भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

Dated: 27.05.2026

To,

The Director,
Ministry of Environment, Forest & Climate Change (IA Division)
Indira Paryavaran Bhavan, Jor Bagh Road,
New Delhi

Sub: Submission of Six Monthly Compliance Report of Stipulated Conditions of Environmental Clearance Expansion of Civil Enclave at Jammu Airport over an area of 40,000m2 proposed by Airports Authority of India by Ms Airports Authority of India for submission Period of April 2025 to September 2025.

Ref. No.21-46/2023-IA.III date-07.12.2023

Sir,

This has reference to the EC Identification no. **EC23A2902JK5192762N** and EC letter No. **21-46/2023-IA.III date-07.12.2023** vide which we have been asked to submit the Compliance with the specific and general conditions.

In view of above, we are approaching you by submitting a (Soft) copy of the following information/documents for your kind perusal:

1. Point-wise compliance of the stipulated environmental condition/safeguards.
2. Supporting Documents

Thanking You,
Yours Sincerely,

M/s Airports Authority of India
(Authorized Signatory)

Copy to:

1. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD- cum- Office Complex, East Arjun Nagar, New Delhi- 110032.
2. The Member Secretary, Jammu and Kashmir State Pollution Control Board, Parivesh Bhawan, Transport Nagar, Narwal, Jammu.

सिविल विमान क्षेत्र, जम्मू कैंट–180003 (जम्मू और कश्मीर) दूरभाष : 2437843 फैक्स : 0191–2454318, 0191–2455067
Civil Airport, Jammu Cantt - 180003 (Jammu Kashmir) Phone : 2437843 Fax : 0191-2454318, 0191-2455067

1 INTRODUCTION

1.1 Introduction

M/s Airports Authority of India has proposed the expansion of Civil Enclave at Jammu Airport over an area of 40,000 m² proposed by Airports Authority of India, District- Jammu, UT-Jammu and Kashmir.

This Project has obtained its Environmental Clearance from the Ministry of Environment, Forest and Climate Change (New Delhi) with certain conditions.

Status of the Project:
The project is under construction as per EC conditions securing Consent to Establish and other requisite permissions.

1.2 Purpose of the Report

As per the "Sub Para (i)" of "Para 10" of EIA Notification 2006, it is stated that *"It shall be mandatory for the project proponent to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the concerned regulatory authority, on 1st June and 1st December of each calendar year"* and as per compliance condition mentioned in Environment Clearance Letter.

The regulatory authorities in this case are MoEF & CC Delhi and CPCB Delhi & Jammu & Kashmir State Pollution Control Board Jammu. Various scheduled Site Visits were conducted by a team of Experts to Monitor Pollution-related parameters as defined by CPCB / JKSPCB. Samples for water and soil were also collected by NABL/ MoEF approved laboratory for analysis.

Based on the Specific and General Conditions mentioned in the EC Letter, a Compliance Report has been prepared and submitted regularly to the authority.
The Environmental assessment has been carried out to verify:

1) The proposed project has not any adverse effect on the project site as well as it's surrounding.
2) There is compliance with the conditions stipulated in the Environmental Clearance Letter.
3) The Project proponent is implementing the environmental safeguards in the true spirit.
4) The non-conformity in the project with respect to the environmental implications of the project.
5) The project proponent is implementing the environmental pollution mitigation measures as suggested in the approved Form-1 and Environmental Management Plan.

1.3 Methodology for Preparation of Report is as follows:

1) Study of EC Letter & Related Documents.
2) Site Visits by a Team of Experts.
3) Monitoring of Environment Parameters, viz. Ambient Air, Water, Noise & Soil by the NABL/MoEF labs.
4) Interpretation of Monitoring Results.
5) Preparation of the Half yearly Environmental Compliance Report.

1.4 Generic Structure of Report:

1) Purpose of the Report, explaining the need of a Compliance Report and the Methodology Adopted for the preparation of Report.
2) Compliance Report, explaining the entire General & specific conditions in the EC Letter and providing details w.r.t. each condition/ guideline.
3) Supporting Documents which are mandatory for the project.

2

ADHERENCE TO SPECIFIC AND GENERAL CONDITIONS

I. Specific Conditions

Sr.No.	Conditions	*Replies*
1.	The entire area should be cordoned off with large tin shed (at least up to 6.0 m) so that no dust goes outside from the active area during construction phase.	Agreed & is being complied.
2.	All measures should be taken as per rules for control of pollution during construction.	All measures have been undertaken to control pollution during construction.
3.	At least 2 % of moisture should be maintained all time in all materials (except construction materials, cement and other equivalent materials) including excavated material during construction phase.	Agreed & is being complied.
4.	As the building construction progresses, the inside area should be covered with fine screen cloth.	Complied.
5.	Construction activities that are likely to cause noise nuisance to nearby residents should be carried out only between 6am to 8pm.	Complied.
6.	Fresh water requirements from local authority shall not exceed 465 KLD. Extraction of ground water shall be subject to the permission of Central Ground Water Authority (CGWA).	Agreed & noted. Certificate of registration for Borewell in Jal Sakti Department (PHE). The Connection no. for Borewell registration is 1211030000114 dated-22.05.2023. Certificate of Registration for Borewell is attached as **Annexure-2.**
7.	The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing, and the quality of water being supplied through spray faucets attached to toilet seats.	Noted & will be complied.
8.	The proponent shall also provide electric charging points in the parking areas for e-vehicles as committed.	25 Nos. of EV Charging points are planned for installation at NTB Site.
9.	The construction of the structures shall be undertaken as per the plans approved by the concerned local authorities/local administration, meticulously conforming to the existing local and central rules & regulations.	The construction of the structures is being undertaken as per the plans approved by the concerned local authorities/local administration, meticulously conforming to the existing local and central rules & regulations.
10.	The construction material shall be obtained only from approved quarries. In case new quarries are to be opened, specific approvals from the competent authority shall be obtained in this regard.	Complied.
11.	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.	Noted & being complied.
12.	Vehicles hired for bringing construction material to the site should be in good conditions and should have a	Agreed & complied.

	pollution check certificate and should be operated only during non-peak hours, as applicable.	
13.	Ready mixed concrete must be used in building construction.	Whenever required ready mixed concrete is being used in building construction.
14.	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	Pre-mixed concrete, curing agents are being used wherever applicable to reduce the water demand during construction.
15.	Construction spoils, including bituminous materials and other hazardous materials, must not be allowed to contaminate watercourse and the dumpsites for such materials must be secured so that they should not leach into the ground water.	Agreed & is being complied. Moreover, till date no Bituminous Material is used.
16.	Appropriate drainage channels need to be designed to take care of the water flow into the nearest water course/rivers, etc. It should be ensured that sustainable water flow in the various channels of watershed in the plateau is maintained.	Agreed & complied with. Drainage system has been designed with 26 Nos. Recharge Wells.
17.	Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.	Noted and complied.
18.	Water conservation fixtures shall be provided and water balance shall be maintained through verifiable metering for fresh raw water, recycled as well as rain water harvesting.	Noted and will be complied.
19.	Use of environment friendly materials in bricks, blocks, and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.	Agreed & complied. AAC Blocks are used instead of Red Bricks. Also, PPC cement is being used.
20.	Notification GSR 568 dated 18.06.2018 of MoEF&CC regarding Ambient Air Quality Standards with respect to Noise in Airport Noise Zone shall be complied with.	Agreed & is being complied.
21.	Integrated Noise Model (INM) be more frequently used and mitigation undertaken during the operational phase of the project shall be recorded and reported.	Noted and will be complied.
22.	Debris and Muck Management Plan to be prepared and implemented so as to avoid spillage of muck and debris on the slopes.	Noted.
23.	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).	Noted & is being maintained accordingly.
24.	No tree can be felled/transplant unless exigencies demand & need to be cut with prior permission from the concerned Authority. Efforts to be made to transplant the trees to other locations in the same vicinity by using appropriate mechanical devices which are available these days. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Where the trees need to be cut, compensatory plantation in the ratio of 1:10 (i.e., planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Efforts be made to plant indigenous species which are tall in size rather than small saplings. The survival rate studies on the plantation shall be done after every 3 years.	No tree cutting is involved.

25.	The plantation species in and around proposed 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.	Noted.
26.	Energy conservation to the extent of at least 20% shall be incorporated, including water conservation (reuse/recycle, rainwater harvesting and water efficient fixtures) and other green building practices for various buildings proposed within the New Civil Enclave. The PP shall consider ECBC Guidelines 2009 to achieve energy efficiency. The energy conservation measures shall be subject to periodic verification by the competent Energy Conservation/ Efficiency authority in the State.	Agreed & will be complied.
27.	Adopt 'Zero Carbon Programme' both in the construction and operational phases of the proposed project.	Noted and is being complied as per GRIHA.
28.	The project proponent shall strictly comply with the concern raised during public consultation and commitment(s) made by them in the same and recommendation(s) made by EAC in compliance to the OM as per F. No. 22-65/2017-IA.III dated 30.09.2020 issued by MoEF&CC as amended from time to time.	Commitments made by us for addressal of public consultation issues will be undertaken as recommended by EAC.

II Statutory Compliance:

Sr.No.	Conditions	*Replies*
1.	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980. In case of the diversion of forest land for non-forest purpose involved in the project.	Not Applicable as no forest land is involved.
2.	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	Not Applicable.
3.	The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan I Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area)	Noted & Agreed. The approved Site – specific Conservation Plan/ wildlife Management Plan will be implemented in consultation with the State Forest Department.
4.	The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.	CTE has been obtained from J&K Pollution Control Committee Vide No. PCC/digital/24024335931 of 2024 dated 01.04.2024 and the copy is attached as **Annexure-1.**
5.	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	Agreed & Noted. Certificate of registration for Borewell in Jal Sakti Department (PHE). The Connection no. for Borewell registration is 1211030000114 dated-22.05.2023.

		Certificate of Registration for Borewell is attached as **Annexure-2.**
6.	Clearance from Directorate General of Civil Aviation (DGCA) and Airports Authority of India (AAI) for safety and project facilities shall be obtained.	Not Applicable as the proposed expansion is proposed by the Airports Authority of India. The Jammu airport operation is under the control of the IAF and AAI is responsible only for the operation of the Civil Enclave.
7.	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.	The proposed project is under construction phase Power requirement for the operations will be sourced from the JPDCL.
8.	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.	Noted and Agreed. The proposed project is in construction phase statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, fire Department, Civil aviation Department will be obtained as per applicability.

