

F.No.10-31/2018-IA-III  
 Government of India  
 Ministry of Environment, Forest and Climate Change  
 (IA.III Section)

Indira Paryavaran Bhawan,  
 Jor Bagh Road, New Delhi - 3

Date: 09 March, 2020

To,

**The Director,  
 M/s Directorate of Civil Aviation, Government of Uttar Pradesh,  
 Lucknow Airport, Lucknow - 226 009, Uttar Pradesh  
 Email: ddca.up@nic.in; jewarairport01@gmail.com**

**Subject: Development of Greenfield 'Jewar International Airport' Phase-I & II,  
 Gautam Buddh Nagar, Uttar Pradesh by M/s Directorate of Civil Aviation,  
 Government of Uttar Pradesh - Environmental Clearance - reg.**

Sir,

This has reference to your online proposal No. IA/UP/MIS/74694/2018 dated 17.06.2019, submitted to this Ministry for grant of Environmental Clearance (EC) in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986.

2. The proposal for grant of environmental clearance to the project 'Development of Greenfield "Jewar International Airport Phase-I & II", Gautam Buddh Nagar, Uttar Pradesh by M/s Directorate of Civil Aviation, Government of Uttar Pradesh was considered by the Expert Appraisal Committee (Infra-2) in its 42<sup>nd</sup> meeting held during 10-12 July, 2019 and 48<sup>th</sup> meeting held during 28-29 January, 2020. The details of the project, as per the documents submitted by the project proponent, and also as informed during the above meeting, are as under:-

- (i) Spread over an area of 1,334.00 ha, proposed site for the airport is located between latitude 28°10'09.87"N and longitude of 77°38'20.41"E, north of Jewar Village, in Gautam Buddh Nagar District of Uttar Pradesh. The Yamuna Expressway is located at about 700 meters from the project site. The site is about 70 km from IGI Airport.
- (ii) In the area of development 1,334.00 ha has been earmarked for development of the airport. The land utilization at present consists of settlements and agricultural area. The land also consists of government land. Existing Settlements and structures falling within the airport area shall be resettled before any demolition work. This area is a part of the notified area of Yamuna Expressway Industrial Development Authority. Project has been designed as per International standards to cater A380 aircrafts. The master plan for the airport is designed to conforms to the Standards and Recommended Practices (SARPs) formulated by the International Civil Aviation Organization (ICAO) and promulgated by Directorate General of Civil Aviation (DGCA), India. Land acquisition & R&R will be undertaken by the Collectors office/ State Govt. The details of the project is as follows:

Components	Phase I (2020-2022)		Phase II (2027-2030)		Total	
	No.	Area (sqm)	No.	Area (sqm)	No.	Area (sqm)
Runway	1	2,49,000	1	2,34,000	2	4,83,000
Hangar & Aircraft Maintenance Facility	1	1,77,672	1	1,96,733	2	3,74,405
Commercial Development	2	1,39,002	0	0	2	1,39,002
AAI/ BCAS/ MET	1	10,000	0	0	1	10,000
JIA MGT. Block	2	10,000	0	0	2	10,000
CISF /Police Station	1	10,000	0	0	1	10,000

Car Parking	1	48,491	2	39,584	3	88,075
Utilities	1	65,630	3	56,627	4	1,22,257
Terminal	1	71,313	1	68,141	2	1,39,454
RESA 240X90	2	21,600	2	21,600	4	43,200
Maintenance Building	1	2,800	1	2,800	2	5,600
AGL Sub Station	1	2,800	1	2,800	2	5,600
RADAR	1	9,933	1	9,891	2	19,824
Express Cargo Terminal	1	16,490	1	81,010	2	97,500
Cargo Terminal	1	30,984	1	31,955	2	62,939
Fire Station	2	1,200	3	4,600	5	5,800
Isolation Bay	1	16,024	1	16,025	2	32,049
Apron (Terminal)	1	1,64,556	1	1,77,213	2	3,41,769
Apron (Cargo)	1	62,220	1	91,396	2	1,53,616
Taxi lane + Taxiway	1	2,83,370	1	15,03,928	2	17,87,298
Truck Bay	1	1,37,500	1	13,750	2	1,51,250
Cargo Admin and Utilities	1	1,60,682	0	0	1	1,60,682
STP	1	20,000	0	0	1	20,000
Approach Road	1	3,12,627	0	0	1	3,12,627
Fuel Facility	1	15,000	1	25,000	2	40,000
ATC	1	3,848	0		1	3,848
DVOR	0	0	1	2,82,743	1	2,82,743
Terminal Building gen. Aviation	0	0	1	3,000	1	3,000
General Aviation Apron	0	0	1	24,014	1	24,014
Sub-Station	0	0	1	4,062	1	4,062
<b>Total Area of Development</b>		<b>20,42,743</b>		<b>28,90,872</b>		<b>49,33,614</b>

