

M.C. Mehta

Vs

Union of India and Others

I. A. No.29 in Writ Petn. (Civil) No. 4677 of 1985

(Kuldip Singh, K. Venkataswami JJ)

10.05.1996

ORDER

1. Mr. M. C. Mehta—environmentalist lawyer—has filed this public interest petition under Art. 32 of the Constitution of India seeking a direction to the Haryana Pollution Control Board (the Board) to control the pollution caused by the stone crushers, pulverizers and mine operators in the Faridabad—Balabgarh area. We are in the process of monitoring the petition. The core question which we propose to deal with in this order is whether—to preserve environment and control pollution—the mining operations should be stopped within the radius of five kilometers (km) from the tourist resorts of Badkal lake and Surajkund in the State of Haryana.

2. This Court by the order dated November 20, 1995 directed the Board to inspect and ascertain the impact of mining operations on the ecologically sensitive area of Badkal lake and Surajkund. The inspection was done by a team of the Board comprising of Dr. B. Sengupta, /senior Scientist, Shri Lalit Kapoor, Senior Environmental Engineer, Shri R. C. Kataria, Environmental Engineer and Dr. J. Moitra, Scientist 'B'. The inspection report of the Board was placed before this Court along with an affidavit filed by Dr. S. P. Chakrabarti, Member Secretary of the Board. In the affidavit, regarding the mining activities, it is stated as under :—

"For the purpose of mining, explosives are being used for rock blasting. Because of unscientific mining operation, overburden materials (top soil and murum remains) were observed to be lying haphazardly. Deep mining for extracting silica sand lumps is causing ecological disaster as these mines lie unreclaimed and abandoned. As a matter of fact mining site reveals total lack of environmental planning"

The report contains the following recommendations regarding the mining activities in the area :—

"Mining

At present, manual as well as semi-mechanised mining of hard stone, weathered soft stone and coarse sand in 33 mining area leased by the State Government of Haryana is operative. Explosives are used for rock blasting.

Recommendations

1) Environmental Management Plan (EMP) shall be prepared by mine lease holders for their mines and actual mining operation made operative after obtaining approval

from the State Department of Environment or Haryana State Pollution Control Board. The Environmental Management Plan (EMP) should be implemented following a time-bound action plan. Land reclamation and afforestation programmes shall also be included in the EMP and must be implemented strictly by the implementing authorities.

2) Mining activities should be stopped within a radius of 5 km. from Badkal Lake and Surja Kund (tourist place).

3) At present mining activities are going on without obtaining consent as required under the Air (Prevention and Control of Pollution) Act, 1981, from the Haryana State Pollution Control Board. Mine lease holders shall take appropriate steps to obtain consent from the State Pollution Control Board failing which the State Pollution Board shall take necessary action in this regard.

4) The mine owners should adhere strictly to Mine Safety Plan and install all necessary devices.

5) The overburden along with top soil should be properly preserved for use at the time of reclamation of abandoned mine.

6) Use of explosive, in the mines should be regulated as per the Explosive Act and after obtaining approval from the Competent Authorities."

This Court on March 21, 1996 noticed the statement of Mr. Gopal Subramaniam, learned counsel appearing for the State of Haryana in the following words :-

"Mr. Gopal Subramaniam states that the mining work has stopped within the radius of 5 kms. of Badkhal Lake and Suraj Kund. We appreciate the gesture of Haryana Government. Mr. Subramaniam states that the steps to provide green belt in that area are also in progress. He shall place on record the positive steps which are in the contemplation."

Mr. Shanti Bhushan, Mr. G. L. Sanghi and Mr. R. S. Suri, learned counsel appearing for the mine operators vehemently contended before this Court on March 29, 1996 that the mining operations were closed without affording any opportunity to the lessees of the mines. After hearing learned counsel, this Court passed the following order :-

"There is no order by this Court directing the closure of the mines. Mr. Shanti Bhushan, however, states that in view of the observations made by this Court in the earlier orders, the Haryana Government has closed the mines in the area. The main contention raised is that without hearing the mine owners and without giving them any opportunity, the mines have been closed. Needless to say that action regarding closure of the mines have been taken on the basis of the report submitted by the Central Pollution Control Board. Be that as it may, we give opportunity to these mine-owners to present their case before this Court."

The mining operations within the radius of 5 kms. from Badkal lake and Surajkund were stopped by the Haryana Government on the basis of the recommendation made

by the Board. The mine operators through their learned counsel raised serious objection to the recommendation of the Board seeking closure of the mining operations within the radius of 5 kms. According to learned counsel the pollution generated, if any, by the mining activities cannot go beyond a distance of one km. and as such the closure of the mines within the area of 5 kms. was wholly unjustified. It was suggested by the learned counsel that another opinion in this respect may be obtained from an expert body like the National Environmental Engineering Research Institute (NEERI). This Court on April 12, 1996 passed the following order :-

"We have heard learned counsel for the parties. We are of the view that it would be useful to have the expert opinion of the National Environmental Engineering Research Institute on the point whether the mining operations in the said area are to be stopped in the interest of Environmental Protection, Pollution Control and Tourism Development. If so whether the limit should be five kms. or less.