2. Air Quality Monitoring and Preservation

S. No.	Conditions of Environmental Clearance	*Status of Compliance*
i	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 ie and PMs in reference to PM emission, and SOx and NOx in reference to SO; 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	Noted and agreed. We are monitoring within and outside the airport area have installed system to carryout Ambient Air Quality
ii	Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board	Noted and agreed.
iii	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 and the 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	A detailed traffic management and traffic decongestion plan has been enclosed as **Annexure-3.**
iv	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.	Noted and being complied. Soil and other construction materials is being sprayed with water prior to any loading, unloading or transfer operation by the contractor.

v	The excavation working area should be sprayed with water after operation so as to maintain the entire surface wet.	Noted and is being complied.
vi	Excavated materials shall be handled and transported in a manner that they do not cause any problems of air pollution	Noted and is being complied.
vii	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	Noted and is being complied.

3. Water quality monitoring and preservation

S. No.	Conditions of Environmental Clearance	*Status of Compliance*
[i]	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 plan shall be drawn up and implemented to the satisfaction of the State Pollution Control Board	Not Applicable as no hangar has been proposed for the maintenance of Aircrafts.
[ii]	Proper drainage systems, emergency containment in the event of a major spill during monsoon season etc. shall be provided.	Noted. Proper drainage system has been provided to mitigate the impacts of run-off storm water.
[iii]	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.	Noted and will be complied. Proper drainage system along with oil & grease separator will be provided to mitigate the impacts of run-off storm water before discharging into rainwater harvesting structures; 26 Nos. Desilting Chambers are being constructed.
[iv]	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.	Agreed & is being complied.
[v]	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.	Rain water Harvesting for roof run-off and surface run-off, as plan submitted will be implemented conforming to the CGWA standards and 26 Nos. Recharge Wells are being constructed.
[vi]	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.	Noted and agreed. Before exceeding use of fresh water, prior permission would be taken from competent authority.
[vii]	Sewage Treatment Plant shall be provided to treat the wastewater generated from airport. Treated water shall be reused for horticulture, flushing, backwash, HVAC purposes and dust suppression.	STP of 820 KLD will be provided for treatment of domestic waste water treated water is used for horticulture, flushing etc.
[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.	Not applicable as the effluent will be treated in STP of capacity 820 KLD and treated water will be used for flushing and horticulture.
[ix]	A detailed drainage plan for rain water shall be drawn up and implemented	A detailed drainage plan for rain water has been drawn up for implementation.

4. Noise monitoring and prevention.

S. No.	Conditions of Environmental Clearance	*Status of Compliance*
1.	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.	Noise baseline data has been collected and has been attached as **Annexure - 6.**
2.	Noise from vehicles, 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 equipment.	Noise baseline data has been collected and has been attached as **Annexure-6.**
3.	Acoustic enclosures for DG sets, noise barriers for ground-run ways, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.	Noted and same is being implemented as mitigation measures for noise impact due to ground sources.
4.	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	Noted and same will be complied during the operation period.
5.	Where construction activity is likely to cause noise nuisance to nearby residents, restrict operation hours between 7 am to 6 pm.	Noted and agreed.

5. Energy Conservation measures

S. No.	Conditions of Environmental Clearance	*Status of Compliance*
(i)	Energy conservation measures like installation of LED/CFLS/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.	Noted and will be complied. Energy conservation measures like installation of LED/CFLS/TFLs for the lighting the areas outside the building will be integral part of the project design and will be in place before project commissioning.

6. Waste Management

S. No.	Conditions of Environmental Clearance	*Status of Compliance*
(i)	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)	Noted and is being complied.
(ii)	The project activity shall conform to the Fly Ash notification issued under the E.P Act of 1986.	Noted & Agreed.
(iii)	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.	Noted and is being complied.
(iv)	Any waste from construction and demolition activities related thereto shall be managed so as to strictly	Any waste from construction and demolition activities related thereto is being managed as per the norms of Construction and Demolition Waste Rules, 2016.

	conform to the construction and demolition Waste Management Rules, 2016.	
(v)	The Project proponent shall implement a management plan duly approved by the State Pollution Control Board and Obtain its Permission for the safe handling and disposal of a. Trash collect in flight and disposed at the Airport including segregation, collection and disposed. b. Toilet wastes and sewage collect from aircraft and disposed at the Airport. c. Waste arising out of maintenance and workshops. d. Waste arising out of eateries and shops situated inside the Airport complex. e. Hazardous and Other Wastes.	Not applicable as no waste disposal is done at the Airport premises. Municipal waste generated from the terminal building and aircraft is handed over to the authorised Municipal waste treatment facility while hazardous waste i.e. used oil generated from the DG set is being handed over to the SPCB authorized vendors.
(vi)	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 aircraft, terminals and offices), Wood, waste oil and solvents (from maintenance and engineering Operations) Kitchen waste and vegetable oils (from caterers) shall be carried out. Solid waste shall be disposed in accordance to the Solid Waste Management Rules, 2016 as amended.	Solid waste generated from the Airport mainly comprises of the Municipal waste which is being handed over to the Municipal Solid waste management Authority and Used oil (Hazardous waste) generated from DG sets will be handed over to the SPCB authorised vendors.
(vii)	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	Noted and agreed.
(viii)	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	Noted and agreed.

7. Green Cover

S. No.	Conditions of Environmental Clearance	*Status of Compliance*
1.	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	Due to safety reason & restrictions, Green belt cannot be developed in entire periphery of the Airport. However Green belt will be developed in area as provided in project details, with native tree species in accordance with Forest Department. Around the airport area adequate number of trees will be implemented in this season.
2.	Top soil shall be separately stored and used in the development of green belt.	The top soil has been stored separately and the same to be used for greenbelt development.

8. Public Hearing and Human health issues

S. No.	Conditions of Environmental Clearance	*Status of Compliance*
1.	Construction site should be adequately barricaded before the construction begins.	Noted and has been complied.
2.	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.	Noted & agreed. Same is being complied.

3.	Provision of Electro-mechanical doors for toilets meant for disabled passengers. Children nursing/feeding room to be located conveniently near arrival and departure gates.	Noted and will be complied.
4.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Noted.
5.	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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project. Occupational health surveillance of the workers shall be done on a regular basis.	Agreed and is being complied.
6.	Occupational health surveillance of the workers shall be done on a regular basis.	Noted and it is ensured that Occupational health surveillance of the worker is being done on regular basis

9. Miscellaneous

S. No.	Conditions of Environmental Clearance	*Status of Compliance*
1.	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.	The EC Granted was advertised in local newspaper of Punjab Kesri- dated 13.12.2023. Copy of Advertisement is Attached as **Annexure-4.**
2.	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.	Noted and has been complied.
3.	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.	Noted and same is being complied.
4.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental conditions on the website of the Ministry of Environment, Forest and Climate Change at Environment Clearance Portal.	Noted and same is being complied.
5.	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 I 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	Noted and agreed. We have well laid environmental policy approved by the Board of Directors. Copy of the same is enclosed as **Annexure – 5.**

	board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.	
6.	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 to the head of the organization.	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel has already been provided.
7.	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	Noted.
8.	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Noted.
9.	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.	Form- V for each financial year will be submitted every year & will simultaneously be uploaded on the website, as per the required conditions during operational phase of the project.
10.	The criteria pollutant levels namely PM10, PM2.5, SO, NOS (Ambient levels) shall be monitored and displayed at a convenient location near the Main Gate of the Company in public domain.	Noted and is being complied.
11.	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.	Noted and agreed.
12.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Noted.
13.	The project proponent snail abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee	Noted and agreed.
14.	No further expansion or modifications in the plan shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)	Noted. Prior environmental clearance will be taken before any further expansion or modifications.
15.	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.	Noted.
16.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted.

17.	The Ministry reserve the right to stipulated additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Noted.
18.	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 report.	Noted, we will provide full Cooperation to the officer (s) of the Regional office by furnishing the requisite data/ information/monitoring report.
19.	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, 198l, fie Environment (Protection) Act, 1986, Hazardous and C:ther Waste:: (Management and Trans boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1981 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India/High Courts and any and any others Courts of Law relating to the subject matter.	Noted.
20.	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	Noted.

3 DETAILS OF ENVIRONMENTAL MONITORING

3.1 AMBIENT AIR QUALITY MONITORING

3.1.1 Ambient Air Quality Monitoring Stations

Ambient air quality monitoring has been carried out at 3 locations Near Office Building, Parking Area of Project, & Project Site. This will enable a comparative analytical understanding of air quality and the changes in the air environment in the study area with respect to the prevailing conditions. The locations of the ambient air quality monitoring stations are given in **Table 3.1**.

Table 3.1 Details of Ambient Air Quality Monitoring Stations

S. No.	Location	Location Name/ Description
1.	AAQ 1	Office Building
2	AAQ 2	Parking Area
3	AAQ 3	Project Site

3.1.2 Ambient Air Quality Monitoring Methodology

Monitoring was conducted in respect of the following parameters:

- Particulate Matter ($PM_{2.5}$)
- Particulate Matter (PM_{10})
- Sulphur Dioxide (SO_2)
- Oxides of Nitrogen (NO_x)
- Carbon Monoxide (CO)

Installation of Respirable Dust sampler (RDS) & Fine Particulate Sampler (FPS) was done with the attachment for the 24 hour ambient air quality monitoring as per Gazette Notification 16th November,2009.

The air samples were analyzed as per standard methods specified by Central Pollution Control Board (CPCB) and IS: 5182. The techniques used for ambient air quality monitoring and minimum detectable levels are given in **Table 3.2**.

Fine Particulate Sampler instruments have been used for monitoring Particulate Matter 2.5 ($PM_{2.5}$ i.e. <2.5 microns), and Respirable Dust Sampler was used for sampling Respirable fraction (<10 microns), gaseous pollutants like SO_2, and NO_x. Bladder and Aspirator bags were used for collection Carbon Monoxide samples. Gas Chromatography techniques have been used for the estimation of CO.