- (iii) The daily consumption of water during operation phase will be about 17,267.5 KLD of which 3,040.8 KLD will be fresh water requirement. The water for the project during operation and construction phase will be drawn from Jewar distributaries and Kasna STP located at Greater Noida.
- (iv) During operation phase, around 9,889.9 KLD of wastewater will be generated. The wastewater will be treated in the STP having capacity of 12 MLD using MBBR technology. The treated water will be re-used for landscaping and flushing purpose at the airport.
- (v) Infrastructure like spillage collection chamber, concrete floor shall be provided at places of fuel storage to ensure minimum spillage of oil thereby reducing contamination of soil. Biodegradable portion of MSW will be used to generate manure / biogas. Recyclable waste will be sold to recyclers. Hazardous waste shall be treated in accordance with Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016. Spent oil from DG sets and other sources shall be stored in concrete floors and sent to authorize recyclers.
- (vi) Power requirement for the 1<sup>st</sup> Phase is 30 MVA and Phase-2 is 70 MVA. The same will be met from the State Authority or private company. 6 DG sets of 2 MVA capacity each will serve as back-up during power failure.
- (vii) Landscaping/ plantation/ greenery will be developed on 133.4 ha area. Indigenous species shall be planted in consultation with horticulturist and forest department.
- (viii) ToR was granted by MoEFCC vide letter F.No.10-31/2018-IA-III dated 12.06.2018. The ToR was for phase I & II only i.e. for the specified traffic (30 MPPA) and cargo tonnage (1 MTPA) in the year 2033-34 as expected.
- (ix) National Board for wild life clearance is not required as there are no National Parks or Wildlife Sanctuaries located within 10 km radius of the proposed project.
- (x) Public hearing conducted on 27.11.2018 at Primary School, Village Kishorepur, Jewar.
- (xi) Investment cost of the project is Rs. 7,291 Crore.

- (xii) Employment potential: Permanent employment- during construction: 125 Employees, During Operation: 9000 (Phase 1), During Operations: 20000 (phase 2). Temporary- During Construction: On an average 750 per day and a maximum of 1100 on any peak day, During Operations: 900.
- (xiii) Benefits of the project: Economic output with a multiplier of 1.6 due to investment at airport. In present value terms, this is estimated to be around Rs. 63,500 Crores. Tax revenue to the government from the economic output: This has been assumed to be only 1% of the economic output. In present value terms, this comes out to be around Rs. 635 Crores. The income from revenue share from the airport, in present value terms has been estimated to be around Rs. 4,175 Crores. The tax revenue from airport, in present value term works out to be around Rs. 2,100 Crores. The lease rentals from the airports to the government, in present value terms, have been estimated to be around Rs. 1,365 Crores.

3. The project/activity is covered under category 'A' of item 7(a) 'Airports' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at Central Level by sectoral EAC.

