M.C. MEHTA

V.

UNION OF INDIA AND ORS. RE: AIRPORTS AUTHORITY OF INDIA LTD.

JULY 22,1999

[S. SAGHIR AHMAD AND M. JAGANNADHA RAO, JJ.]

Environmental Law:

Environment (Protection) Act, 1986:

Environmental Protection—Pollution control—Hot Mix Plants—Setting up of—For resurfacing of airport runways—At IGI Airport—Held: Environmental problem has to be balanced with the necessity of running an International Airport in the Capital of India—In view of transportation and security problems and the importance of Hot Mix procedure for strengthening of airport runways and the fact that the Supreme Court had already given permission to CPWD to set up hot mix plants for 3 months for repairing roads in Delhi, Airport Authority has to be allowed to set up hot mix plants for resurfacing airport runways at IGI Airport for one year or till completion of work, whichever is earlier—However, hot mix plants will be set up at least 3 kms away from a populated area and particulate emission shall not exceed 150mg/Nm3—Air (Prevention and Control of Pollution) Act, 1981— Environment (Protection) Rules, 1986.

The Airports Authority of India at the Indira Gandhi International Airport (IGI) had filed the present application for permission to instal Hot Mix Plants in the vicinity of IGI Airport for a period of one year for resurfacing of the runways for the safe landing and take-off of domestic and international aircraft and for smooth handling of aircraft traffic.

Allowing the application, this Court

HELD: 1. Resurfacing of Airport Runways is a work of national importance, which has to be carried out so that the IGI Airport is operational and does not cause any operational hazard at the time of landing and takeoff. The environment problem has to be balanced with the necessity or running an International Airport in the Capital of India. [1045-F]

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A 2. In view of the facts set out in various affidavits regarding problems of transportation and security and the importance of hot mix procedure for strengthening airport runways and the fact that this Court has already allowed the CPWD for setting up of hot mix plants for a period of 3 months for repairing the Delhi roads, Airports Authority of India has to be allowed
B to set up hot mix plant for resurfacing of the runways at IGI Airport subject to the following conditions:- [1045-H; 1046-A]

(i) Hot mix plants will be set up in the safe vicinity of IGI Airport at least a distance of 3 Kms. from a populated area. [1046-B]

C (ii) The Airports Authority of India shall ensure that the particulate matter emission does not exceed the prescribed limit of 150mg/Nm3 under the Environment (Protection) Rules, 1986 made under the Environment (Protection) Act, 1986. [1046-C]

(iii) The hot mix plants shall be operated for a period of one year from
D the date on which these are installed or till the resurfacing of the runways is done and completed, whichever is earlier. [1046-E]

M.C. Mehta v. Union of India, Scale (SP) 31, referred to.

CIVIL ORIGINAL JURISDICTION : I.A. No. 22 In W.P. (C) No. E 4677 of 1985 I.A. No. 642 of 1999.

Under Article 32 of the Constitution of India

R. Sundarawardhan, R.N. Keswani, Chandrakanta Nayak, Ram Lal Roy,
M.C. Mehta, (Ranjit Kumar) (NP), S.K. Bhattacharjee, Vijay Panjawani, Ms.
F Indira Sawhney, Y.P. Mahajan, S.K.Dwivedi, D.S. Mehra, C.V. Subba Rao, Ms.
Niranjana Singh, B.V. Balramdas, (D.V. Gupta) and Chariman Airports and
Authority of India for the appearing parties.

The Judgment of the court was delivered by

G S. SAGHIR AHMAD, J. Hot Mix Plants which were treated as hazardous industries have since been closed with effect from 20th of February, 1997 in pursuance of the Order dated 10.10.1996 passed by this Court in I.A. No. 22 in Writ Petition(C) No. 4677 of 1985 (M.C. Mehta vs. Union of India & Ors.) since reported in 1997 (1) Scale (SP) 31.

H The Airports Authority of India at the Indira Gandhi International Airport,

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New Delhi has filed this application for permission to instal Hot Mix Plants Α in the vicinity of IGI Airport for a period of one year for resurfacing of the runways for the safe landing and take off of domestic and international aircrafts and for smooth handling of aircraft traffic. It is indicated in this application that the resurfacing of the main runway was last done in the year 1990-91 while the resurfacing of the secondary runways was carried out in B 1998. It is further stated that due to the constant use of these runways by the ever-increasing traffic, both domestic and international, cracks have developed in the runways and due to the wear and tear of the surface of the runways, certain areas of the runways are showing signs of distress all of which require immediate resurfacing.

