

POLLUTION CONTROL APPELLATE AUTHORITY (W. B.)

“Paribesh Bhawan”, 10A, LA Block, Sector-III, Salt Lake City,
Kolkata – 700 098

Re: Appeal No. A-45/2001
Alloy Steel Rolling Mills
...Appellant
Vs.
W. B. Pollution Control Board.
... Respondent.

ORDER

23.03.2004

This appeal is directed against order dated 31.08.2001 passed by the West Bengal Pollution Control Board directing the Appellant Unit located at Howrah to submit a time bound action plan by a specified date to change over from coal-fired system of operation of rolling mill to a cleaner fuel (oil or gas) system of operation within a period of six months with the stipulation that in case of non-compliance the Board will issue closure order as also order for disconnection of electricity. The gist of the contention raised by the Appellant Unit M/s. Alloy Steel Rolling Mill in challenging the impugned order is that the order is wholly arbitrary and is not based on any good or sustainable reason nor is it backed by any recorded reason although recording of reason is a mandatory requirement of law. On the other hand the contention of the Respondent State Pollution Control Board in defending the impugned order, in substance, is that the order has been passed patently and definitely for good reasons with a view to protecting the environment from undesirable air pollution and this order is a part of the common policy formulated in this regard. The point for decision in this appeal is whether any interference with the impugned order is warranted.

At the threshold the learned Advocate for the Appellant Unit wants us to examine the validity of the impugned order on the anvil of the

provisions of Rule 3(2) of the Environment (Protection) Rules, 1986 framed under the Environment (Protection) Act, 1986. Rule 3(1) prescribes in schedules the standard for emission or discharge of environmental pollutants from the industries, operations or process. Rule 3(2) however empowers the Pollution Control Board to specify more stringent standards in respect of any specific industry, operation or process depending upon the quality of the recipient system and after recording reasons therefor in writing. It is submitted by the learned Advocate for the Appellant Unit that while the impugned order makes more stringent provision by way of requiring the rolling mill to change over from the coal-firing system of operation to cleaner fuel (oil or gas) firing system, it does not record reasons for doing so which is a fatal non-compliance of the provisions of Rule 3(2) and which in view of judicial pronouncements relied upon by him, renders the impugned order ipso facto bad in law. It is further contended by him in this connection that if the order itself does not contain any reason for passing the same, it will not be open to the authority concerned to supplement the order by subsequently furnishing reasons in support of the same. While the proposition of law is indeed not in dispute it has however to be stated that it will not be correct to say that the impugned order does not record the reason for passing the same. As we find, the impugned order itself says that the State Pollution Control Board is enforcing the relevant statutory provisions with a view to controlling air pollution in an effective manner and that on monitoring the air quality in Kolkata and its Metropolitan Area for a considerable period of time it has now been decided for the improvement of the quality of air that no coal-fired rolling mill will operate within the metropolis of Kolkata and such units should operate only by using cleaner fuel (oil or gas) and such change over should be effected within a period of six months. The order also records that the Board has fixed up emission standard for rolling mills

for particulate matter at 150 mg/Nm³ irrespective of capacity. We thus find that the reason for passing the impugned order has been stated in the order itself with reasonable clarity. This step has been taken with a view to controlling air pollution 'in an effective manner'. This step has been taken 'for the improvement of the quality of air' after 'monitoring the air quality of the concerned area for a considerable period of time'. So the reason for taking the impugned decision has been spelt out in an intelligible manner in the impugned order itself. The question whether the stated reason stands the test of reasonableness or correctness is entirely a different matter and that will be examined by us hereafter. Again, it has to be stated here that the reason to be stated in the order need not be an elaborate research thesis or a detailed process of deducing a mathematical conclusion. It will suffice if the broad features that necessitated the decision in question is reflected in the order in an intelligible manner as the reason for passing the order. Ask the question, what was the reason for passing the impugned order or for that matter, for taking the decision reflected in the order. The answer, in our opinion, is eloquent in the order itself. The order itself purputingly projects the reason that the decision reflected therein was taken with a view to controlling air pollution in an effective manner and the decision was taken for the improvement of the air quality of the concerned area after monitoring the air quality for a considerable period of time. In our view, this meets the requirement of law in this regard.