4. The proposal was earlier considered by the EAC (Infra-2) in its 42<sup>nd</sup> meeting held during 10-12 July, 2019, wherein the EAC observed that the EIA/EMP report submitted by the project proponent does not cover the all environmental aspect of the proposed airport. After detailed deliberation EAC asked the project proponent to submit additional details. Project Proponent has submitted the additional information on Ministry's website on 04.01.2020. The details are as follows:

**(i) Status of permission for tree cutting from Forest Department.**

Forest Department has granted the permission for felling of 11,460 trees standing within the proposed site vide letter no. 2307/22-1 dated 10.12.2019 and 2342/22-1 dated 12.12.2019. Total 11,460 trees need to be felled/ shifted due to the project. The details of trees are as follows:

S. No.	Village Name	Number of Trees need to cut	Number of Trees need to shift	Total
1.	Ranhera	4659	61	4720
2.	Rohi	3204	12	3216
3.	Parohi	153	0	153
4.	Kishorepur	554	06	560
5.	Dayantpur	2680	99	2779
6.	Banwaribans	32	0	32
<b>Total</b>		<b>11282</b>	<b>178</b>	<b>11460</b>

**(ii) Afforestation plan for plantation.**

Afforestation Action Plan has been prepared by DFO Gautam Buddha Nagar as follows:

S. No.	No. of Trees to be planted	Proposed Location	Proposed Area (ha)	Cost for Afforestation (Rs.)	Period
1.	60,000	Proposed green belt of Sector- 22D and Sector 29-30	30	1,42,63,000	2019-20 to 2022-23
2.	52,820	11 ha in Murshadpur forest block and 15.5 ha in Gulistanpur forest block	26.5	1,21,32718	

<b>Total</b>	<b>1,12,820</b>		<b>56.5</b>	<b>2,63,95,718</b>	<b>2019-20 to 2022-23</b>
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The cost for Compensatory Afforestation is 10 times i.e. Rs. 2,63,95,718 has been already transferred to Forest Department vide cheque no. 275502 dated 13.12.2019 and also the tree feeling cost has been given to the Forest Department vide cheque no. 275503 dated 13.12.2019

**(iii) Restoration plan for water bodies including channels.**

Restoration plan for water bodies including channels present and proposed scenario - wise is as follows:

<b>Name of drain</b>	<b>Present Scenario</b>	<b>Proposed Scenario</b>
Pathwaya Nala	Pathwaya Nala, running north-south at east end needs diversion for the development of airport.	Pathwaya Nala is 74.4 km in length. This is a natural drain. From 49.0 km to 54.4 km of this drain would get affected as this stretch falls within proposed airport site. Total cost of re-establishment has been proposed as Rs.2479.35 lakhs.
Drainage of Bajauta Distributary	Bajauta Distributary is 23 km in length having peak discharge of 52 cumec.	From 0 km to 0.450 km of this distributor need to be diverted since it is falling within proposed air port site. Hence, by providing head regulator and cross regulator the diversion of Bajauta Distributary has been proposed for about 1km.
Dayantpur Minor	Dayantpur Minor is 3.1 km in length having peak discharge of 23 cumec.	From 1.765 km to 3.100 km of this drain is falling within the project site having command area in 340 ha of within proposed boundary of Jewar Airport. Hence, Dayanatpur Minor has been handed over for the development of Airport Project. Thus, the length of Dayanatpur Minor will be curtailed from 0.000 km to 1.765 km and re-establishment of this drain has been proposed.
Drainage of the Kishorepur Minor:	Kishorepur minor, running from NW to SE is cutting the site diagonally.	Kishorepur Minor is 4.8 km in length having peak discharge of 5.5 cumec and Cultural Command Area of 610 ha. Since the drain entirely falling within proposed project site, it has been handed over for the project. Head to tail of Kishorepur Minor and its command area is falling within project site, hence it has been handed over for the project.

**(iv) Conservation plan for Birds and Fauna in consultation with Wildlife Institute of India (WII).**

Wildlife Institute of India (WII) has been engaged for development of Conservation Plan for Birds and fauna. Interim Report and Inception Report prepared by WII has been submitted. The Final Report in this regard is expected by end of July, 2020. Proponent will ensure the implementation of WII's recommendation throughout the project cycle during preconstruction, construction and operational stages.