It is further stated in this application as under:-

"3. The resurfacing of the existing runways has to be done using the bituminous overlays which necessitates the hotmix plants to be installed within the vicinity of IGI Airport or nearby sites not exceeding three to four kilometers range. This is because to have a proper laying D of surface the premix material has to be maintained at a very high temperature before laying it at the runways. The time of transportation from the plant where the premix is prepared to the runway site where it has to be laid has to be minimised. In the event the distance if more than three to four kilometers, more time in transportation would be taken which would reduce the temperature of the premix considerably thereby rendering the premix absolutely useless for the purpose of laying it at the runways.

4. The temperature of the bituminous mix at the time of laying on ground has to be maintained over 120 degree "C" and if such hot mix is transported at a distance of more than 5 kilometers, the temperature is bound to go below 120 degree "C", rendering it ineffectual and inept for the purpose of resurfacing the runways.

5. Pursuant to the directions given by this Hon'ble Court in I.A. No. 22 in Writ Petition [C] No. 4677, M.C. Mehta v. Union of India, (1997) 1 Scale SP 31; 10.10.96, all the Hotmix Plants have been shifted to areas outside the vicinity of Delhi and have stopped functioning as such within the State of Delhi from 28th February, 1997. The said plants which have now been installed outside the city of Delhi are at a minimum distance of 25 kilometers from IGI Airport. Such being the length of the distance, it will be difficult to maintain proper quality of H

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premix material and the same may not be useful at all for laying at the runway site. At the same time, very huge quantity of hotmix material is required approximately 250,000 tonnes. For transporting such a huge quantity of hot premix material for laying it at the runway, over 100 number of trucks shall be required to be deployed per day. It is impossible to deploy 100 trucks every day considering several road and traffic restrictions for the movement of heavy duty trucks during day time. As such, it has become next to impossible to have resurfacing of the runways which have become completely worn out and owing to several cracks in them which have recently developed it may become well nigh impossible to receive and handle any aircraft traffic whether domestic or international.

6. In such circumstances, it is absolutely necessary to carry out the work of repair and maintenance of the wornout runways immediately, which cannot be done unless the hotmix plants are permitted to be installed within the vicinity of IGI Airport or nearby sites. Owning to these extraordinary, exceptional and special circumstances, an exception be made in favour of the petitioner and the Hon'ble Court be pleased to permit petitioner to set up hotmix plants within the vicinity of IGI Airport or at a nearby site so that the resurfacing of the runways can be done immediately and in a shorter period so that the landing and take-off of aircraft traffic and also its handling is not hindered.

7. The petitioner submits that the place where the hotmix plants shall be installed for a period of one year only is at least 2 kilometers away from the residential areas and populace, and shall not cause any pollution or environmental hazards. The applicant-Airports Authority of India submits that the Hotmix Plants that will be installed by it shall be fitted with pollution control devices of international standards. The said plants shall meet all the standards of pollution control prescribed by the Central Pollution Control Board, who shall have full authority at all times to inspect the installation of the hot mix plants and also shall have constant vigil, supervision and watch of the said plants throughout the period of one year so that there is no deviation from the prescribed limits of pollution. The hotmix plants will operate only for a period of one year from the date of installation."

The Airports Authority of India also set out the following undertakings H with which, it said, it would bind itself:-

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"(i) That hotmix plants shall operate only for a period of one year from A the date of installation;

(ii) That the said plants shall be at least 2 kilometers away from the populace and residential areas;

(iii) That the hotmix plants shall operate and function during prescribed B hours, which the movement of traffic and people is at least;

(iv) The hotmix plants shall be fitted with pollution control devices of international standards and shall meet all the requirements prescribed by Central Pollution Control Board;

(v) That hotmix plants shall not emit pollutants beyond the limits prescribed by the Central Pollution Control Board;

(vi) That Central Pollution Control Board shall at all times, exercise, control and supervision of the hotmix plants, so that there is no deviation from the prescribed limits of pollutants;

(vii) That the hotmix plants shall be used only for the purpose of preparing premix material for the resurfacing of runways and for no other purposes."

In the additional affidavit dated 1st April, 1999, it was stated as under:-

"1. I say that for the resurfacing and strengthening the main runway, secondary runway and parallel taxi track, the applicant Airport Authority of India requires to put up four numbers of hot mix plants of 100-120 tonnes per hour capacity.