Table 3.2 Techniques used for Ambient Air Quality Monitoring

S. No.	Parameter	Technique	Technical Protocol
1	Particulate Matter 2.5	Fine Particulate Sampler, Gravimetric Method	#SOP No. VEL/SOP/01, Section No. SP 63
2	Particulate Matter 10	Respirable Dust Sampler, with cyclone separator, Gravimetric Method	IS-5182 (Part-23)
3	Sulphur dioxide	Modified West and Gaeke	IS-5182 (Part- 2)
4	Oxides of Nitrogen	Jacob & Hochheiser	IS-5182 (Part-6)
5	Carbon Monoxide	Gas Chromatography	IS-5182 (Part-10)

3.1.3 Ambient Air Quality Monitoring Results

The Detailed on-site monitoring results of $PM_{2.5}$, PM_{10}, SO_2, NO_x and CO are presented in **Table 3.3.**

Table 3.3 Ambient Air Quality Monitoring Results

S.No.	Parameter	UNIT	AAQ1	AAQ1	AAQ1	NAAQS*
1.	**Particulate Matter (PM2.5)**	**µg/m3**	72.15	75.16	85.34	60
2.	**Particulate Matter(PM10)**	**µg/m3**	136.20	185.34	195.34	100
3.	**Nitrogen Dioxide(NO2)**	**µg/m3**	32.57	35.20	36.10	80
4.	**Sodium Dioxide(SO2)**	**µg/m3**	15.42	17.15	18.47	80
5.	**Carbon Monoxide (CO)**	**mg/m3**	0.71	0.85	0.84	4

*NAAQS – National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 18.11.2009

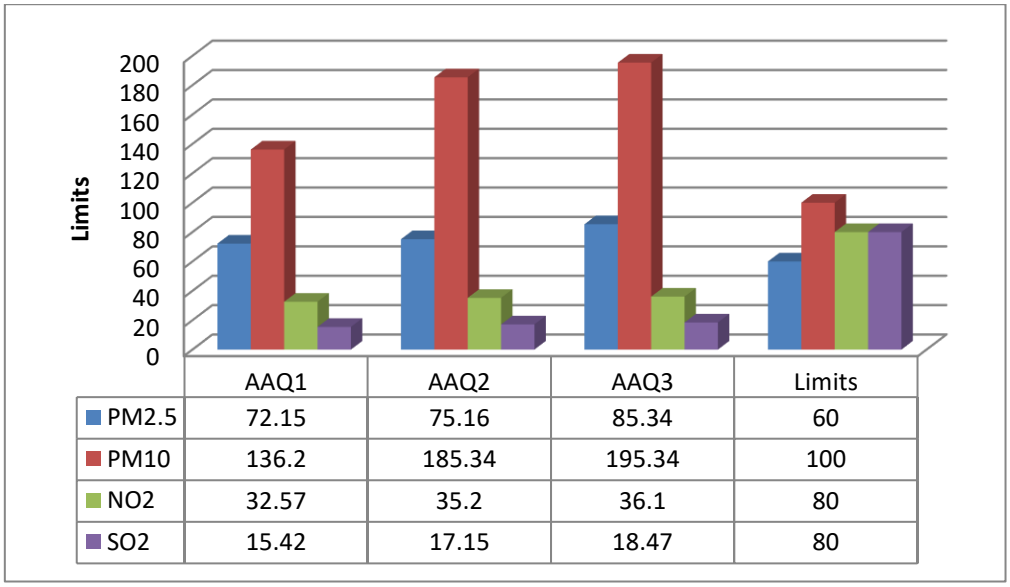

Figure 3.1 Location-wise Variation of PM $_{2.5}$, PM_{10}, NO_2& SO_2 Ambient Air Quality

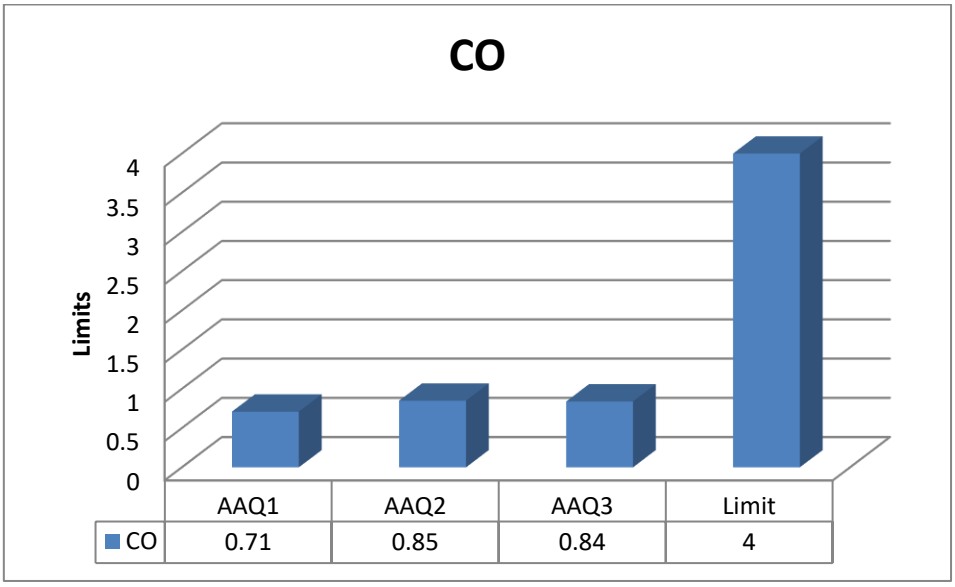

Figure 3.2 Location-wise Variation of CO in Ambient Air Quality

3.1.4 Discussion on Ambient Air Quality in the Study Area

PM_{10} and $PM_{2.5}$ levels at the project site are within the permissible limit of 100 µg/m³ and 60 µg/m³ respectively, in all the areas (for commercial, rural and other areas as stipulated in the National Ambient Air Quality Standards). SO_2, NO_x and CO were observed within the corresponding stipulated limits (Limit for SO_2 and NO_x: 80 µg/m³ and limit for CO: 4.0 mg/m³) at all monitoring locations. Station wise variation of ambient air quality parameters has been pictorially shown in **Figure 3.1 & 3.2.**

3.2 AMBIENT NOISE MONITORING

3.2.1 Ambient Noise Monitoring Locations

The main objective of noise monitoring in the study area is to assess the present ambient noise levels near the Project Site, Near the Centre of the Project and Near Back Side of Project due to various construction realted activities and increased vehicular movement. A preliminary reconnaissance survey has been undertaken to identify the major noise generating sources in the area. Ambient noise monitoring was conducted at three locations at the boundary of the project site as given in **Table 3.4**.

Table 2.4 Details of Ambient Noise Monitoring Stations

S. No.	Location Code	Location Name/ Description	Present Land use
1.	N1	Office Building	Commercial
2.	N2	Parking Area	Commercial
3.	N3	Project Site	Commercial

3.2.2 Methodology of Noise Monitoring

Noise levels were measured using sound level meter. Noise level monitoring was carried out continuously for 24-hours with one hour interval starting at 06:00 a.m. to 06:00 a.m. next day. The noise levels were monitored on working days only. During each hour, L_{eq} was directly computed by the instrument based on the sound pressure levels. Monitoring was carried out at 'A' response and fast mode.

3.2.3 Ambient Noise Monitoring Results

The location wise ambient noise monitoring results are summarized in **Table 3.5**. The location-wise variation of noise levels are graphically presented in **Figure 3.2**.

Table 3.5 Ambient Noise Monitoring Results

Parameters	N1		N2		N3	
	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
L_{eq}	60.45	54.46	62.74	52.18	63.47	50.34
CPCB Limits in dB(A) Leq (Commercial Area)	65.0	55.0	65.0	55.0	65.0	55.0

3.2.4 Discussion on Ambient Noise Levels in the Study Area

Day Time Noise Levels (L_{day}):
The day time noise level at all the locations was found to be within the limits prescribed for a Commercial area i.e. 65 dB (A).

Night Time Noise Levels (L_{night}):
The night time noise level at all the locations was found to be within the limits prescribed for Commercial area i.e. 55 dB (A).

3.3 WATER QUALITY MONITORING

Water sample was collected from the project site. The sample was analyzed for various parameters to compare with the standards for drinking water as per IS: 10500 for drinking water sources. The details of water sampling locations are given in **Table 3.6**.

Table 3.6 Details of Water Quality Monitoring Station

S. No.	Location Code	Location Name/ Description
1.	**W1**	Project Site (Tap Water)
2.	**W2**	Drinking Water

3.3.1 Methodology of water Quality Monitoring

Samples were collected as grab samples and sampling forms were filled in as per the sampling plan. The preservative samples were properly added to preserve as per standard operating procedures (SOP) and stored immediately in ice boxes, which were ensured for appropriate temperatures. Sample for chemical analysis was collected in polyethylene carboys. Sample collected for metal content were acidified to <2 pH with 1 ml HNO_3. A sample for bacteriological analysis was collected in sterilized glass bottles.

Soon after the completion of sampling, the chain of custody sheets for the samples were filled in and then they were transported to the laboratory for further analysis. Proper care was taken during packing and transportation of samples. All the samples reached the central laboratory within the holding times for different parameters. After ensuring the same the samples were forwarded immediately for analysis.

The samples were analyzed as per the standard procedures specified in 'Standard Methods for the Examination of Water and Wastewater' published by the American Public Health Association (APHA) and CPCB. The analytical techniques and the test methods adopted for the testing of water are given in **Table 3.7**

3.3.2 Water Quality Monitoring Results

The detailed water quality monitoring results are presented in **Table 3.7**

Table 3.7 Tap Water Quality Monitoring Result

S. No.	Parameter	Test-Method	Result	Unit	Limits of IS:10500 -	
					Requirement (Acceptable Limits)	Permissible limit in the Absence of Alternate Source
1.	pH (at 25 °C)	IS3025 (P-11)	7.41	--	6.5 to 8.5	No Relaxatio
2.	Colour	IS3025 (P-4)	BLQ(LOQ-1.0)	Haze	5	15
3.	Turbidity	IS3025 (P-10)	BLQ(LOQ-1.0)	NTU	1	5
4.	Odour	IS3025 (P-5)	Agreeable	--	Agreeable	Agreeable
5.	Taste	IS3025 (P-8)	Agreeable	--	Agreeable	Agreeable
6.	Total Hardness (as	IS3025 (P-21)	132.00	mg/	200	600
7.	Calcium (as Ca)	IS3025 (P-40)	24.00	mg/	75	200
8.	Alkalinity (as $CaCO_3$)	IS3025 (P-23)	152.00	mg/	200	600
9.	Chloride (as Cl)	IS 3025 (P-32)	78.32	mg/	250	1000
10.	Cyanide (as CN)	IS 3025 (P-27)	BLQ(LOQ-0.02)	mg/	0.05	No
11.	Magnesium (as Mg)	IS3025 (P-46)	17.49	mg/	30	100
12.	Total Dissolved	IS3025 (P-16)	220.00	mg/	500	2000
13.	Sulphate(as SO_4)	IS3025 (P-24)	23.30	mg/	200	400
14.	Fluoride (as F)	IS 3025 (P-60)	0.15	mg/	1.0	1.5
15.	Nitrate (as NO_3)	IS3025 (P-34)	12.47	mg/	45	No Relaxatio
16.	Iron (as Fe)	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.01)	mg/	1.0	No relaxatio
17.	Aluminum (as Al)	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.002)	mg/	0.03	0.2
18.	Boron	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.01)	mg/	0.5	2.4
19.	Total Chromium (as Cr)	VEL/STP/ICP/W-01, Issue No.-01, 01/11/21	BLQ(LOQ-0.01)	mg/l	0.05	No Relaxatio
20.	Phenolic	IS3025 (P-43)	BLQ(LOQ-0.0005)	mg/	0.001	0.002
21.	Mineral Oil	IS 3025 (P-39)	BLQ(LOQ-0.1)	mg/	1.0	No
22.	Anionic Detergents	IS3025 (P-68)	BLQ(LOQ-0.05)	mg/	0.2	1.0
23.	Zinc (as Zn)	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.01)	mg/	5	15
24.	Copper (as Cu)	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.002)	mg/	0.05	1.5
25.	Manganese (as Mn)	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.01)	mg/	0.1	0.3
26.	Cadmium (as Cd)	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.002)	mg/	0.003	No Relaxatio
27.	Lead (as Pb)	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.002)	mg/	0.01	No Relaxatio
28.	Selenium (as Se)	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.001)	mg/	0.01	No Relaxatio
29.	Arsenic (as As)	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.005)	mg/	0.01	No Relaxatio
30.	Mercury (as Hg)	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.0005)	mg/	0.001	No Relaxatio
31.	Total Coliform	IS 15185	Absent	/100ml	Shall not be detectable in any	
32.	E. coli	IS 15185	Absent	/ 100ml	Shall not be detectable in any 100 ml sample	

Note:-This Report Complies as per IS: 10500:2012 (RA: 2018)
*BLQ-Below Limit of Quantification, **LOQ- Limit of Quantification.
@Amendment No.1 in June 2015 (Limits of Iron & Arsenic) and Amendment No.2 in Sept. 2018 (Limit of Boron & IS method of Total Coliform & E.Coli) & Amendment No.3 in Feb. 2021 (Limit of Mineral Oil).