We, therefore, request Dr. Khanna to send an inspection team to the area concerned preferably within next week to examine the question of closure of the mines from the environment and pollution point of view. The team shall also examine the working of the stone crushers and pulverisers in the area. Initially report regarding mines may be filed. We request Dr. Khanna to have the report filed in this Court within ten days."

The NEERI has filed its inspection report dated April 20, 1996.

3. We have heard learned counsel for the mine operators at length.

4. The two tourist places, Surajkund and Badkal lake, are located in Faridabad district of Haryana State and are at a distance of about 18/24 kms. from New Delhi. Because of their proximity to the capital city of India these resorts have a great tourist potential. We may refer to the relevant parts of the NEERI report :

"Air Quality Monitoring was carried out by the Inspection Team at one working mine beyond 5 km. from Badkal lake and Surajkund area to assess the extent of air pollution from the mining activities, overburden loading and haulage, and to determine fugitive emission of Suspended Particulate Matter (SPM). One monitoring station was established in upwind direction at a distance of 300 m. whereas another monitoring station was located in downwind direction at 50 m. distance from the face of the mine. The mining activity was being carried out in an area of 0.70 x 1.0 km². The air quality monitoring was conducted for four hours during mining operations. The blasting operations also took place during the air quality monitoring. At the upwind and downwind stations, SPM concentrations were observed to be 124 and 416 ug/m³ respectively. The contribution from mining activities was 292 ug/m³.

Fugitive air pollution emission rate of SPM for mining activities was also estimated using upwind-downwind technique. The fugitive emission rate was 30.26 gm/sec for production of 4000 tons of stones during four hours.

Noise levels were measured by inspection team at the working mine beyond 5 kms. from Badkal lake. The noise levels were observed to be in the range of 52-82 dBA.

The noise levels were also measured at a distance of 500 m away from the working mine, and it was observed to be equal to the background noise level of 40-42 dBA. Noise levels were also measured during blasting, when 820 gms. of explosive was used in four holes of 1.2 m depth. The maximum noise level of 59.5 dBA was recorded at a distance of 500 m from the blast site."

The following recommendations have been made by the NEERI in the report :—

"6.1 Mining

6. 1. 1 Detailed exploratory operations need to be undertaken to facilitate the estimation of reserves in the region, and for scientific management of mining operations.

6. 1. 2 The mine lease owners need to undertake the mining operations in series, i. e. mining activities must be completed to full potential in a block before moving to the next. This will help in reclamation of land in the block in which mining operations have been completed.

6. 1. 3 All the mine lease holders need to prepare detailed mining plans, and obtain approvals before the actual mining operation are initiated. The implementation of approved mining plans by the mine lease holders needs to be ensured by a designated authority with specialization in environment.

6. 1. 4 The mine lease holders should also prepare mine safety plans, and ensure installation of necessary devices for protection of mine workers.

6. 1. 5 In view of the observations made by the Archaeological Survey of India (ASI) on the availability of stone age tools and other historic remains, ASI needs to work in collaboration with the mine lease holders on matters relating to excavation operations.

6. 1. 6 Dust suppression measures like sprinkling of water of haulage roads and overburden dumps and other areas need to be implemented by mine lease holders.

6. 1. 7 In order to minimise the dust pollution caused due to vehicular traffic, it is necessary to initiate a number of measures, e. g. an alternate bypass road must be laid to ensure that no vehicles pass through the area within 1 km. radial distance from the periphery of the lakes.

6. 1. 8 It is necessary to minimise the duration of blasting operations.

6. 1. 9 Necessary measures must be initiated by the Haryana Tourism Department to protect the quality of lake waters, and to eliminate the non-point sources of pollution.

6. 1. 10 The Environmental Management Plans (EMP) being formulated by the mine owners should include land rejuvenation and afforestation programmes, and other measure necessary to protect the quality of the environment and human health. The mining operations should commence only after the approval of EMPs by a designated authority. A time bound action plan needs to be initiated for the

implementation of the measures delineated in the Environmental Management Plans.

6. 1. 11 In order to protect the Surajkund and Badkal lakes and the associated tourist complexes, it is necessary to develop and implement scientifically designed greenbelts around these complexes, as also around boundaries of different mining blocks.

6. 1. 12. Greenbelt should also be developed and implemented on either side of the roads in the mining area and Surajkund-Badkal road to minimise the effects of dust and noise pollution.

6. 1. 13 The question of lifting the ban on mining operations need to be considered in conjunctions with the implementation of stringent pollution control, land reclamation, greenbelt, and other Environmental Management measures so as to facilitate the availability of construction materials and employment opportunities for the workers along with the protection of environment and public health.