2. Two of these hot mix plants will be set up at one location while the F remaining two will be set up at another location. The hot mix plants shall be fitted with the pollution control device confirming to international standards and also the device which meets all the requirements of Central Pollution Control Board, Government of India.

3. The hot mix plants proposed to be set up are also of G international quality and this technology is used the world over including U.S.A.

4. The hot mix plants have to be set up immediately in view of the fact that cracks have developed in the runways, making it hazardous for the operations of the aircrafts and passengers safety. If hot mix plants H

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which are used the world over are not allowed to be set up, the airport will have to be shut down for about one year as hot mix plant technology alone permits the work of resurfacing to be continued while the runways are at the same time kept functional.

5. It is reiterated that these hot mix plants proposed to be set up which are of international technology and for which global tenders have been invited by the applicant, AAI and also the pollution control device which shall be attached to these hot mix plants are the latest technology available in this field and are used the world over by all the advanced countries. These plants and the pollution control device meet the prescribed standards for pollution control as set up by the Central Pollution Control Board, Government of India."

On behalf of Central Pollution Control Board, its Senior Environmental Engineer, Shri Lalit Kapur, filed a short affidavit, dated 5th of April, 1999, in which it has been, *inter alia*, stated as under:-

"The process emission from Hot Mix Plants contains particulate matter and sulphur dioxide besides toxic/carcinogenic hydrocarbons like benzene, formaldehyde, anthracene and toxic metals like lead, arsenic, mercury, cadmium. Therefore, the Expert Committee of CPCB has categorised Hot Mix Plants as hazardous industry (Ha category). As per Master Plan-2001, all hazardous/noxious industries should be shifted out from U.T. of Delhi."

The main opposition came from Mr. M.C. Mehta who appeared in person and filed his written submissions indicating, inter alia, as under:-

"4. That some of the Hot mix plants are located in Bajkheda, Gurgaon, which is about 8 kms. from the airports. Therefore transportation of hotmix should not pose any problem.

5. That according to the information received from Dr. Mark Chernaik, a reputed scientist from USA,

"It is clearly possible to transport hot mix material a distance of 20-25 kilometers (from the existing plants to the airport) without a fall in temperature that impairs the quality of the hot mix material.

This is substantiated by Mr. Maghsoud Tahmoressi, Director, South Central Superpave Center, Bituminous Section, Materials

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& Tests Division, Texas Department of Transportation...

According to Mr. Tahmoressi, the distance you can transport hot mix material from a hot mix plant to a project site does not matter as much as the time it takes to travel this distance. The allowable time from plant to project site depends on several Β factors, including: 1) the outside temperature: the allowable time is much less in cold climates in winter than in hot tropical climates (such as India); 2) the type of truck and truck covering: You can greatly extend the allowable time by covering the hot mix material with a tarp or by using an insulated truck bed; 3) the type of aggregate used: Hot mix asphalt is a mixture of two С materials: asphalt and aggregate. The two most common aggregates used in the production of hot mix asphalt are limestone and river bed gravel. If you use the former (limestone), the allowable time from plant to project site is a little less because the limestone absorbs some of the asphalt, reducing the quality of the hot mix material. You can overcome this, however, by D using a greater ratio of asphalt to limestone aggregate.

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Regardless of these factors, Mr. Tahmoressi thinks there would be no problem whatsoever to transport hot mix material a distance of 20-25 kilometers from plant to project site. This is not a very great distance. According to Mr. Tahmoressi, in the State of Texas, it is common for trucks to carry hot mix material 120-150 miles (200-240) kilometers, driving a minimum of 2-3 hours) from plant to project site, especially in rural areas.

I found a discussion on the Internet of a road paving project where hot mix material was carried by truck 35 miles (56 kilometers) from plant to project site : (http://www. utexas.edu/research/ superpave/articles/tim.html) Production and Placement of Superpave Hot Mix Asphaltic Concrete Pavement

"...Recently, our company was awarded a highway contract from the Texas Department of Transportation on US 271 in Red River County. This contract consisted primarily of a two-inch hot mix overlay. Approximately eleven thousand tons of this material consisted of a 19.0mm Superpave hotmix... At the beginning of placement, the air temperature was 53° F and the conditions were cloudy. The hot mix was produced at a temperature of 325° F and H