Table 3.8 Drinking Water Quality Monitoring Result

S. No.	Parameter	Test-Method	Result	Unit	Limits of IS:10500 -	
					Requirement (Acceptable Limits)	Permissible limit in the Absence of Alternate Source
1.	pH (at 25 °C)	IS3025 (P-11)	7.36	--	6.5 to 8.5	No Relaxatio
2.	Colour	IS3025 (P-4)	BLQ(LOQ-1.0)	Haze	5	15
3.	Turbidity	IS3025 (P-10)	BLQ(LOQ-1.0)	NTU	1	5
4.	Odour	IS3025 (P-5)	Agreeable	--	Agreeable	Agreeable
5.	Taste	IS3025 (P-8)	Agreeable	--	Agreeable	Agreeable
6.	Total Hardness (as	IS3025 (P-21)	67.00	mg/	200	600
7.	Calcium (as Ca)	IS3025 (P-40)	14.00	mg/	75	200
8.	Alkalinity (as $CaCO_3$)	IS3025 (P-23)	95.34	mg/	200	600
9.	Chloride (as Cl)	IS 3025 (P-32)	45.00	mg/	250	1000
10.	Cyanide (as CN)	IS 3025 (P-27)	BLQ(LOQ-0.02)	mg/	0.05	No
11.	Magnesium (as Mg)	IS3025 (P-46)	7.77	mg/	30	100
12.	Total Dissolved	IS3025 (P-16)	124.00	mg/	500	2000
13.	Sulphate(as SO_4)	IS3025 (P-24)	6.00	mg/	200	400
14.	Fluoride (as F)	IS 3025 (P-60)	BLQ(LOQ-0.02)	mg/	1.0	1.5
15.	Nitrate (as NO_3)	IS3025 (P-34)	2.18	mg/	45	No Relaxatio
16.	Iron (as Fe)	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.01)	mg/	1.0	No relaxatio
17.	Aluminum (as Al)	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.002)	mg/	0.03	0.2
18.	Boron	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.01)	mg/	0.5	2.4
19.	Total Chromium (as Cr)	VEL/STP/ICP/W-01, Issue No.-01, 01/11/21	BLQ(LOQ-0.01)	mg/l	0.05	No Relaxatio
20.	Phenolic	IS3025 (P-43)	BLQ(LOQ-0.0005)	mg/	0.001	0.002
21.	Mineral Oil	IS 3025 (P-39)	BLQ(LOQ-0.1)	mg/	1.0	No
22.	Anionic Detergents	IS3025 (P-68)	BLQ(LOQ-0.05)	mg/	0.2	1.0
23.	Zinc (as Zn)	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.01)	mg/	5	15
24.	Copper (as Cu)	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.002)	mg/	0.05	1.5
25.	Manganese (as Mn)	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.01)	mg/	0.1	0.3
26.	Cadmium (as Cd)	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.002)	mg/	0.003	No Relaxatio
27.	Lead (as Pb)	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.002)	mg/	0.01	No Relaxatio
28.	Selenium (as Se)	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.001)	mg/	0.01	No Relaxatio
29.	Arsenic (as As)	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.005)	mg/	0.01	No Relaxatio
30.	Mercury (as Hg)	VEL/STP/ICP/W-01, Issue No.-01,	BLQ(LOQ-0.0005)	mg/	0.001	No Relaxatio
31.	Total Coliform	IS 15185	Absent	/100ml	Shall not be detectable in any	
32.	E. coli	IS 15185	Absent	/ 100ml	Shall not be detectable in any 100 ml sample	

Note:-This Report Complies as per IS: 10500:2012 (RA: 2018)
*BLQ-Below Limit of Quantification, **LOQ- Limit of Quantification.
@Amendment No.1 in June 2015 (Limits of Iron & Arsenic) and Amendment No.2 in Sept. 2018 (Limit of Boron & IS method of Total Coliform & E.Coli) & Amendment No.3 in Feb. 2021 (Limit of Mineral Oil).

3.3.4 Discussion on Water Quality in the Study Area

The water quality in the project area is observed to be alkaline in nature, with total alkalinity reaching up to 152.00mg/L against the desirable limit of 200 mg/L; however, alkalinity is less than the permissible limit of 600 mg/L. Total dissolved solids in the water is 220.00mg/L against the desirable limit of 500 mg/L, however, total dissolved solids is lower than permissible limit of 600 mg/L. However, the remaining parameters are within the CPCB-prescribed limits.

3.4 SOIL MONITORING

3.4.1 Soil Monitoring Locations

The objective of the soil monitoring is to identify the impacts of on-going project activities on soil quality and also predict impacts, which have arisen due to the execution of various construction related activities. Accordingly, a study of assessment of the soil quality has been carried out.

To assess the impacts of ongoing project activities on the soil in the area, the Physico-chemical characteristics of soils were examined by obtaining soil samples from selected points and analysis of the same. A single sample of soil was collected from the project site for studying soil characteristics, the location of which is listed in **Table 3.9.**

Table 3.9 Details of Soil Quality Monitoring Location

S. No.	Location Code	Location Name/ Description
1.	**S1**	Project Site

3.4.2 Methodology of Soil Monitoring

The sampling has been done in line with IS: 2720 & Methods of Soil Analysis, Part-1, 2nd edition, 1986 of the American Society for Agronomy and the Soil Science Society of America. The homogenized samples were analyzed for physical and chemical characteristics (physical, chemical and heavy metal concentrations).
The samples have been analyzed as per the established scientific methods for Physico-chemical parameters. The heavy metals have been analyzed by using an Atomic Absorption Spectro-photometer.

3.4.3 Soil Monitoring Results

Single sample of soil is collected from the site to check the quality of soil of the study area .The physico-chemical characteristics of the soil, as obtained from the analysis of the soil sample, are presented in **Table 3.10.**

Table 3.10Physico-Chemical Characteristics of Soil in the Study Area

S. No.	Parameter	Test-Method	Result	Unit
1.	pH (at 25 ^{0}C)	IS : 2720 (P-26)	7.52	--
2.	Conductivity	IS:14767	0.364	mS/cm
3.	Soil Texture	VEL/EN/STP/64, Issue No.- 01, Issue Date 01/11/2023	Sandy Loam	--
4.	Color	VEL/EN/STP/67, Issue No.- 01, Issue Date 01/11/2023	Yellowish Brown	--
5.	Water holding capacity	VEL/EN/STP/86, Issue No.- 01, Issue Date 01/11/2023	32.41	%
6.	Bulk density	VEL/EN/STP/59, Issue No.- 01, Issue Date 01/11/2023	1.55	gm/cc
7.	Chloride as Cl	VEL/EN/STP/69, Issue No.- 01, Issue Date 01/11/2023	152.34	mg/100g
8.	Calcium as Ca	VEL/EN/STP/72, Issue No.- 01, Issue Date 01/11/2023	132.54	mg/100g
9.	Sodium as Na	VEL/EN/STP/62, Issue No.- 01, Issue Date 01/11/2023	104.15	mg/kg
10.	Potassium as K	VEL/EN/STP/61, Issue No.- 01, Issue Date 01/11/2023	85.34	kg/hec.
11.	Organic Matter	IS 2720 (P-22), Titrimetric Method	0.51	%
12.	Magnesium as Mg	VEL/EN/STP/72, Issue No.- 01, Issue Date 01/11/2023	36.12	mg/100g
13.	Available Nitrogen as N	IS:14684 Distillation Method	215.34	kg./hec.
14.	Available Phosphorus	VEL/EN/STP/73, Issue No.- 01, Issue Date 01/11/2023	26.30	kg./hec.
15.	Zinc (as Zn)	VEL/HW/STP/03, Issue No.- 01, Issue Date 01/11/2023	22.15	mg/kg
16.	Manganese (as Mn)	VEL/HW/STP/03, Issue No.- 01, Issue Date 01/11/2023	14.15	mg/kg
17.	Lead (as Pb)	VEL/HW/STP/03, Issue No.- 01, Issue Date 01/11/2023	5.10	mg/kg
18.	Cadmium as Cd	VEL/HW/STP/03, Issue No.- 01, Issue Date 01/11/2023	BLQ (LOQ – 0.5)	mg/kg
19.	Chromium (as Cr)	VEL/HW/STP/03, Issue No.- 01, Issue Date 01/11/2023	10.32	mg/kg
20.	Copper (as Cu)	VEL/HW/STP/03, Issue No.- 01, Issue Date 01/11/2023	8.24	mg/kg

3.4.4 Discussion on Soil Characteristics in the Study Area

The soil in study area is characterized by moderate organic content. The soil quality in the project area has not been affected by the project activities.