The present document summarizes work done between 02.11.2019 – 15.12.2019 including field surveys and lab-based work. A total of six species of mammals were observed in the proposed GJIA site as well as within its 10 km buffer. A total of 60 species of bird species were recorded during the present survey. A total of 28 independent groups of Blackbuck were observed during the present survey. In the proposed Greenfield Jewar International Airport (GJIA) site, they can be observed on the eastward of the Jewar-

Bulandshahar road towards the south-east corner. A total of 21 independent groups of Nilgai were observed during the present survey. During survey, Golden Jackal (Canis aureus) on two separate occasions comprising two individuals on each occasion were observed. Jungle Cat (Felis chaus) was observed twice as a single individual in the proposed GJIA site. In total, 64 sarus cranes in 21 independent observations were observed across the landscape during the survey. Egyptian vulture (Neophron percnopterus) is an endangered species that was recorded at a few places on four different occasions during the survey. A total of 24 independent observations of Indian Peafowl were made across the GJIA landscape. A total of 99 perennial water bodies were recorded across the GJIA landscape

**(v) Study on filling of 14 ponds and mitigation measures especially with respect to water conservation.**

14 ponds (Total Area: 3.85 ha) located within proposed site are likely to be getting affected due to the proposed development. The details are as follows:

Details of ponds located within proposed Jewar International Airport						
S. No.	Area of pond (sqm)	Latitude	Longitude	Revenue Village Name	Survey No/s	Remarks
1.	833.76	28°10'54.78"N	77°34'33.79"E	Dayanatpur	1014	Pvt.
2.	4002.81	28°10'42.82"N	77°34'44.01"E	Dayanatpur	1054, 1055	1054 (Pvt.)/1055 (Pvt.)
3.	1473.32	28°10'48.76"N	77°35'40.95"E	Dayanatpur	1164, 1210	1164 (Govt.-Khad Gadde), 1210 (Govt.-Abadi)
4.	932.299	28°10'36.94"N	77°35'33.45"E	Dayanatpur	1267	Pvt.
5.	2021.32	28°10'31.60"N	77°35'35.80"E	Dayanatpur	1258	1258 (Govt.- Graveyard)
6.	503.676	28°10'28.72"N	77°35'29.04"E	Dayanatpur	1827	Pvt.
7.	8766.33	28°9'56.76"N	77°35'59.51"E	Kishorpur	162	162 (Govt.-Pond)
8.	619.148	28°10'44.89"N	77°36'11.35"E	Rohi	96	Pvt.
9.	5357.07	28°10'50.97"N	77°36'31.31"E	Rohi	46, 48, 49	46 (Pvt.), 48 (Pvt. & Govt.), 49 (Pvt. & Govt.)
10.	1800.63	28°09'59.63"N	77°37'24.88"E	Rohi	598	Govt.
11.	9463.3	28°10'07.24"N	77°37'39.88"E	Rohi	652, 651	652 (Govt.-Pond), 651 (Govt.-Nabin Prati)
12.	990.611	28°10'03.58"N	77°37'41.01"E	Rohi	650	650 (Govt.-Pond)
13.	1336.26	28°10'01.94"N	77°37'43.37"E	Rohi	969	969 (Govt.-Pond)
14.	409.94	28°09'35.59"N	77°37'47.06"E	Parohi	336	Private
<b>Total Area (sqm)</b>						<b>38,510.474</b>
<b>Total Area (ha)</b>						<b>3.85</b>

9 Land parcels of total area **6.3370 ha** in Jewar Tehsil have been allocated by Revenue Department for creation of new pond as a mitigative action. The details are as follows:

Land Allocated by Collector, Gautam Buddha Nagar for Creation of New Pond					
No.	Village Name	Land use	Survey No.	Gata No.	Area (ha)
1.	Aakalpur	Barren	239	297	1.3590
2.	Faloda Bangar	Barren	647	746 Kha	2.5630
3.	Takipur Bangar	Barren	338	236 Ma	0.0760
4.	Takipur Bangar	Barren	338	237 Ma	0.0250

5.	Takipur Bangar	Barren	338	246	1.0050
6.	Takipur Bangar	Barren	338	277 Ma	0.2020
7.	Takipur Bangar	New Fallow Land	336	236 Ma	0.0410
8.	Takipur Bangar	New Fallow Land	336	242	1.0120
9.	Takipur Bangar	New Fallow Land	336	277 Mi	0.0540
<b>Total Land (ha)</b>					<b>6.3370</b>

- (vi) Submitted Wind rose diagram for one year.
- (vii) Revised Corporate Environment Responsibility (CER) plan as compensatory afforestation cannot be part of CER.