The Appellant has brought on record in this appeal a copy of the State Pollution Control Board's order dated 11.05.2001 by which the Board fixed the emission standard for particulate matters for boilers, ceramic kilns, iron foundries and rolling mills operating within Kolkata Metropolitan Area at 150 mg/Nm³ as the emission limit. For rolling mills (as also for certain other operations) the Board also prescribed

use of only cleaner fuel (oil or gas) for the purpose. In the introductory part of this order it has been recorded that the concentration of particulate matter, especially the respirable particulate matter is very high in the ambient air of Kolkata and its metropolitan area, that exposure to high level of particulate matter is associated with respiratory morbidity and mortality of human beings, that various coal/coke fired installations like boilers, ceramic kilns, iron foundries and rolling mills contribute significantly towards high particulate level in the air of the concerned area, that the State Pollution Control Board accepted the recommendations of the Committee constituted for recommending emission standard for various coal fired installations and specific industries within the Kolkata metropolitan area and therefore the Board specified the recorded emission standard under Rule 3(2) of the Environment (Protection) Rule, 1986 for specific operations and industries mentioned therein with a view to improving the air quality of Kolkata Metropolitan area for compliance of National Ambient Air Quality Standard.

As has been mentioned above, the State Pollution Control Board appointed an expert Committee comprising top-level experts under the Chairmanship of Professor S. K. Sanyal, Dean, Faculty of Engineering & Technology, Jadavpur University for considering the question of specifying more stringent emission standard for coal fired installations and some specific industries like cast iron foundries, ceramic industries, rolling mills which operate in large numbers in Kolkata Metropolitan Area and are responsible for high particulate emission. This officially appointed expert Committee considered the matter in-depth and submitted its elaborate report in April 2001 running into 20 pages, several photographs and a number of annexures marked Annexures A to I. In the report it is mentioned that the

recommendation of the Committee has been made considering the following aspects:

1. Ambient air quality of Kolkata, Howrah and other Urban & Industrial centres of Kolkata Metropolitan Area (KMA).
2. Geographical distribution of different coal fired installations, ceramic industries, cast iron foundries, rolling mills in Kolkata, Howrah and other parts of Kolkata Metropolitan Area.
3. Environmental status of above sector of industrial operations and its relation to air quality of the areas.
4. Existing emission norms for the above categories of industries.
5. Available emission control technology including use of cleaner fuel for controlling and minimizing emissions from the industrial operations stated above.

In the first meeting of the Committee held on 27.03.2001 the Board officials made a presentation before the Committee members on the air quality of Kolkata, Howrah and other areas of Kolkata Metropolitan Area and also the health effects of air pollutants, specially particulate matter on Kolkata population. In the second meeting held on 31.03.2001 the members deliberated threadbare on the relevant aspects of the matter mentioned in the report and it was resolved that the prevailing particulate emission standard from the sources should be made stringent for improvement of air quality in the concerned areas. The Committee members visited some of the units belonging to

the concerned categories on 17.04.2001 and 19.04.2001 for ground assessment of environmental situations in these industries. Based on the deliberations held in the second meeting and subsequent visits to representative industries, the Committee finished its recommendations in the meeting held on 23.04.2001. The Board accepted the recommendations of the Committee and the impugned order of Board is the outcome of such acceptance.

In their report the said expert Committee inter alia records that Respirable Particulate Matter (RPM) has been found to be responsible for increasing morbidity and mortality among exposed population with previous respiratory and cardiac disorder and that the annual mean concentration of these tiny particles in Kolkata is about two times the national standard for such parameter and the situation in winter is much more alarming when the concentration of RPM has been found to vary between two to three times that of the annual mean. The Committee takes notice of the fact that according to Environmental Protection Agency of United States the winter levels of RMP as found in Kolkata represents an 'unhealthy' air quality level which may trigger aggravation of respiratory and heart symptoms in susceptible group of population. The Committee also records that the level of other pollutants monitored, viz., SO², NO², Pb remains much below the National Ambient Air Quality Standard for such parameters throughout the year. The report further records that in Howrah also the concentration of RPM reaches very high level (average 206 Mg/m³) during the winter months and that the concentration of NO² has also been found to be reasonably high which may be due to the presence of large number of iron foundries and hot rolling mills in the area using high temperature furnaces, but the SO² level however remains much below the national standard even during the winter months. The Committee also notes that although by reason of identification of all