3.5 Stack Emission Monitoring

Table 3.11 Details of Stack Monitoring Stations

S. No.	Location Code	Capacity
1.	DG1	750 KVA (After RECD) 125 (Old Airport)
2.	DG2	1010 KVA (After RECD)
3.	DG3	380 KVA (After RECD)
4.	DG4	750 KVA (After RECD)
5.	DG5	125 KVA (Old Airport)

Table 3.12 Stack Monitoring Results

Location- DG1

S. No.	Parameter	Protocol	Result	Unit	Limits (As Per CPCB)
1.	Particulate Matter (as PM)	IS 11255 (P-1):2019	0.014	gm/kw-hr	0.02
2.	Oxide of Nitrogen (as NO_x)	VEL/EN/STP/146, Issue No.-01, Issue Date 01/11/23	0.284	gm/kw-hr	0.40
3.	Total Hydrocarbon (as HC)	VEL/EN/STP/137, Issue No.-01, Issue Date 01/11/23	0.055	gm/kw-hr	0.19
4.	Carbon Monoxide (as CO)	VEL/EN/STP/146, Issue No.-01, Issue Date 01/11/23	0.348	gm/kw-hr	3.5

Table 3.13 Stack Monitoring Results

Location- DG2

S. No.	Parameter	Protocol	Result	Unit	Limits (As Per CPCB)
1.	Particulate Matter (PM) at 15 % O2 Correction)	IS 11255 (P-1)	23.51	mg/Nm3	50
2.	Oxides of Nitrogen (as NO2) at 15 % O2 Correction)	VEL/EN/STP/146, Issue No.-01, Issue Date 01/11/2023	410.12	mg/Nm3	650
3.	Carbon Monoxide at 15% O2 Correction)	VEL/EN/STP/146, Issue No.-01, Issue Date 01/11/2023	70.61	mg/Nm3	100
4.	NMHC (as C) at 15% O2 Correction)	VEL/EN/STP/137, Issue No.-01, Issue Date 01/11/2023	25.31	mg/Nm3	Not Specified

Table 3.14 Stack Monitoring Results

Location- DG3

S. No.	Parameter	Protocol	Result	Unit	Limits (As Per CPCB)
1.	Particulate Matter (as PM)	IS 11255 (P-1):2019	0.012	gm/kw-hr	0.02
2.	Oxide of Nitrogen (as NO_x)	VEL/EN/STP/146, Issue No.-01, Issue Date 01/11/23	0.268	gm/kw-hr	0.40
3.	Total Hydrocarbon (as HC)	VEL/EN/STP/137, Issue No.-01, Issue Date 01/11/23	0.052	gm/kw-hr	0.19
4.	Carbon Monoxide (as CO)	VEL/EN/STP/146, Issue No.-01, Issue Date 01/11/23	0.341	gm/kw-hr	3.5

Table 3.15 Stack Monitoring Results

Location- DG4

S. No.	Parameter	Protocol	Result	Unit	Limits (As Per CPCB)
1.	Particulate Matter (as PM)	IS 11255 (P-1):2019	0.013	gm/kw-hr	0.02
2.	Oxide of Nitrogen (as NO_x)	VEL/EN/STP/146, Issue No.-01, Issue Date 01/11/23	0.278	gm/kw-hr	0.40
3.	Total Hydrocarbon (as HC)	VEL/EN/STP/137, Issue No.-01, Issue Date 01/11/23	0.062	gm/kw-hr	0.19
4.	Carbon Monoxide (as CO)	VEL/EN/STP/146, Issue No.-01, Issue Date 01/11/23	0.384	gm/kw-hr	3.5

Table 3.15 Stack Monitoring Results

Location- DG5

S. No.	Parameter	Protocol	Result	Unit	Limits (As Per CPCB)
1.	Particulate Matter (as PM)	IS 11255 (P-1):2019	0.019	gm/kw-hr	0.02
2.	Oxide of Nitrogen (as NO_x)	VEL/EN/STP/146, Issue No.-01, Issue Date 01/11/23	0.244	gm/kw-hr	0.40
3.	Total Hydrocarbon (as HC)	VEL/EN/STP/137, Issue No.-01, Issue Date 01/11/23	0.043	gm/kw-hr	0.19
4.	Carbon Monoxide (as CO)	VEL/EN/STP/146, Issue No.-01, Issue Date 01/11/23	0.361	gm/kw-hr	3.5

3.6 Point Source (DG Noise) Monitoring

Table 3.21 Details of Point Source Monitoring Stations

S. No.	Location Code	Capacity
1.	DG1	125 KVA
2.	DG2	750 KVA
3.	DG3	1010 KVA
4.	DG4	380 KVA
5.	DG5	750 KVA

Table 3.22 DG Noise Monitoring Results

S. No.	Parameters	Protocol	Result dB(A)		
			Open the Canopy of DG Set Result dB(A)	Close the Canopy of DG Set (0.5 Meter Distance) Result dB(A)	Insertion Loss
1.	L_{eq}	IS-4758	96.5	70.3	26.2
2.	CPCB Limits in dB (*A)	-	--	75.00	25.00

Table 3.23 DG Noise Monitoring Results

S. No.	Parameters	Protocol	Result dB(A)		
			Open the Canopy of DG Set Result dB(A)	Close the Canopy of DG Set (0.5 Meter Distance) Result dB(A)	Insertion Loss
1.	L_{eq}	IS-4758	95.4	70.1	25.3
2.	CPCB Limits in dB (*A)	-	--	75.00	25.00

Table 3.24 DG Noise Monitoring Results

S. No.	Parameters	Protocol	Result dB(A)		
			Open the Canopy of DG Set Result dB(A)	Close the Canopy of DG Set (0.5 Meter Distance) Result dB(A)	Insertion Loss
1.	L_{eq}	IS-4758	94.5	69.1	25.4
2.	**CPCB Limits in dB (*A)**	-	--	**75.00**	**25.00**

Table 3.25 DG Noise Monitoring Results

Table 3.26 DG Noise Monitoring Results

S. No.	Parameters	Protocol	Result dB(A)		
			Open the Canopy of DG Set Result dB(A)	Close the Canopy of DG Set (0.5 Meter Distance) Result dB(A)	Insertion Loss
1.	L_{eq}	IS-4758	99.7	72.3	27.4
2.	**CPCB Limits in dB (*A)**	-	--	**75.00**	**25.00**

S. No.	Parameters	Protocol	Result dB(A)		
			Open the Canopy of DG Set Result dB(A)	Close the Canopy of DG Set (0.5 Meter Distance) Result dB(A)	Insertion Loss
1.	L_{eq}	IS-4758	98.4	72.2	26.2
2.	**CPCB Limits in dB (*A)**	-	--	**75.00**	**25.00**

3.7 Waste Water

3.7.1 Waste Water Quality Monitoring Locations

A sample of waste water was collected from the project site for the assessment of the impacts of the project on discharge point.

Waste water sample was collected from STP Plant. The details of waste water sampling locations are given in **Table 3.27**

Table 3.27 Details of Waste Water Quality Monitoring

S. No.	Location Code	Location Name/ Description
1.	WW 1	STP Inlet
2.	WW2	STP Outlet

3.7.2 Waste water result

Table: 3.28 STP Inlet Result

S. No.	Parameter	Test-Method	Result	Unit
1.	pH (at 25 ˚C)	IS:3025 (P-11):2022 (Using Electrode)	6.51	--
2.	Total Suspended Solids	IS: 3025 (P-17):2022 (Gravimetric Method)	250.00	mg/l
3.	Total Nitrogen	VEL/EN/STP/08, Issue No.-01, Issue Date-2023	18.00	mg/l
4.	BOD (3 Days at 27°C)	IS 3025 (Part-44):2023	152.00	mg/l
5.	COD	APHA, 24th Edt. 2023, 5220 B Open Reflux Method	540.00	mg/l
6.	Total Phosphorus (as P)	IS:3025 (P-31) (Stannous Chloride Method)	9.00	mg/l
7.	Faecal Coliform	IS 1622:1981 (RA-2019)	500	MPN/100ml

Table: 3.29 STP Outlet Result

S. No.	Parameter	Test-Method	Result	Unit	Prescribed Limits*
1.	pH (at 25 °C)	IS:3025 (P-11):2022 (Using Electrode)	7.61	--	5.5-9.0
2.	Total Suspended Solids	IS: 3025 (P-17):2022 (Gravimetric Method)	32.00	mg/l	20.0
3.	Total Nitrogen	VEL/EN/STP/08, Issue No.-01, Issue Date-2023	6.00	mg/l	10.0
4.	BOD (.3 Days at 27°C)	IS 3025 (Part-44):2023	12.00	mg/l	10.0
5.	COD	APHA, 24th Edt. 2023, 5220 B Open Reflux Method	85.00	mg/l	50.0
6.	Total Phosphorus (as P)	IS:3025 (P-31) (Stannous Chloride Method)	0.34	mg/l	--
7.	Faecal Coliform	IS 1622:1981 (RA-2019)	60	MPN/100ml	--

J&K PCC

J&K Pollution Control Committee
Jammu/Kashmir (www.jkspcb.nic.in)

Consent Order

Consent No.:- PCC/digital/24024335931 of 2024 **Date:- 01/04/2024**

Consent To Establish (Expansion) under Section 25/26 of the Water(Prevention & Control Pollution)Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981, as amended is granted in favour of

M/s Airports Authority of India
Civil Airport Jammu
Jammu South, Jammu(registered with DIC vide registration No:
Ministry of civil aviation. date: 12/02/2019)

for a period for three years from the date of issue for RED category of unit as per revised classification of industrial sector, subject to the following terms and conditions in a time bound manner :

1. The consent granted by the Committee is restricted to Prevention and Control of Pollution only and shall not be treated as substitute of permission required under other laws of the land.
2. The consent is granted valid for the establishment of unit for manufacturing of the products / by-products consented quantity as mentioned below with capital investment of Rs.861.37 Crores:

S No.	Terminal building	Area	Unit
1	Proposed Expansion of civil enclave at Jammu Airport along with allied structure (Terminal Building,Car Parking,Apron,Link Taiways etc)	40000	Square Meter

Any change / enhancement in Air port shall have to be intimated to the Committee and the unit holder has to apply afresh for the same

3. **Compliance under Water Act :**

a. Standards of discharge for Sewage disposal:

Sewage Treatment - The unit holder has to install and maintain continuous operation of a comprehensive treatment system as is warranted with reference to effluent quality and operate and maintain the same continuously so as to achieve the quality to treated effluent to the following standards before disposal :-

Parameters	Range	Conc. in mg/l except for pH
pH	between	6-9
Suspended Solids	Not to exceed	100
BOD(3 days at 27 degree celsius)	not to exceed	30

b. All the Waste water/Trade efffluent shall be treated as per norms to meet the environment standards of EP Act 1986.
c. Water consumption
i. The daily quantity of water consumption shall not exceed - KLD.
ii. The daily quantity of sewage effluent from the unit shall not exceed - KLD

4. **Complance under Air Act :**

a. The unit holder shall comply to National Ambient Air Quality Standards as per EP Act 1986 (refer rule 3(3B).

b. The unit holder has to operate stack(s) of the following specifications :)

S. No.	Stack attached to	Volume Nm3/hr	Height (in Meters)	Top diameter (in Meters)	Velocity of gas emission m/sec
1	DG Set (4x1250 & 1x500) KVA	4.4	30	Round	7.52

c. The unit holder has to install and maintain continuous operation of a comprehensive air pollution control system including the following pollution control devices to achieve the quality of emissions within the tolerance limits as prescribed under the environment protection act 1986:

S.No.	Pollution Control Equipments
1	

d. Fuel Consumption Details :-

S.No.	Type of fuel	Maximum Quantity	Unit
1	HSD	2	Megawatt

5. The unit holder shall comply to the Solid Waste Management Rules 2016 dated 8-4-2016

6. Under the Noise Pollution (Regulation and Control) Rules 2000, the unit holder shall take adequate measures for control of noise from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75dB(A) during day time and 70 dB(A) during night time. Daytime is reckoned in between 6 am to 10 pm and night time is 10 pm to 6 am