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A	transported 35 miles to the jobsite. The mix arrived at the jobsite at 300° F. The mix was dumped directly into a Roadtec RP- 230 paper and breakdown was initially achieved using two Caterpillar 634-C twelve-ton rollers"
	6. According to information received from Dr. Chernaik,
в	"There are two general types of asphalt plants: 1)Plants that produce asphalt cement for road construction or repair; 2) Plants that produce other asphalt products (for example, asphalt roofing material). The first type of asphalt plant is called a "hot mix" asphalt plant. They are the most common type of asphalt plant.
C	A hot mix asphalt plant can emit large quantities of dust and polyaromatic hydrocarbons (PAHs). Exposure to dusts can cause a variety of lung illnesses. Exposure to PAHs can cause lung cancer and other cancers.
D	The process that occurs at a hot mix asphalt plant is relatively simple. The plant mixes crushed stone material (pebbles) with liquid asphalt spray (a product of crude oil distillation) in a rotating cylindrical mixing tube (the drum) that facilitates the coating of the pebbles with a sticky layer of asphalt. The
E	temperature of the drum is about 155 degrees centigrade. The mixture contains about 95% pebbles, and 5% asphalt. While the pebble-asphalt mixture is still hot, the material is loaded onto trucks for transport to a road construction site.
F	These plants can emit enormous quantities of dust particles. As the drum rotates, it causes the dispersion of very small particles of stone (dust).
G	7. That United States Environment Protection Agency (US EPA) has, from time to time, issued notices to the Hot Mix Plants for causing health hazard. These notices state that emissions from hot mix plants can impair lung function, especially among children and the elderly. Some of the instances are as follows:-
	(i) EPA CITES BUCKO FOR CLEAN AIR ACT VIOLATION; INCLUDES \$43,000

FINE-U.S. Environmental Protection Agency (EPA) Region 5 has

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recently filed an administrative complaint against Bucko Construction A Co. for an alleged clean-air violation at the company's hot-mix asphalt plant, 890 Chase St., Gary, IN. A \$43,000 penalty is proposed.

Inhaling high concentrations of particulates can affect children, the elderly, and people with heart and lung diseases the most.

EPA's goal is to protect public health and the environment, and we will take all necessary steps to ensure compliance with clean-air regulations," saud David Kee, director of the regional Air and Radiation Division. (Source: http://www.epa.gov/reg500pa/news98/98opal7 6.htm)

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(ii) EPA CITES H&D FOR AIR POLLUTION; INCLUDES \$191,297 C PENALTY

U.S. Environmental Protection Agency (EPA) Region 5 has recently filed an administrative complaint against H&D, Inc., for clean Air Act violations at the company's Cheboygan County, MI, hot mix asphalt plant. A \$191,297 penalty is proposed. (Source: http://www.epa.gov/ D reg500pa/news/960pal45.htm)

(iii) ASPHALT MAKER FINED \$17,000 FOR CLEAN AIR ACT VIOLATIONS

"BALTIMORE—The U.S. Environmental Protection Agency announced today that it has settled its Clean Air Act lawsuit against Redland Genstar, Inc., a Baltimore-based asphalt maker. In its September 1997 complaint, EPA alleged that Redland Genstar violated EPA's regulation limiting particulate emissions from "hot mix" asphalt plants. The regulation prohibits emissions of 20% opacity or greater. In a joint inspection by EPA and the Maryland Department of the Environment on May 7, 1997, inspectors documented visible emissions ranging from 32.2% to 34.8% opacity.

"Particulate pollution has been linked to respiratory illness and increased mortality in humans." (Source: http://www.epa.gov/region03/ r3press/pr98-1555.htm)

8. It is submitted that all building structures like a hot mix plant exhaust gas stack, will obstruct the path of airplanes flying into and out of airports. There are also Environment Protection Rules (Section 5) and local zoning laws and regulations prohibiting the location of industries near sensitive areas. Also, construction of new hotmix H

- A plants will require plying of large number of trucks for transportation of raw material which negates the argument of Airports Authority that transportation of hotmix is not feasible as it will require deployment of 100 trucks a day.
- 9. It is submitted that the hotmix plants shifted under the Order of this Hon'ble Court were not in proximity of the airports and were located in areas of Lal Kuan, Rangpuri, Mehrauli and Khayalla. As some of the hotmix plants are already operating in Bajkheda, Gurgaon, which is about 8 kms. from the International Airport, the Airports Authority can set up new hot mix plants in that area.
 - 10. Airports Authority of India was never a party to this case and they never approached this Hon'ble Court during the last five years when this case of hotmix plants was being heard by this Hon'ble Court. Further, for a new industry of such large scale, manufacturing 250,000 tons of hotmix, it is necessary to obtain clearance from the Ministry of Environment under Environment Impact Assessment Notification 1994. Setting up of new industries requires site clearance and other permissions and consent from the authorities under the law."