major polluting industries and of ensuring installation of emission control system for arresting particles and control the concentrated of RPM in Kolkata decreased slowly over the Board exercising strict surveillance and the past four years, yet further improvement of air quality in Kolkata as also Howrah and other parts of the metropolitan area with special reference to lowering of particulate matter is of paramount importance considering the health risk of the population of heavily populated urban agglomeration. The Committee specifically records in its report that it visited both coal and oil fired rolling mills and noted that particulate emission from oil fired rolling mills is negligible. As regards Howrah the Committee specifically records that excepting a few rolling mills most are now operating either on oil or industrial gas which has not only improved the air quality of Howrah during '90s than before but also cleared the Howrah sky to a large extent after '80s. After elaborate discussion the Committee records its observations in respect of various installations recommending for most of them use of only cleaner fuel (oil or gas) instead of coal. For Howrah rolling mills also the report specifically recommends use of only cleaner fuel (oil or gas) and not coal. The Committee also puts a note of caution in its report that as incomplete combustion of oil may also lead to environmental problems the Board will ensure through necessary direction that whenever oil is put to use as fuel, the degree of combustion is optimum by using efficient burners, atomizers and also preheating arrangement of oil before it is pumped to the burner. It is further noted that as currently there is no alarm regarding the level of SO² in ambient air, there is no necessity of specifying sulphur quantity in fuel oil at the present juncture and the Board may decide on the issue in future looking at the recipient air quality.

It is however the contention of the Appellant Unit that the aforesaid report of the officially appointed expert Committee is not acceptable as

it did not properly consider the risk of increased SO₂ concentration in the environment to the detriment of human health as a result of use of oil as fuel in place of coal. Instead, the Appellant relies upon report submitted by the Mechanical Engineering Department Consultancy Cell of the Bengal Engineering College (Deemed University), Sibpur, Howrah. Initially the Mechanical Engineering Department Consultancy Cell of the Bengal Engineering College was requested by the Appellant Unit during the pendency of this appeal to submit a report in the matter and accordingly the Mechanical Engineering Department Consultancy Cell of the Bengal Engineering College submitted an interim report in April 2002 and when that fact was brought to its notice the Appellate Authority by its order dated 18.06.2002 asked the Mechanical Engineering Department Consultancy Cell of the Bengal Engineering College (Deemed University) to submit its full report in the matter. The matter, it seems, was dealt with by a team of faculty members of the Mechanical Engineering Department Consultancy Cell of the Bengal Engineering College (Deemed University) under the Chairmanship of Professor A.K. Chottopadhyay, Professor & Head, Mechanical Engineering Department Consultancy Cell, Bengal Engineering College (Deemed University) and the team submitted its full report in July 2002 which is heavily relied upon by the Appellant.

It is submitted by the learned Advocate for the Appellant Unit that the Consultancy Cell conducted a test on stack emissions on 07.03.2002 at the work site of M/s. Alloy Steel Rolling Mill (Appellant Unit) where pollution control devices were fitted with the operating furnace running on coal and also conducted another test on stack emission from an oil fired furnace of a Re-rolling Mill at Howrah on 24.07.2002 and it was found that the emission level of SPM for the coal fired furnace was 115.14 mg/Nm³ while that for the oil fired furnace it was

121.67 mg/Nm³ and the emission level of SO² for the former was 0.311mg/Nm³ while that for the latter it was 42.3 mg/Nm³. It is submitted on behalf of the Appellant Unit that this report shows that the emission level of SO² for the coal fired furnace is much higher than the emission level of SO² for the coal fired furnace and that, such high SO² level of emission will be far more hazardous for human beings if the furnaces are converted to oil fired system from the coal fired ones. It is also pointed out that the emission level of particulate matter for its coal fired furnace fitted with pollution control device is well within the permissible limit of 150mg/Nm³. The Appellant also relied upon another document namely the test certificate of Das & Associates, which was annexed to the very memo of appeal and which shows the emission level of SPM for its furnace as 124 mg/Nm³. In the very memo of appeal and also in argument it is the contention of the Appellant that since the emission level of SPM for its furnace is only 124 (quite below the maximum standard of 150) there is no reason why its furnace should be asked to change from the coal fired system to the oil fired one. This contention does not impress us. The impugned order of the Board dated 31.08.2001 imposes two conditions, viz., that the unit should operate only by using cleaner fuel (oil or gas), and that it also should maintain emission standard for particulate matter at 150 mg/Nm³ and both these conditions will have to be satisfied. It has to be pointed out that the emission level of particulate matter for the Appellant's furnace was not found to be uniform in the tests held by Das & Associates and by the Bengal Engineering College Consultancy Cell as we have already noted. This indicates that variable factors, like, quality of coal, fluctuation of operational efficiency of the control system, etc. may very well influence the emission level of particulate matter at a particular point of time. Also it is possible that for minimizing the operational cost, the installed control device may be kept out of operation for some length

of time if any industrial unit so desires to do. It is thus understandable that the Board has for good reasons, imposed as a measure of general policy, both the conditions for compliance, namely, the condition of maintaining the emission standard and the condition of using cleaner fuel (oil or gas) instead of coal. Also it is an event of common knowledge and a matter of common sense that apart from stack emission the use of coal generally, if not invariably creates additional pollution load of particulate matter due to coal handling and downstream effect associated with the use of coal as furnace fuel. The impugned order having been passed for good reason there is no reason why the Appellant should not fall in line with other complying units of industries in implementing the general policy framed by concerned authority for the protection of environment.