7. The unit holder shall comply to the Plastic Waste Management Rules 2016 dated 18-3-2016

8. Self Monitoring Schedule :
The unit holder shall have to get the samples of emission/Effluents analysed from the laboratory of J&K PCC or laboratories approved by J&K PCC when unit becomes operational to the check the efficacy of Pollution Control Devices (PCDs) installed in the unit

9. The unit holder shall comply with the additional conditions as stipulated below:-

i. The Consent is valid for the Establishment of unit only. The unit holder can only manufacture products, at the rate of production as mentioned in consent order. Any change in production caapcity, process, raw materials use etc, shall have to be intimated to the Boad. For any enhancement of the above, fresh consent has to be obtained fom J & K Pollution Control Committee.

ii. The unit holder has to keep a record of the environmental data monitored regularly with regard to operation and maintenance of pollution control devices viz Air Pollution and Water Pollution Control to achieve the desired standards notified in EP Act.

iii. Pollution Control Devices (ETP/ECD) as contemplated to achieve the quality of effluent emission within the tolerance limits prescribed , shall have to be operational during the course of production. The effluent/emission shall not contain constituents in excess of the tolerance limits as laid down by J & K Pollution Control Committee.

iv. The unit holder shall be liable to pay compensation in case any damage is caused to the environment.

v. The unit holder shall abide by the directions of the Committee which will be issued from time to time.Any infringement/ violation or trangression of the statutory enactments of pollution control acts by the unit, shall be sufficient cause to prosecute the violator in conformity with relevant section of Air/Water Acts and Environment Protection Act in force.

vi. The unit shall be under surveillance monitoring of J & K Pollution Control Committee

vii. The unit holder shall provide adequate arrangement for fighting the accidental leakages/discharge of any air pollutant/gas/liquid from the vessel, machinery etc. which are likely to cause fire hazard including environmental pollution.

viii. The unit holder shall adhere to general standards terms and conditions of Water / Air Acts and compliance of environment standards as per environment protection act 1986

ix. The unit holder should apply 60 days in advance for renewal of consent before expiry the date of this Consent Order

x. The unit holder shall not operate the unit unless Committee issue Consent to Operate (Fresh)

Specific Conditions:-

1. The Air port Authority shall follow-up conditions of specific and other statutory and Additional conditions incorporated in the Environmental Clearance applicable during construction phase and submit time bound compliances to PCC

2- The Air port Authority shall apply separately for the proposed D.G Sets above 1 MVA capacity.

3- The unit holder shall install all requisite pollution control devices and ensure compliance of general terms and conditions as promulgated under Water (Prevention &Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981 and amendments made thereof as well as EP Act besides confirm Achievement of norms/Environmental standards as prescribed under above said Acts.

4- The unit holder has to display Board outside the unit for displaying Air / Water / Hazardous Waste data as per directions of Hon'ble Supreme Court of India.

5- Periodic Inspection by Divisional Officer, PCC as per schedule for Red category units.

6- The unit shall remain under surveillance of the JKPCC regularly.

xi. In case of violation of above mentioned conditions or any public complaint the consent shall be withdraw.

* This consent is issued purely from environmental angle and the Committee shall not be responsible for any claim, counter claim, ownership, partnership etc of the unit.

'By Order'

1.4.24

(J N Sharma)
Environmental Engineer

JAMMU & KASHMIR JK POLLUTION CONTROL COMMITTEE PCC CONSENT TO ESTABLISH OPERATE FRESH RENEWAL JAMMU / SRINAGAR

Member Secretary
1.4.24

Copy to the :

1. Regional Director PCC Jammu for information and ensure the implementation of conditions as above.
2. General Manager DIC Jammu for information.
3. D.O PCC Jammu South for the direction to monitor the conditions of the consent stated above.
4. P.A. to Chairman, J&K PCC for information of the Chairman
5. M/s Airports Authority of India , Civil Airport Jammu for compliance of above said conditions.
6. Office file

The unit holder shall comply to environment standards as notified under the environment protection Act 1986, read with the Water (Prevention & Control of Pollution) Act 1974 & Air (Prevention & Control of Pollution) Act, 1981 which can also be downloaded from the website www.jkspcb.nic.in or at www.cpcb.nic.in

Date of registration: 22 May 2023

JAL HI JEEVAN HAI

GOVERNMENT OF JAMMU & KASHMIR
JAL SHAKTI (PHE) DEPARTMENT

CERTIFICATE OF REGISTRATION

Certified that the applicant is hereby registered in Jal Shakti Department (PHE) Jammu & assigned the following details:

CONSUMER DETAILS

Name	: Sanjeev Kumar Garg
Parentage	: Indra Kumar Garg
Address Line 1	: Jammu Airport, Plot No.449, Village-Balicharana, Tehsil-Satwari
Address Line 2	: , District-Jammu,

CONNECTION DETAILS

Connection Number	: 1211030000114
Consumer Id	: 0102030112568
Type of Connection	: **Borewell**
Connection Category	: BOREWELL COMMERCIAL
Diameter Size	: 32 MM
Location	:
Lifting Device	: Submersible
Quantity of Ground Water	: 465 m3/day
Sub-Division	: Kunjwani
Division	: City-II, Jammu

CONTACT DETAILS

Phone Number	: 9419180970
Email-ID	: apd_jammu@aai.aero

S/d-
CHIEF ENGINEER
JAL SHAKTI (PHE) JAMMU

NOTE:- This is a computer generated certificate & does not require signature. This certificate bears no legal weightage for being produced in any court of law or before any Govt./Pvt authority as proof of residence/occupation/identification.

JAMMU AIRPORT TRAFFIC FORECAST

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1 Introduction

Jammu district falls in sub-mountainous region at the foothills of the Himalayas. The Shivalik range rises gradually in the north part of the district and merges with the Indo-Gangetic plains in the south. The district comprises of four tehsils i.e., Jammu, R.S. Pura, Akhnoor and Bishnah. The entire district can be divided into two distinct parts. The area forming north of Jammu-Akhnoor Road and Jammu-Pathankot Road, also known as Kandi area, is comparatively under-developed and is mostly rain fed. The southern part of these Roads is largely fed by canal and tube wells for irrigation purposes and is relatively more prosperous. The details of the Jammu district have been described below.

Jammu is located at 74° 24' and 75° 18', East longitude and 32° 50' and 33° 30' North latitude. It is situated on the bank of river Tawi. Jammu city is at an elevation of 1,030 feet above the mean sea level. It is located on the National Highway–44 to the North-West of Delhi. Due to its locational advantage, Jammu has assumed importance as a transit place as it is located at the vertex of linkage corridors to Rajouri, Poonch, Kishtwar, Doda and serves as the gateway to Kashmir Valley, Ladakh and pilgrim places of Sh. Mata Vaishno Devi (Katra) and Shri Amarnath shrine (Pahalgam).

To successfully assess the capacity of road infrastructure connecting to the Airport, various analyses are required such as, estimation of Airport passenger growth rate, estimation of Airport passenger forecast for horizon year, traffic flow analysis of existing access road, Level of Service analysis for the approach road and Airport parking analysis. In the following sections all these steps are discussed in detail. The horizon year for this study is considered to be 2030.

1.1 Regional Connectivity

Jammu city is well connected with other parts of the ste and adjoining areas through Road, rail and air network. It is connected to Srinagar by Road and air. Jammu-Tawi railway station is located at 2 km from city center; the railway station connects the state with rest of the country. Some of the important trains plying to and from Jammu Tawi railway station are Jammu Tawi Express, Shalimar Express, Jhelum Express, Andaman Express and Amarnath Express, etc. Close to the railway station is the bus stand, which offers bus services for various destinations within and outside the state. Jammu airport connects to places like Srinagar, Leh, Delhi, Chandigarh and Amritsar. The city is approximately 600 km away from the National capital (Delhi) and about 290 km from the summer capital (Srinagar) of the State. It connects with all parts of J&K as well as with other major cities/towns of Punjab & Himachal Pradesh. The city has a good Road network which is used by state transport buses or private luxury coaches. Being located enroute to the Shri Mata Vaishno Devi Shrine, Holy Amarnath Cave, scenic spots in the Pirpunjal range, the Kashmir Valley and Ladakh, it has attained the status of a transit city of immense transitcharacter.

1.2 Demographic and Socio-Economic Profile

The Population of Jammu and Kashmir State according to the 2011 census stands at about 12.54 million, making it the 19th most populated state in India. The State is spread over an area of about 220,000 sq. km. making it the 10th largest state in the country in terms of area. The density of population per sq. km. is about 56 which is fairly below the national average of 382 per sq. km. The State has a growth rate of about 23% which exceeds the national growth rate of about 17%. Out of total population of Jammu and Kashmir,

27% people live in urban areas. The total figure of population living in urban areas is 3,433,242 of which 1,866,185 are males and 1,567,057 are females.

The urban population in the last 10 years has increased by 36.42% higher than the national average. The macro-level spatio-demographic variations observed at the regional level as per Census 2011 reflect that Jammu Region with 26% of the State's total geographical area counts for 55% of its total population load. Against the State's average urbanization of 27%, the Jammu Region has 23% of its people living in urban areas. As per the census 2011, the Jammu (Municipal Corp. + Outer Growth) accounts for 38% of the total urban population of the Jammu District. Among 22 districts, Jammu is the second highest urban (50%) district after Srinagar which has 95% of its people living under municipal limits. As per census 2011, about 12% of state's population resides in Jammu district thereby making it the most populous district of the State. Of this, nearly half population resides in urban area while the remaining 50% population resides in rural areas of the district (Census of India2011).

Jammu, the city of temples and the Winter Capital of J&K State, is a symbol of ancient values and presents aspirations. In J&K State, Jammu has a distinct image due to its heritage, location and linkages. With rapid pace of urbanisation and development of economic activities in Jammu, the city's influence has been increasing in range and impact. Growth of Jammu Urban Agglomeration (7.7 lac) has been increasing which can be adjudged from the trend of decadal change in urban population in adjoining tehsils of Jammu city. Many villages in Jammu Samba and Districts have already been engulfed by the sprawl of Jammu city. JMP-2032 is proposed to be extended from 305 sq. km. to 652 sq. km which include the Municipal Corporation of Jammu, Municipal Committee of Ghomanhasan, Municipal Committee Bishnah, Municipal Committee Bari Brahmana and Municipal Committee of Vijaypur, and as many as 324 settlements in Jammu, & Samba District.