The applicant also filed an additional affidavit in view of the Court's E Order dated 6.4.1999 in which it was stated as under:-

"5. It is further submitted that this Hon'ble Court by its order dated 6th April, 1999 has directed the Applicant-Airport Authority "to file a better affidavit indicating the modern technology which would be employed for commissioning the Hot-mix plant and the Pollution Control Device which would be utilised for running the Hot-Mix plant coupled with expert opinion". It is submitted that the applicant applied to the Director General, Ministry of Surface Transport for its expert opinion in respect of Pollution Control Device that may be installed in the use of Hot-Mix plants. The Ministry of Transport which is the highest expert body for road works has by its letter dated 16th April, 1999, a true copy of which is annexed as ANNEXURE A-2, informed the Applicant that "the following three types of pollution control devices are in use on the Hot-Mix plants of different capacity to carry out the works at different places in India.

(i) Wet Scrubber

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(ii) Mist Elimination

(iii) Bag House filter

"it depends upon the manufacturers and to the user as to which type of pollution control device is suitable with their plants".

6. It is submitted that the technology used for Hot-Mix plants differs B from manufacturer to manufacturer. In India, the best Hot-Mix plants are manufactured by Apollo. The technology used by Apollo and the technical specification of the plant are given in their literature which gives the details of the technology used in the Hot-Mix plants as well as the Pollution Control Unit that shall be fitted in the plant. A copy of the Brochure of Apollo giving the technical specification of the technology used by them for Hot-Mix plants is annexed hereto and marked as ANNEXURE A-3.

7. The Gujarat Apollo Equipments Limited have also given the detailed technical specifications for the bag Filter Pollution Control device, a D true copy of which is annexed as ANNEXURE A-4. It bears repetition that Bag Filter Pollution Control Device is one of the three devices which are used for pollution control in Hot-Mix plants as stated in the letter dated 16th April, 1999 [Annexure A-2] of the Ministry of Transport.

8. The applicant further submits that the permissible limit of emission of particulate matters in respect of Hot-mix plant is 150 mg. under the Environment Protection Rules. The Applicant has been assured by Apollo [who manufacture the Hot-mix plants, the technical specifications of which are enumerated in their literature annexed as F Annexure A-3] and also by Gujarat Apollo Equipment who shall be supplying the Bag Filter Pollution Control Device that their technology and the plants supplied by them shall meet the permissible limits of the emission of particulate matters prescribed by the Environment Protection Rules. The applicants has been assured that after the setting up of these devices the emission of particulate matters from G the Hot-Mix plants shall not exceed 150 mg. The prescription of 150 mg. by the Environment Protection Rules is stated in the order dated 10th October, 1986 in I.A. No. 22 in Writ Petition [Civil] No. 4677 of 1985 of this Hon'ble Court.

9. That the Applicants on having made enquiry from the Delhi Pollution H

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Control Committee about the norms prescribed by the Air [Prevention Α and Control of Pollution] Act, 1981 in respect of the Hot-mix plants have been informed that no norms, standards or guidelines have been prescribed for the installation of the Hot-mix plants under the said Air Act of 1981. In fact the Harvana State Pollution Control Board in their letter dated 24-06-1997 addressed to Environmental Engineer, Regional Office, Faridabad has inter alia stated as follows: "The Air [Prevention and Control of Pollution] Act, 1981, came into being in the year 1981 but since then norms/standards for the installation of Hot-Mix plants and guidelines of settling criteria for the installation of Hot-Mix plants have not been laid down for implementing the provisions of the Air Act, for controlling pollution of the Hot-mix plants".