While the Bengal Engineering College Consultancy Cell report predominantly dealt with the emission levels of pollutants obtaining in the Appellant Unit operating on coal fired furnace and another unit operating on oil fired furnace, the officially appointed expert Committee dealt with the matter from a wider perspective of general nature inter alia taking into consideration the over all impact of large scale change over from the coal fired system to the oil fired system already carried out during some years past in the concerned area and the prospect of further improvement in bringing down the level of pollution by taking recourse to the recommended measures. The main plank of the Appellant's contention is that the change over to oil fired system will dangerously increase the SO² level of pollution in the air. In this connection it is however to be noted that although in its July 2002 report the Bengal Engineering College Consultancy Cell recorded the SO² level of emission from the Appellant's coal fired furnace as 0.311mg/Nm³ as against 42.3mg/Nm³ from a particular oil fired furnace, yet in an earlier report dated 21.08.1998 the same

Consultancy Cell recorded the SO_x level of emission from the Appellant's rolling mill as 5mg/Nm³ after commissioning of the pollution control equipment. Again, in the test certificate issued by Das & Associates in November 2000 in respect of the Appellant's coal fired furnace the level of concentration of SO₂ in the gaseous emission has been recorded as high as 107mg/Nm³. Such wide variation in the SO₂ level of emission at different times as reflected in the three different reports relating to the Appellant's furnace ranging from 0.311 to 107 is starkly confusing, if not bewildering also. And all these three reports are the documents which the Appellant has brought on record and relied upon. Be that as it may, it is an acknowledged fact that the level of SO₂ concentration in the air of the concerned area is much lower than the prescribed standard and presently there is no reason to be worried about the same. The Bengal Engineering College Consultancy Cell in their interim report also records that it is reported that currently there is no alarm regarding the level of SO₂ in the ambient air but the same may reach an alarming level in near future if all coal fired furnaces are converted to oil fired furnaces. On the other hand it is the case of the State Pollution Control Board that most of the coal fired furnaces in the concerned area have already been converted to oil fired furnaces, barring a few only, as a result of which there has been reckonable improvement in the particulate level of emission in the ambient air maintaining yet a comfortably low level of SO₂ concentration in the area, and that, conversion of a few left out coal fired furnaces to oil fired ones will further improve the particulate level of ambient air within the comfortable margin of SO₂ level which is still much below the permissible standard in the concerned area capable of absorbing yet any marginal rise in this respect. The learned Advocate for the Appellant attracts our attention to the observation of the officially appointed expert Committee in its report that as currently there is no alarm regarding the level of SO₂ in ambient air,

there is no necessity of specifying sulphur quantity in fuel oil at the present juncture and the Board may decide on the issue in future looking at the recipient air quality. In this connection he submits that this being a health related issue the expert Committee should have followed the principle of judging the action and reaction from the safety point of view before recommending the change over as is done by medicine manufacturers before marketing any newly invented medicine which, according to him has not been done by the expert Committee in this matter. In our view this submission of the learned Advocate is not appropriate because almost all medicines even when marketed after testing run the risk of causing some adverse effect or side effect on some patients using the same and that is why the manufacturers of the medicines in most cases notify in the concerned literatures of the medicines as to what side effects or adverse effects may be caused by such medicines in some patients using the same and what remedial measures are to be resorted to in the event any patient suffers such effects by reason of use of such medicine. Cent per cent side-effect- free medicine for cent percent patients is a rarity. Medical Science does not guarantee cent per cent side-effect-free medicine. What it aims at is to tackle the side effect where it appears, as efficiently as it can. Also in many cases the literature of the particular medicine requires close medical watch on the patient during the period of administration of the medicine for finding out whether the medicine is producing any undesirable adverse effect on the patient so that appropriate remedial measure may be taken in such event, if necessary. Here in this case also the expert Committee likewise has recommended change over from one system to another for improving the level of particulate concentration in the ambient air and has at the same time emphasized the necessity of taking remedial measure in future, if the situation so demands later, to take care of any increase in the SO² concentration which is presently at a very

comfortable level. In our view the expert Committee has taken a very correct and balanced view of the matter, and the imported medical illustration is wholly ineffective for discrediting the expert Committee report.