The estimated capital cost of the project is Rs. 3,754 Crore for Phase I and Rs. 3,537 Crore for Phase II. Therefore, CER (Corporate Environment Responsibility) cost is **Rs. 18.7895 Crore for Phase I and Rs. 17.7095 Crore for Phase II**. The allocated CER budget would get allocated in villages like Rampur Bangar, Nilaouni, Dungarpur Rilka, Chandpur and Achheja Buzurg.

5. The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues in its 48<sup>th</sup> meeting held during 28-29 January, 2020, recommended the project for grant of environmental clearance with stipulated specific conditions along with other Standard EC Conditions as specified by the Ministry vide OM dated 04.01.2019 for the said project/activity, while considering for accord of environmental clearance. Based on the recommendation of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance to the project 'Development of Greenfield "Jewar International Airport Phase-I & II", Gautam Buddh Nagar, Uttar Pradesh by M/s Directorate of Civil Aviation, Government of Uttar Pradesh under the provisions of the EIA Notification, 2006 and amendments/circulars issued thereon, and subject to the specific and general conditions as under:-

#### **A. Specific Conditions:**

- (i) As proposed, Environmental Clearance is for 'Development of Greenfield 'Jewar International Airport' Phase-I & II, Gautam Buddh Nagar, Uttar Pradesh by M/s Directorate of Civil Aviation, Government of Uttar Pradesh.
- (ii) The land acquisition / purchase shall be in conformity to the LARR Act, 2013 and any other laws and regulations governing land acquisition.
- (iii) Clearance from Directorate General of Civil Aviation (DGCA) and Airports Authority of India (AAI) for safety and project facilities shall be obtained.
- (iv) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (v) Conservation plan for Birds and Fauna in consultation with Wildlife Institute of India (WII) shall be submitted within six month from grant of this clearance and shall be implemented in letter and spirit.
- (vi) Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities shall be complied with.
- (vii) Total water requirement is estimated as 17267.5 KLD, while fresh water requirement will be 3040.8 KLD. The water for the project during operation and construction phase will be drawn from Jewar distributary and Kasna STP located at Greater Noida. As proposed, no ground water shall be used in the project.
- (viii) Aircraft maintenance, sensitivity of the location where activities are undertaken, and control of runoff of potential contaminants, chemicals etc shall be properly

implemented and reported.

- (ix) Waste water generated from the Airport will be treated in Sewage Treatment Plant of 12 MLD capacity. Treated waste water will be used for landscaping and flushing. There will be zero discharge of treated waste water from airport.
- (x) During construction and operational phase AAQ monitoring should include PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NOx, NH<sub>3</sub>, CO, CH<sub>4</sub> and Benzene.
- (xi) During airport operation period, noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations. A monitoring station for ambient air and noise levels shall be provided in the village nearest to the airport.
- (xii) Traffic Management Plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time. Traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- (xiii) An onsite disaster management plan shall be drawn up to account for risks and accidents. This onsite plan shall be dovetailed with the onsite management plan for the district.
- (xiv) Top soil shall be separately stored and used in the development of green belt.
- (xv) Green belt shall be developed in area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter-alia cover the entire periphery of the Air Port. Plantation activity should be taken up under the expert guidance for forest department of Government of Uttar Pradesh. As far as possible monocultural plantation should be avoided.
- (xvi) The plantation species in and around Airport site should be carefully chosen to avoid bird nesting and to improve pollution control and noise control measures. Water intensive and/or invasive species should not be used for landscaping.
- (xvii) The proposed 10 times compensatory plantation need to be monitored by the Government of Uttar Pradesh so that the target of planting 1,12,820 saplings is achieved in a time bound manner, their survival rate is monitored and mortality is replenished. In case of non-survival of any transplanted tree, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree) shall also be done and maintained.
- (xviii) A water security plan to the satisfaction of the CGWA shall be drawn up to include augmenting water supply and sanitation facilities and recharge of ground water in at least two villages and schools, as part of the C.S.R. activities.
- (xix) Energy conservation measures like installation of LED should be integral part of the project design and should be in place before project commissioning.
- (xx) Initiatives such as Green Infrastructure Development program, adoption of less emission intensive technologies, renewable energy program, electrical vehicles and Airport Carbon Accreditation need to be adopted to reduce its impact on climate change and Green House Gas (GHG) emissions as per environmental best practices governing Greenfield airports.
- (xxi) Provision of Electro-mechanical doors for toilets meant for disabled passengers shall

