the lowest levels of PM<sub>10</sub> and PM<sub>2.5</sub> recorded for wildlife sanctuaries and national parks or Mount Everest. These readings are more likely due to methodological error or indicate manipulation of raw data than a reflection of actual ambient air quality. The Environment Audit reports new CAAQMS as well as CEMS showing erratic results.

27. Appellants have also raised the issue of the EIA itself lacking any information about the possible health impacts of the increase in PM10 and PM2.5 levels on the local communities surrounding the plant. When an EIA omits such information, it is the duty of the EAC to demand such inputs. However, in this case, this concern too has been forgotten. The Resp. No.3 has denied the negative health impacts of graphite pollution. However, in this matter, we defer to the order of the NGT which rejects this claim entirely. (Dt. 28.01.2019 - CC - pp. 853 - 858)

### **Graphite pollution**

28. The Appellants submit that the EAC also failed to consider the pervasive and deep rooted issue of the graphite pollution caused by the plant of the Resp. No. 3 in the village of Amona, which has not subsided but instead has become worse over the years.

29. It is submitted that the evidence and history of the graphite pollution by the plant is writ large from the following documents:

a) A recent report dated 15th June 2022 of the Zonal Agricultural Officer who has conducted a survey of the fields of 59 farmers and awarded compensation due to the deposition of graphite particles on the leaves and crops resulting in reduced production is on record. The fields are at a considerable distance (2 kms) away from the factory. The ZAO is a government authority whose report must be accepted. He has no reason to deliberately give an adverse report against the company. The appellants are not canvassing the compensation issue - only that the report shows that there is graphite pollution in the year 2022, after the EC has been granted. (CC, - p. 803)

b) GSPCB's Inspection Report (CC @ p. 822) pursuant to GSPCB directions dated 14.01.2022 (CC @ p. 767)

- c) Photographs Feb 2022 (CC, @ p. 848 - *Colour photos @ p. 46 of appeal*)
  - d) GSPCB Inspection Report dated February-March 2020 (CC @ 352, 353, 356, 358 [third para])
  - e) GSPCB Inspection Report dt. May 2020 (CC @ p. 361)
  - f) GSPCB Show Cause Notice dt. 9/7/2020 (CC @ p. 365)
  - g) Public Hearing comments on 14 March 2021 (CC @ pp. 385 - 436). More than 50% of the concerns raised in the Public Hearing related to the issue of granting an expansion when the existing units were polluting the environment to the discomfort of the village communities. The Resp.No.3 was bound to examine these issues. The EAC was bound to examine whether these concerns were addressed. (*See Hanuman Laxman Aroskar v. Union of India, 2019 (15) SCC 401 - Paras 117 - 129 - p. 1 @ pp. 53 - 57 - of Compilation of Judgements*].
  - h) GSPCB's Comments dated 2/7/2021 on Vedanta's compliance with earlier EC (CC @ p. 464) reflected in EAC Minutes dated 2021 (CC @ p. 488) and MoEF's Show Cause Notice dated August 2021 (CC @ p. 554)
30. The above record demonstrates that graphite pollution has been troubling the villagers despite all measures recommended to control the pollution, hence appellants are before this Tribunal for *prevention* (under Precautionary Principle) of possibility of enhanced load of graphite pollution which will undoubtedly occur, if the existing graphite generating units are allowed to expand operations.

**Non carbon alternatives for coal production**

31. Finally, the Appellant also raised the issue that the EAC ought not to have recommended, in the year 2022, a plant which proposes to burn coal derived coke for its production. The means of moving into a de-carbonised route for the sector are already available, using green hydrogen to replace coal and coke in the reduction of iron. MoEF therefore ought not to have approved expansion of the plant in 2022, when the EIA had not considered this option at all. Hence the expanded plant would generate additional greenhouse gases, despite India's commitment to reduction of greenhouse gases and zero net emission by 2030.

15th April 2023

Mapusa, Goa



Counsel for the Appellants

Adv. Norma Alvares