For Jammu District, the share of gainfully occupied persons—Work Force Participation Rate (WFPR)—against the dependent and non-working population as per the census 2011 is 27% against that of an average of 24.50%. Workforce of an area is composed of all persons who are actually or potentially gainfully employed or engaged in productive activity. Primary Sector consisting of cultivators and agricultural labourers as per census 2011 accounts for 16% of the total workers at the district, 15% at the tehsil level and 7% at the local area level. The decrease in the share of primary workers at the local area level is indicative of growing influence of urban forces in the area. The corresponding share of workforce resulting because of decrease has been mainly engaged in tertiary sector which predominantly constitutes the services sector. The fact cannot be denied that service sector is growing as a dominant contributor to GDP in developing countries, but diversification of economy and multiplier effects are found more in secondary sector.

2 Road Network in Project Influence Area

In figure below the major roads in the project influence area are shown. There is only one National Highway i.e., NH 44 that passes nearby. This is a 4-lane divided road with approx. 30m RoW. This is the primary road that provides regional connectivity to Jammu city. RS Pura Road is the major arterial road in the study area, that provides access to the Jammu Airport upon which the traffic survey has been conducted. It is a 4-lane divided road with approx. 20m RoW. There is a road connecting NH 44 to RS Pura Road i.e., between Kunjwani Chowk and Satwari Chowk. Tawi bridge falls between Dogra Chowk and Guru Ravidas Chowk.

Apart from this, a ring road of 6 lane divided carriageway is under construction which connects NH44 near Jakh in south and near Jagti Township in the north of the Jammu city. This will later help in diverting the through traffic which are currently coming into the city area.

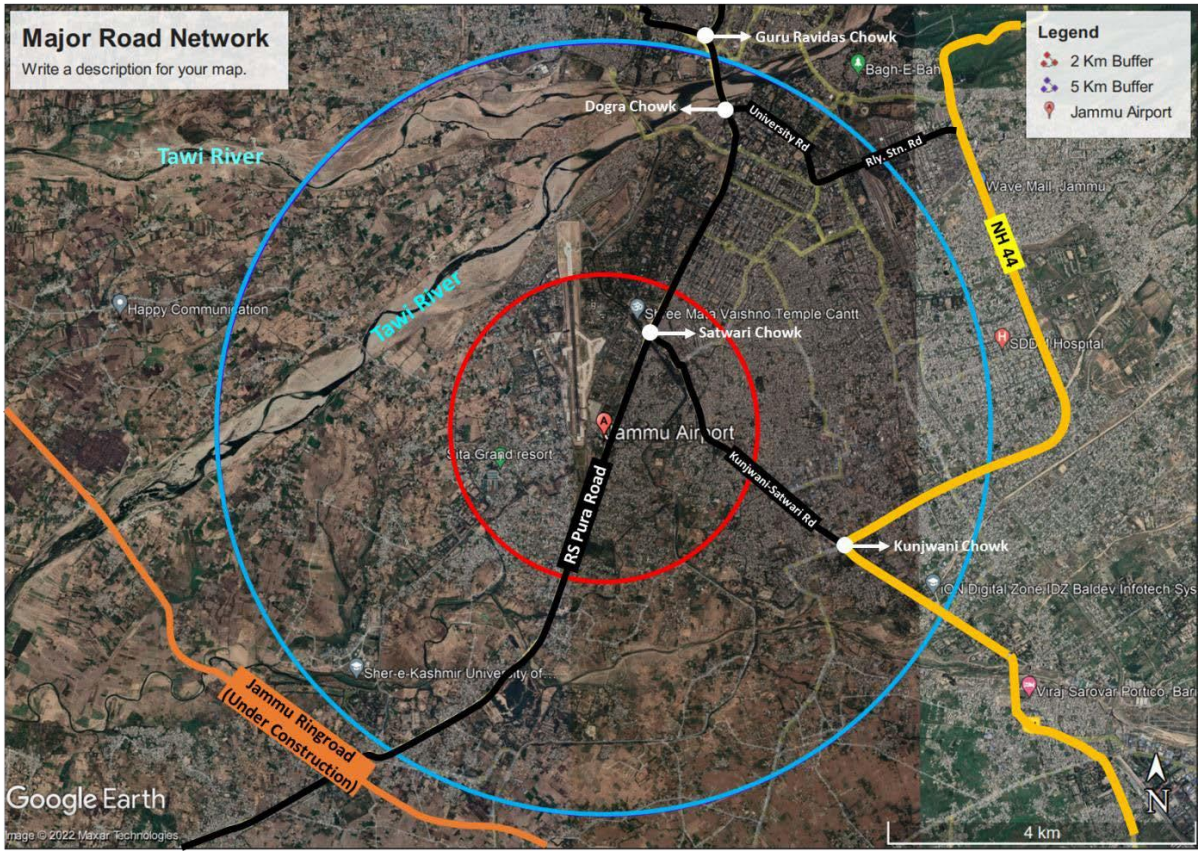

Figure 1 Major Road Network in Project Influence Area

3 Data Collection

3.1 General

The initial step in conducting any Transport Assessment study for a transport hub is the data collection of the traffic and travel pattern of the commuters of that hub and the factors which influences these travel patterns. From various transportation studies, it is revealed that the travel pattern in any hub of urban agglomeration is quite regular and a definite pattern develops in the movement of people, which have to be anticipated for the horizon years. Therefore, appreciation of existing traffic and travel characteristics is extremely important for successful completion of transport assessment.

This data collection is either done through secondary sources and conduct of primary surveys. The baseline data, apart from helping in understanding the existing traffic and transportation situation also helps in appreciating the existing problems and constraints.

3.2 Secondary Data Collection

To estimate the future passenger growth rate for Jammu Airport, past trend in passenger data was needed

to be analyzed. Thus, last 5-year airport passenger data (2017-2022) has been collected from secondary source (AAI website). Apart from that for estimation of the passenger growth rate, various parameters such as GSDP & NSDP of Jammu and GDP of India have been collected from various secondary sources.

3.3 Primary Data Collection

As a part of this study, comprehensive traffic and transport surveys were carried out in the month of 24 June 2022. The primary surveys include classified traffic volume counts, parking accumulation surveys and commuters head count surveys. These surveys have been carried out for 24 hours (1 day). All the traffic surveys were conducted by trained enumerators under the supervision of traffic engineers and transport planners. The details pertaining to each survey and the methodology is as discussed below.

3.3.1 Passenger Head Count Survey

In order to record number of passengers entering/exiting from the airport passenger counts were carried out at all the entry and exit gates of the railway station. Enumerators were deployed at entry and exit gates to capture these flows. The survey was carried out for 24 hours at Jammu Airport.

3.3.2 Classified Traffic Volume Count at Mid-block

Traffic volume counts were conducted at mid-block locations to appreciate the existing traffic volume plying on the section of important links in the influence region of airport. The data is utilized in appreciating the hourly variation of traffic, identification of the peak hour characteristics, the modal composition, etc.

3.3.3 Parking Accumulation

Parking accumulation surveys were carried out at off street parking location inside the Airport. At Jammu Airport parking facilities are available for two wheelers and cars.

The details of surveys and their schedule is as presented in the table below.

Table 1Details of Primary Surveys

Sr. No	Type of Survey	Location	Duration	Date of Survey
1	Passenger Head Count Survey	Jammu Airport	1 day (24 hours)	24 June 2022
2	Traffic Volume Count at Mid-block	RS Pura Road	1 day (24 hours)	24 June 2022
3	Parking Accumulation Survey	Gate 1 and Gate 2 of Jammu Airport	1 day (24 hours)	24 June 2022

4 Profile of the Jammu Airport

Jammu Airport (also known as Satwari Airport (IATA: IXJ, ICAO: VIJU)) is a civil airport in Jammu, Jammu and Kashmir, India. It is situated 14 km (8.7 miles) from the international border between India and Pakistan.

Jammu being the capital city and largest urban settlement of the Jammu province, air is a growing mode of transport. Air transport has gained its significance with increase in the number of tourists to Mata Vaishno

Devi Shrine, other historical and religious place located in and around the city.

Jammu Civil Airport is located at a distance of 8 km from the city and the other airports in its vicinity are Pathankot 110 km, Amritsar 250 km, Ludhiana 265 km and Srinagar 300 km. Jammu is connected by air with Delhi, Srinagar and Leh.

The Jammu Airport starts operation at 8:00 Am and the last flight takes off before 5:00 Pm. The airport authorities are not allowed to operate commercial flights beyond the time allotted to them. The airport is already overburdened with the number of flights and passengers as it has to cater to more than 4,000 passengers on daily basis in 48 (arrival and departure) flights.

With a capacity of 360 passengers at one time, the airport is catering 1,600 passengers during peak hours as 12 flights operate within two-and-a-half hours every afternoon. Jammu Airport is a domestic airport; hence there is only one terminal which offers numerous facilities to the travelers.

Jammu airport connects to places like Srinagar, Leh, Delhi, Chandigarh and Amritsar. The city is approximately 600 km away from the National capital (Delhi) and about 290 km from summer capital (Srinagar) of the State. It connects with all parts of J&K as well as with other major cities/towns of Punjab & Himachal Pradesh.

Currently there are 6 airlines operate in Jammu Airport which is Alliance Air, Air India, IndiGo, SpiceJet, GoAir and Vistara. The flights destination including Amritsar, Chandigarh, Leh, Delhi, Hyderabad, Mumbai and Srinagar. No separate cargo flight from this Airport up to the moment of writing of this page. All Airlines are handling cargo as well as passengers.

Table 2 Airlines with their major destinations at Jammu Airport

Airlines	Destinations
Air India	Delhi, Leh, Srinagar
Alliance Air	Delhi
IndiGo	Amritsar, Delhi, Kolkata, Mumbai, Srinagar
GoAir	Delhi, Mumbai, Srinagar
SpiceJet	Chandigarh, Dehradun, Delhi, Jaipur, Srinagar
Vistara	Delhi, Srinagar

5 Airport Passenger GrowthDrivers

5.1 Strong demand and policy support driving investments

The major growth drivers for any city are growing demand of the city. As the middle-income group and working population grow, the city grows itself. Rising domestic and foreign tourists and travelers of the city is the other growth drivers of the city. Various government policy supports which focus on infrastructure development in the city makes any city grow automatically. Increasing investment opportunities in cities make them grow themselves.