> 10. It is submitted that in so far as Applicants are aware, no norms, standards or guidelines are prescribed either by the Air [Prevention and Control of Pollution] Act, 1981 or under the Environment Protection Act, 1986 and this position has been confirmed by the Haryana State Pollution control Board in their said letter dated 24-06-1997 addressed to the Environmental Engineer, Regional Officer, Faridabad. However, as stated above the applicants have been confirmed by the manufacturers of Hot-mix plants namely Apollo and also by the suppliers of Bag Filter Pollution Control Device namely Gujarat Apollo Equipments Ltd. that the emission of particulate matter shall not exceed 150 mg. vide dated 13-04-1999 addressed to the applicants which is marked as ANNEXURE A-5 which is the maximum prescribed limit as stated in the order dated 10th October, 1996 of this Hon'ble Court in I.A. No. 22.

> 11. The applicant submits that the affidavit dated 5th April, 1999 of Central Pollution Control Board referred to in the order dated 06-04-1999 of this Hon'ble Court does not state the limits and norms prescribed under the Air [Prevention and Control of Pollution] Act, 1981 or the norms prescribed under the Environment Protection Act. Had such information as regards norms/limits and guidelines etc. been given in the said affidavit dated 5th April, 1999 of the Central Pollution Control Board, then the applicant would have been in a position to take expert opinion as regards the efficacy of their proposed Hot-mix plants and the pollution control devices vis-a-vis the norms prescribed, if any. However, it is reiterated that the emission of the particulate matters shall not exceed 150 mg. The plants if allowed to be set up shall function under the supervision and control of the Central Pollution

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Control Board and the applicant undertakes that all the norms and A limits prescribed by the Central Pollution Control Board shall be fully complied with."

One of the objections raised on behalf of Mr. M.C. Mehta and Central Pollution Control Board was that Gurgaon which was in Haryana was only 8 kms. away from IGI Airport and that Hot Mix Plants can be located there. It was contended that if this was done, the Court's earlier Order dated 10.10.1996 would not be contravened. To this objection, the Airports Authority of India has stated in its additional affidavit as under:-

"12. A statement purporting to be in public interest was made at the time of last-hearing on 06-04-1999 that Gurgaon is only 8 kms from the Delhi border. By this apparently innocuous statement a subtle suggestion was sought to be insinuated that the Hot-mix plants can be easily located at the distance of about 8 kms. or thereabouts and there is no necessity to allow the applicant to set up Hot-mix plants within the vicinity of IGI Airport. This is a fallacious argument leading D to a prevented inference.

13. It is true that the distance of Gurgaon border is 8 kms. from National Highway No.8. However Hot-mix plants are not allowed to be set up at the very border of Gurgaon. Further the Airport gate [Terminal II] is not situate at the very National Highway 8 junction. The distance E of Terminal II gate from National Highway junction is a further distance of 8 kms. from National Highway junction. In addition, the distance inside the Airport upto the site of work is 6 kms. Thus, the distance between the nearest point of Gurgaon Border from the site of work is at least 22 kms. in the event the Hot-mix plant is set up at the very F border of Delhi and Gurgaon. It will be ludicrous to expect that the applicant will be allowed to set up the plant at the very border of Gurgaon or even in the midst of city. The total distance of the nearest existing Hot-mix plant in village Silana District, Jhajjar, Haryana is 78 kms. This distance was checked by sending the office vehicle with one of the officers of AAI who left the Airport at 11.30 A.M. and G could return at 5 P.M. on 08-04-1999. There are two railway crossing [Delhi - Jaipur Track] and one border check post of Delhi-Haryana. Time wasted at these check-posts railway crossing is unpredictable. Considering the time taken for a loaded truck to move through the traffic during the day time, minimum time required for travelling one Η way comes to above 2 hours, and the turn over period for one truck

including the loading and unloading period comes to above four and half hours. Since daily laying of 800 MT Bituminous mix work on runway has to be carried out within 4 hours followed by 2 hours for compaction/rolling before opening the runway to aircraft operations, it will not be possible for one truck to make more than one trip in each day. Therefore, in case of HMP outside Airport territory the number of trucks required will be 90 to 100. Movement of such a large number of trucks through normal traffic conditions will pose even more serious pollution problems than that caused by installing a non-polluting HMP. All this traffic congestion and vehicular pollution can be avoided by installing the Hot-mix plant within the vicinity of IGI Airport for the limited purpose of resurfacing the runways. If this is not allowed, it will be very difficult to maintain the temperature of Hot- mix at 120 degree as the trucks will have to travel a distance of minimum of 55 to 70 kms."