be ensured. Children nursing/feeding room shall be located conveniently near arrival and departure gates.

(xxii) The project proponent shall comply with the International Best Practices on environment management as applicable to the Airport project.

(xxiii) The company shall draw up and implement a Corporate Social Responsibility Plan as per the Company's Act of 2013.

(xxiv) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 01.05.2018, and proposed by the project proponent, an amount of Rs. **18.7895 Crore** for **Phase I** and **Rs. 17.7095 Crore** for **Phase II** @0.5% of the project cost shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as **Health Related Facilities** (Construction of toilets and water tank in community as part of Swachh Bharat Abhiyan, Construction of Health Centre, Refurbishment and maintenance of existing Health Centre Organizing Health camps, Organizing Special Health Camps for eye, heart and maternal health Mobile Health Clinic), **Education Related Facilities** (Refurbishment of existing schools, Strengthening of ITI at Jewar and Scholarship for student), **Solid waste Management Facilities** (Providing VATs for Municipal Solid Waste in villages, Developing MSW disposal site with management, Providing training for solid waste management to villagers), **Social Facilities** (Installation of Hand-pumps, Repair and Maintenance of Hand-pumps/deep tube wells used for drinking water, Construction and Maintenance of village roads @ 50 km/year and Providing solar light in village common areas) and **Miscellaneous Facilities** (Skill Development- basic training programmes and Creation of irrigation facilities for farmers. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

## **B. Standard Conditions:**

### **I. Statutory compliance:**

- i. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- ii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- iii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.

### **I. Air quality monitoring and preservation:**

- i. During construction and operational phase AAQ monitoring should include PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NOx, NH<sub>3</sub>, CO, CH<sub>4</sub> and Benzene.
- ii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NOx in reference to SO<sub>2</sub> and NOx emissions) within and outside the airport area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iii. Soil and other construction materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty material wet

- iv. The excavation working area should be sprayed with water after operation so as to maintain the entire surface wet.
- v. Excavated materials shall be handled and transported in a manner that they do not cause any problems of air pollution.
- vi. The soil/construction materials carried by the vehicle should be covered by impervious sheeting to ensure that the dusty materials do not leak from the vehicle.

## **II. Water quality monitoring and preservation:**

- i. Aircraft maintenance, sensitivity of the location where activities are undertaken, and control of runoff of potential contaminants, chemicals etc shall be properly implemented and reported.
- ii. Run off from chemicals and other contaminants from aircraft maintenance and other areas within the airport shall be suitably contained and treated before disposal. A spillage and contaminant containment plan shall be drawn up and implemented to the satisfaction of the State Pollution Control Board.
- iii. Proper drainage systems, emergency containment in the event of a major spill during monsoon season etc. shall be provided.
- iv. The runoff from paved structures like Runways, Taxiways, can be routed through drains to oil separation tanks and sedimentation basins before being discharged into rainwater harvesting structures.
- v. Storm water drains are to be built for discharging storm water from the air-field to avoid flooding/water logging in project area. Domestic and industrial waste water shall not be allowed to be discharged into storm water drains.
- vi. Rain water harvesting for roof run-off and surface run-off, as plan submitted should be implemented. Rain water harvesting structures shall conform to CGWA designs. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease.
- vii. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- viii. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
- ix. A detailed drainage plan for rain water shall be drawn up and implemented.
- x. No ground water shall be extracted without prior permission from CGWA.
- xi. A water security plan to the satisfaction of the CGWA shall be drawn up to include augmenting water supply and sanitation facilities and recharge of ground water in at least two villages and schools, as part of the C.S.R. activities.