The Appellant at the argument stage filed an application before us to appoint another expert Committee for obtaining another report in the matter in view of, what the learned Advocate termed as the two conflicting reports of the expert Committee and the Bengal Engineering College Consultancy Cell. We reserved our decision on that application with the observation that appropriate order will be passed on that application after hearing the arguments and after considering the materials on record.

Now after considering the submissions of both sides and the materials on record we are of the opinion that it is not necessary to appoint another expert Committee in this appeal as we are convinced from the materials on record that the report of the expert Committee can be safely, and rather should be seriously acted upon for the protection of the environment of the concerned area. It is also to be added in this connection that National Environmental Engineering And Research Institute (NEERI) which is a highly responsible body also in its Monument Protection Plan (MPP) in its Report in February, 1992 unambiguously stated that in Calcutta region coal forms primary energy source in domestic stoves as well in industrial boilers and generates air pollutions SO_2 , NO_2 , CO_2 , Co and particulate which are released into the atmosphere and that replacement of coal by other energy sources such as gas or oil can lessen the atmospheric pollution loads. Also the National Environmental Action Plan which is a report of June 2003 submitted by the expert Committee constituted by the Ministry of Environment and Forests, Government of India has inter

alia identified Howrah as a critically polluted area and has recommended in chapter 3.5.1 Sl. No. 23 for providing cleaner fuels like natural gas and furnace oil to the Small Scale Industrial Units (SSI units) located in mega cities/environmentally critical areas/urban estates within a specified time period. In view of so may expert body reports and recommendations in favour of the use of cleaner fuel (oil or gas) we are unable to persuade ourselves to put the wholesome endeavour of the Pollution Control Board in this regard on back gear. This appeal is therefore liable to be dismissed, more so in view of the fact that the impugned action of the Board is a part of the general policy adopted for the improvement of the ambient air quality of the concerned area. In this connection we are also to note that the policy formulated by the State Pollution Control Board on basis of the report of the expert Committee for using cleaner fuel (oil or gas) has been also accepted by the government of West Bengal preparing the Action Plan in September 2002 with regard to control of emission from industrial sources, etc. in Kolkata and Howrah as per orders of the Hon'ble Supreme Court, and this Action Plan has also been sent to the Ministry of Environment & Forests, Government of India.

Reverting now to the legal aspect of the matter for a short reference we are to note that Mr. B. Mukherjee, Senior Law Officer, State Pollution Control Board submitted before us that the action taken by the Board in the matter is sustained by the provisions of Section 19(3) of the Air (Prevention and Control of Pollution) Act, 1981 as well as by the provisions of Rule 3(2) of the Environment (Protection) Rules, 1986. Since it has not been brought to our notice that the State Government issued any prohibitory order in this respect by notification in official Gazette and that too, after consultation with the State Board, we are unable to hold that the impugned action of the Pollution Control Board is covered under said Section 19(3), but we have no hesitation

in holding that it is undoubtedly covered by Rule 3(2) of the Environment (Protection) Rules, 1986.

It may be mentioned here that the Appellant during the pendency of this appeal obtained at their own initiative two test certificates purportingly issued from the National Test House, Alipore in respect of two samples of contents described as 'steam coal grade B' and 'furnace oil' chosen and produced by the Appellant. The test certificates purportingly show higher per-centage of sulphur content in the sample of furnace oil chosen and produced by the Appellant Unit compared to the sulphur content of the steam coal sample produced by them. In our opinion such finding in respect of the particular samples chosen and produced for the purpose is of no decisive consequence in determining the general issue before us which has to be decided on a threadbare consideration of a variety of factors as has been done by us keeping in view the scope of exercising proper checks and balance as may be needed.

We therefore dismiss the appeal with this direction that the Board will maintain regular vigil and watch on the ambient air quality of the concerned area and shall not grant consent to establish any new industry in the concerned area unless it is reasonably satisfied beforehand that the ambient air quality of the area will be able to bear the additional pollution load, particularly in respect of the SO² level within the limit of the prescribed standard. The Pollution Control Board will also keep on reviewing the situation regularly and shall specify sulphur content in fuel oil when it is felt necessary to do so and shall also take such other remedial measures as may be warranted including steps to avoid incomplete combustion of oil. The Appellant is allowed time of four months from this date to change over from the coal fired system to the cleaner fuel (oil or gas) system and is

directed to submit a time-bound action plan to the Board towards compliance within one month from this date. In the event of any non-compliance on the part of the Appellant in this regard the Board will take action in accordance with law.

Sd/-

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And
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Sd/-

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(Justice Gitesh Ranjan Bhattacharjee)
Chairman, Appellate Authority