6. 1. 14 It is considered necessary to prepare a Regional Environmental Management Plan for urgent implementation to enable eco-friendly regional development in the area."

Regarding the Green Belt Development NEERI has recommended as under :-

"Since, plants possess immense capabilities for dust attenuation, it is recommended that greenbelts be developed in following areas :

- At one km. radius all around the Surajkund Lake boundary; 200 m. wide greenbelt
- At one km. radius all around the Badkal Lake boundary; a 200 m. wide greenbelt
- Outside the total mining area lease boundary; a 100 m. wide greenbelt
- On open, peripheral areas around the stone crushers zone; a 100 m. wide greenbelt within the crusher zone boundary (Figure 3)"

The site-wise greenbelt designs have been presented in Table 4.

Road side plantations are also required. Depending upon the width of various roads and the land available, there is a need for two-three rows of trees on either side of each road. The spacing between the rows may be 5. m. and that between trees in each row as 6 m. The requirements of plants for road side plantation has been indicated in Table 4.

The greenbelt development involves use of several plant species in hundreds and, therefore, it is desirable that the work be entrusted to the District Forest Department that will be able to maintain and generate the required number of seedling of all the recommended plant species."

5. The two expert opinions—by the Board and by the NEERI —leave no doubt in our mind that the mining activities in the vicinity of tourist resorts are bound to cause server impact on the local

ecology. The mining brings extensive alteration in the natural land profile of the area. Mined pits and unattended dumps of overburdened, left behind during the mining operations, are the irreversible consequences of the mining operations. Rock blasting, movement of heavy vehicles, movements and operations of mining equipment and machinery cause considerable pollution in the shape of noise and vibration. The ambient air in the mining area gets highly polluted by the dust generated by the blasting operations, vehicular movement; loading/unloading/transportation and the exhaust gases from equipment and machinery used in the mining operations.

6. The Board has notified the Ambient Air Quality Standards by the Notification dated April 11, 1994. The notification fixes limiting standards of pollutants (Sulphur Dioxide, Oxides of Nitrogen, Suspended Particulate Matter, Respirable Particulate Matter, Lead and Carbon Monoxide) in respect of sensitive areas, industrial areas and residential, rural and other areas. The standards for sensitive areas are stringent than the standards prescribed for industrial and residential areas. The Board has recommended that the area of 5 kms. around the periphery of a center of tourism be notified as sensitive area.

7. The Badkal lake and Surjkund are monsoonfed water bodies. The natural drainage pattern of the surrounding hill areas feed these water bodies during rainy season. The mining activities in the vicinity of these tourist resorts may disturb the rain water drains which in turn may badly affect the water level as well as the water quality of these water bodies. The mining may also cause fractures and cracks in the subsurface, rock layer causing disturbance to the aquifers which are the source of ground water. This may disturb the hydrology of the area.

8. We are, therefore, of the view that in order to preserve environment and control pollution within the vicinity of the two tourist resorts it is necessary to stop mining in the area. The question, however, for consideration is what should be the extent of the said area? NEERI in its report has recommended that 200 metres green belts be developed at 1 km. radius all around the boundaries of the two lakes. It is thus obvious that twelve hundred meters are required for the green belts. Leaving another 800 meters as a cushion to absorb the air and noise pollution generated by the mining operations, we are of the view that it would be reasonable to direct the stoppage of mining activity within two km. radius of the tourist resorts of Badkal and Surajkund. We therefore, order and direct as under :

1. There shall be no mining activity within 2 km. radius of the tourist resorts of Badkal and Surajkund. All the mines which fall within the said radius shall not be reopened.
2. The Forest Department of the State of Haryana and in particular the Chief Conservator and the District Forest Officer, Faridabad shall undertake to develop the green belts as recommended by NEERI with immediate effect. The NEERI has also suggested the development plan and the type of trees to be planted. We direct the Chief Conservator of Forest, Haryana, District Forest Officer, Faridabad and all other concerned officers of the Forest Department to start the plantation of trees for developing the green belts and make all efforts to complete the plantations of trees before the monsoon (1996).
3. We direct the Director, Mining and Geology, Haryana, the Haryana Pollution Control Board to enforce all the recommendations of NEERI contained in para 6. 1. of its report (quoted above) so far as the mining operations in the State of Haryana

are concerned. All the mines operators shall be given notices to implement the said recommendations. Failing to comply with the recommendations may result the closure of the mining operations.

4. We further direct that no construction of any type shall be permitted now onwards within 5 km. radius of the Bdkal Lake and Surajkund. All open areas shall be converted into green belts.

5. The mining leases within the area from 2 km. to 5 km. radius shall not be renewed without obtaining prior "no objection" certificate from the Haryana Pollution Control Board as also from the Central Pollution Control Board. Unless both the Boards grant no objection certificate the mining leases in the said area shall not be renewed. Order accordingly.