## **III. Noise monitoring and prevention:**

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. Noise from vehicles and power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.
- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.



- iv. During airport operation period, noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations. A monitoring station for ambient air and noise levels shall be provided in the village nearest to the airport.
- v. Where construction activity is likely to cause noise nuisance to nearby residents, restrict operation hours between 7 am to 6 pm.

#### **IV. Energy Conservation measures:**

- i. Energy conservation measures like installation of LED for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.

#### **V. Waste management:**

- ii. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities shall be complied with.
- iii. Soil stockpile shall be managed in such a manner that dust emission and sediment runoff are minimized. Ensure that soil stockpiles are designed with no slope greater than 2:1 (horizontal/vertical).
- iv. The project activity shall conform to the Fly Ash notification issued under the E.P. Act of 1986.
- v. Solid inert waste found on construction sites consists of building rubble, demolition material, concrete; bricks, timber, plastic, glass, metals, bitumen etc shall be reused/recycled or disposed off as per Solid Waste Management Rules, 2016 and Construction and Demolition Waste Rules, 2016.
- vi. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
- vii. The project proponents shall implement a management plan duly approved by the State Pollution Control Board and obtain its permissions for the safe handling and disposal of:
  - a. Trash collected in flight and disposed at the airport including segregation, collection and disposed.
  - b. Toilet wastes and sewage collected from aircrafts and disposed at the Airport.
  - c. Wastes arising out of maintenance and workshops
  - d. Wastes arising out of eateries and shops situated inside the airport complex.
  - e. Hazardous and other wastes
- viii. The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016. Recycling of wastes such as paper, glass (produced from terminals and aircraft caterers), metal (at aircraft maintenance site), plastics (from aircrafts, terminals and offices), wood, waste oil and solvents (from maintenance and engineering operations), kitchen wastes and vegetable oils (from caterers) shall be carried out. Solid wastes shall be disposed in accordance to the Solid Waste Management Rules, 2016 as amended.
- ix. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- x. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.



**VI. Green Belt:**

- I. Green belt shall be developed in area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the Air Port.
- II. Top soil shall be separately stored and used in the development of green belt.

**III. Public hearing and Human health issues:**

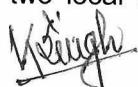
- i. Construction site should be adequately barricaded before the construction begins.
- ii. Traffic congestion near the entry and exit points from the roads adjoining the airport shall be avoided. Parking should be fully internalized and no public space should be utilized.
- iii. Provision of Electro-mechanical doors for toilets meant for disabled passengers. Children nursing/feeding room to be located conveniently near arrival and departure gates.
- iv. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- v. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- vi. An onsite disaster management plan shall be drawn up to account for risks and accidents. This onsite plan shall be dovetailed with the onsite management plan for the district.
- vii. Occupational health surveillance of the workers shall be done on a regular basis.

**IV. Corporate Environment Responsibility:**

- i. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- ii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- iv. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

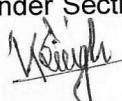
**V. Miscellaneous:**

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of



which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The criteria pollutant levels namely; PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NOx (ambient levels) shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that made during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.



6. This clearance is subject to final outcome of the Writ-Public Interest Litigation (WPIL) No. 51312/2017 in the matter of Civil Society of Agra through Secretary Vs Union of India & 5 Others pending in the Hon'ble High Court of Judicature at Allahabad.

7. This issues with the approval of the Competent Authority.

  
(Dr. Vinod K. Singh)  
Scientist E

Copy to:

- 1) The Secretary, Department of Environment, Government of Uttar Pradesh, Lucknow.
- 2) The Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Kendriya Bhavan, 5<sup>th</sup> Floor, Sector-H, Aliganj, Lucknow - 226024.
- 3) The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
- 4) The Member Secretary, Uttar Pradesh Pollution Control Board, Building. No. TC-12V, Vibhuti Khand, Gomti Nagar, Lucknow -226 010
- 5) Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.
- 6) Guard File/ Record File/ Notice Board.
- 7) MoEFCC website.

  
(Dr. Vinod K. Singh)  
Scientist E