The Airports Authority of India also pointed out that if Hot Mix Plants D were located at Gurgaon, they would have to deploy trucks to transport the bitumen material to the Airport for resurfacing of the runways which would be a security hazard. It was pointed out as under:-

> "14. It is submitted that since the work lies inside the high security area, even use of large number of trucks shall also attract security risks to the airport, whereas, if HMP is located at the airport, the Applicant Airport Authority shall have better security control since the trucks shall be operating within airport security watch and ward.

15. That the Airport runways are subjected to heavy loads of the order of 400 to 600 metric tones, as compared to the normal traffic which is of the order of about 20 tonnes. The aircraft induces very high stresses in the pavement and stability requirement and strength requirement of the Airport Pavement is very high, it needs very rigid quality control standards for production of hot mix as well as for laying and completing the mix. Therefore, the work on runway pavement cannot be managed from any far away located HMP. The work on runways cannot be compared to roads and highways where traffic loads are much less and slight variation in quality does not cause problems to the vehicular traffic, whereas on runways even a single piece of stone aggregate can play serious damage to the aircraft engine. Moreover much of the work done during the winter months

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from November to February. If the distance to be covered is between Α 45 to 70 kms, by trucks then the temperature of the Hot-mix material is bound to fall below 120 degree C making it unfit for the purpose of laving and strengthening the runways."

The Airports Authority of India also cited the example of similar work being carried out at the Mumbai Airport. It was pleaded:-

> "16. That the Airport Authority of India have carried out strengthening/ resurfacing of main runway 09/27 at Mumbai Airport by installing 2 No. of hot mix plant of capacity 120 tonnes per hours adjacent to the Airport. The applicant submits that this is the only one technology C available for the resurfacing of runway when the Airport is in operation and does not warrant closure of airport for a longer period than 6 to 7 hours at a stretch. Normally the work is carried out for 5 to 6 hours and then the Airport is open to the operation of air traffic, even some times during Emergences of air borne aircraft we have to stop the work at shorter notice of one hour and clear the runways for emergency D landing of aircraft.

> 17. It is reiterated that after the strengthening and resurfacing has been completed, the runways will not require to be repaired and strengthened for a long number of years. The permission to set up Hot-mix plants within the vicinity of IGI Airport is sought for a period E of one year after the work of repair and resurfacing is complete. The Hot-mix plants shall be dismantled and removed immediately."

Resurfacing of Airport Runways is a work of national importance which has to be carried out so that the IGI Airport is operational and does not cause F any operational hazard at the time of landing or take off. The environmental problem has to be balanced with the necessity of running an International Airport in the Capital of India. The Airports Authority of India has already called for global tenders for the job in question in which one of the eligibility criteria is that the firm must possess adequate capacity of environment friendly Hot Mix Plant, electronically computerised paver finisher, Pnumetic and G conventional rollers and tools and tackles.

Having regard to the facts set out in various affidavits filed before us specially the additional affidavit dated 19.4.1999 filed on behalf of Airports Authority of India, we are of the view that the applicant has to be allowed to set up Hot Mix Plants for resurfacing of the runways at IGI Airport, New H

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A Delhi, We have already allowed the setting up of Hot Mix Plants and their operation for a period of three months to C.P.W.D. for repairing the Delhi roads. We, therefore, allow the application and direct as under:-

(i) The Airports Authority of India shall, after finalising the tenders and awarding the contract for resurfacing of Runways, allow the setting up of Hot Mix Plants in the safe vicinity of IGI Airport at least at a distance of 3 kms. from a populated area.

(ii) The Hot Mix Plants set up by the company whose tender is accepted would be examined by the Central Pollution Control Board on the environmental feasibility, specially to ensure that the particulate matter emission does not C exceed the prescribed limit of 150 mg/Nm3 under the Rules made under the E.P. Act.

(iii) The vehicles on which the resurfacing material is transported shall be loaded and unloaded in the presence of the Security staff of the IGI Airport who shall constantly escort these vehicles to and fro from the Hot Mix Plants to the work site at the IGI Airport and back so as to rule out the possiblity of any security risk.

(iv) The Hot Mix Plants shall be operated for a period of one year from the date on which these are installed or till the resurfacing of the runways is done and completed, whichever is earlier.

If any problem in managing the Hot Mix Plants at the distance indicated above or in the transport of the material or maintenance of its temperature is felt by the Airports Authority of India, it will be open to it to approach this Court for any further directions or modification of the above directions.

The I.A. is disposed of with the above directions.

I.A. disposed of.

V.S.S.

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