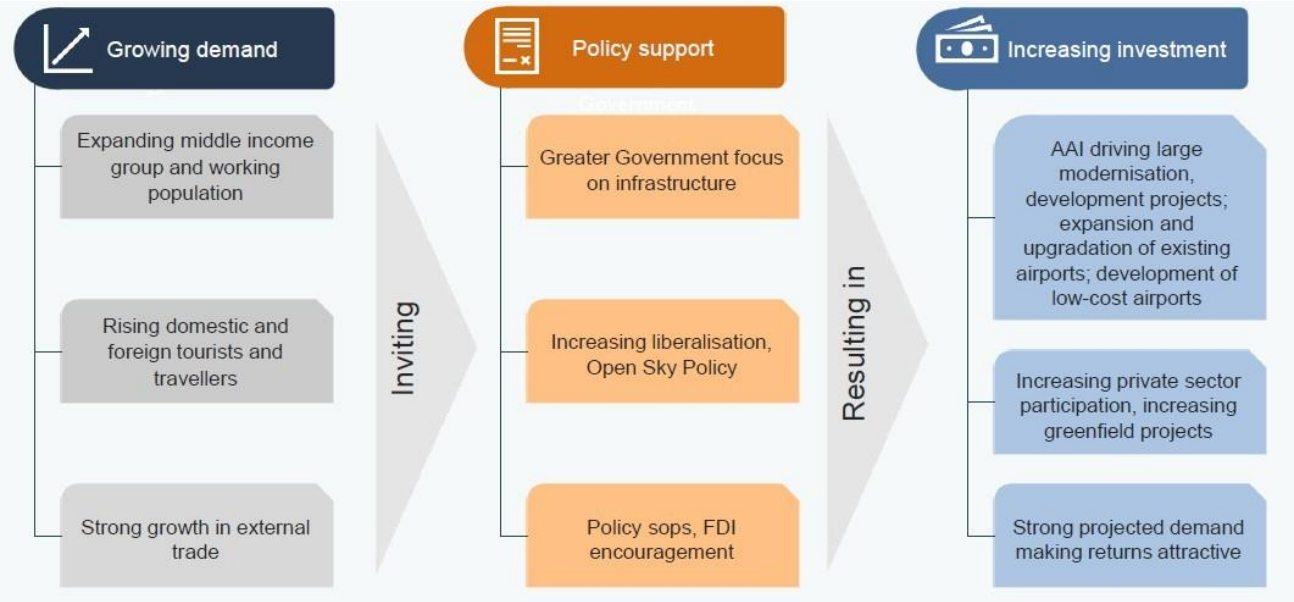

Figure 2 Growth Drivers for Indian Cities

5.2 Travel and Tourism

The tourist population as per year 2010 was about 87.00 Lac per year with peak daily flow of 24,000 pilgrims/ tourists. Jammu being of transit importance in its region and a gateway to Kashmir receives both pilgrim and leisure tourists from across India. The tourist flow to Jammu have been projected by Master Plan 2032are:

a) 25% of the Katra bound pilgrims will visit Jammu for one-day halt. It is assumed that 10 million pilgrims will visit MVD shrine Katra annually by2032.
b) 25% Kashmir bound tourists are expected to stay at Jammu for one day. As provided in the Twenty (20) Year Perspective Plan for Sustainable Development of Tourism in J&K, the Valley can sustain a maximum of 20.00 lac tourists by2020.
c) Jammu is also expected to receive 4,000 pilgrims daily (@50% of pilgrims visiting the Shri Amarnath Shrine Pahalgam during June, July and August months for 50-55days.

As per these assumptions, the total tourists and pilgrims visiting Jammu shall be around 30 lakhs with per day peak flow ranging from 8, 000 (off the Amarnath yatra period) to 12,000 visitors during the Amarnath Yatra period which shall be expected in the months of April, June, July & October each Year.

Also, the Kumbh Mela organized in Jammu after 75 years in 2009, has boosted up the tourist flow in the area again. It happens every 12 years in thearea.

Domestic traffic forecast estimated based on all these growth factors are given below in the table.

***Table 3** Domestic Traffic Forecast for Jammu Airport*

DOMESTIC TRAFFIC FORECAST - JAMMU AIRPORT

YEAR	AIRCRAFT MOVEMENTS (in Nos.)	PAX (in Nos.)	FREIGHT
2019-20 (Base Year)	14088	1455433	1385
2020-21 (Actual)	8200	850909	936
GROWTH RATE	48.0%	50.0%	40.0%
2021-22	12136	1276364	1310
GROWTH RATE	10.0%	12.0%	15.0%
2022-23	13350	1429527	1507

6 Airport Traffic Growth Rates Estimation

6.1 Background

Passenger growth likely to happen on any airport over its lifetime is an important consideration in its planning and design. Research on predicting/estimating the growth rates underline the difficulty in achieving accuracy as there are numerous independent variables affecting the dependent variable. Many uncertainties are associated with the independent variables which go into the procedure of estimating the growth rates. The uncertainties are in the form of changes in National economy, Government policy, socio-economic conditions of the people, and development in the catchment area etc. Also, the success of any airport project with private sector participation hinges on the accuracy and robustness with whichthe future traffic is estimated.

Future traffic forms the basis for the design of the transportation infrastructure facility and also determines the viability of the project. In practice, many parameters influence the future traffic growth rate. Therefore, while carrying out the traffic forecast, it is always to be kept in mind that all the parameters are assessed at the macro level of the country's economy. In economic models the economic indicators like Per capita Income (PCI), Net State Domestic Product (NSDP), Gross State Domestic Product (GSDP) and District Domestic Product (DDP), population and aircraft movement data are related to the traffic flow in the airport. Recognizing this, efforts are to be made to carefully assess all the parameters that help in predicting the traffic demand in future which necessitates realistic estimation of traffic growth rates. Traffic growth in an airport facility is generally estimated on the basis of historical trends, in the present case traffic growth rates are estimated using Elasticity method.

6.2 Approach

Traffic forecasting for airport was done considering past trend in growth and analyzing future prospects of project influence area. Elasticity approach of growth rate estimation was used for long term traffic forecasting. The approach included following steps:

- Various traffic streams using airport were differentiated in various categories as per their respective characteristics.
- Each stream was analyzed separately with respect to past trend of growth and development profile of its influence area.

6.3 PIA and Traffic Streams

A study of the socio-economic profiles of the regions comprising the project influence area (PIA) providesan overview of the factors likely to influence the pattern of economic development and hence the flows and volumes of traffic in the airport. The details include GSDP, GDP (India) and targeted growth rates of the economy. The profiles help to generate basic inputs for the estimation of future growth in demand on the basis of past scenarios, perspective changes in transport demand elasticity and economic growth rates.

The analysis of traffic pattern observed in the airport indicates that the passenger flow in the Jammu Airport is not a linear curve, and the number of passengers is not predictive.

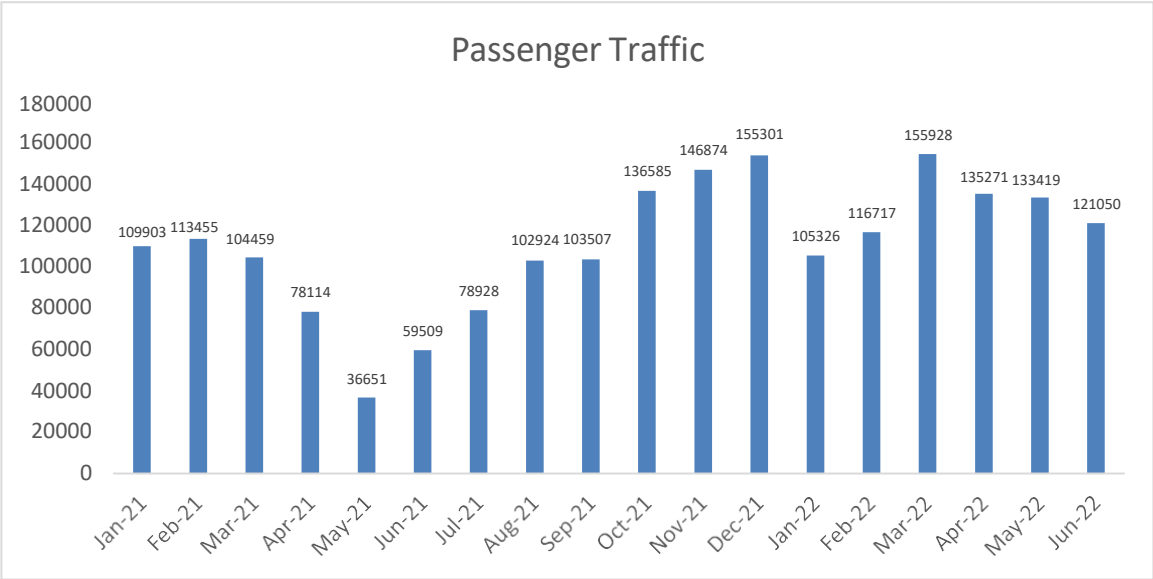

Figure 3 Passenger Traffic Domestic Airports: Jammu

Source: Airport Authority of India

6.4 Growth Trends

To analyze growth potential for this traffic stream, past trend of growth of traffic in airport is analyzed. The traffic which is considered for analysis is from FY 2017 to FY 2022. The growth at all the locations is as presented in the below tables.

Table 4 Past Traffic Growth – Jammu Airport

FY	Passenger/Year	Aircrafts/Year
2017-2018	116000	-
2018-2019	150000	-
2019-2020	1455433	14088
2020-2021	850909	8200
2021-2022	1276364	12136

The analysis of past growth in the airport indicates that there has been a significant growth for passenger movement in airport.

6.4.1 Past Growth in Regional Economies

Growth of traffic in the airport depends on existing development and future growth prospects of the connecting regions. The time series data of economic indicators at constant (2011-12) prices for PIA published by Central Statistical Organization are presented below.

Table 5 Economic Indicators for PIA

Year	GSDP of J&K at Current Prices (2011-2012) - (Rs Trillion)	NSDP of J&K at Current Prices (Rs Trillion)
2015-2016	1.17	0.98
2016-2017	1.25	1.05
2017-2018	1.40	1.17
2018-2019	1.60	1.34
2019-2020	1.7	1.44
2020-2021	1.76	1.49
CAGR	**8.51%**	**8.61%**

Source: Jammu & Kashmir, IBEF Report

6.5 Traffic demand Elasticity

While the past traffic growth trend is generally helpful to indicate growth pattern likely to extend in near future, it is not appropriate to use it for long term forecasts as demand changes are usually because of shifts in the pattern of economic activities in the influence area. Therefore, future traffic forecasting was done using elasticity approach which takes into account the elasticity of traffic demand and probable pattern of future growth of the economy. The Elasticity Method relates traffic growth to changes in the related economic parameters. This method studies, in an appropriate perspective, the changes in observed past traffic volumes in the context of changes in relevant economic indicators in the Project Influence Area (PIA), to which it was closely related in the past. Such parameters include Net State Domestic Product (NSDP), income accruing to the major sectors of the economy, etc. This method takes into account not only the past growth of the major economic indicators, but also the future perspective. Elasticity based econometric model could be derived in the following form:

LogeP = A0 + A1 Loge (EI)

Where:

P = traffic volume;

EI = Economic Indicator;

A0 = Regression constant;

A1 = Regression co-efficient (Elasticity Index).

Elasticity values for aircraft and passenger traffic is estimated using the past trend in traffic data and the growthof PIA GSDP. The elasticity's obtained are as presented below.

Table 6 Elasticity value based on Past traffic data and Growth of PIA NSDP

Vehicle Type	Elasticity
Aircraft	1.5
Passenger	1.7

6.6 Future Growth ofPIA

The projected values of GDP of India provided by Nitiayog and IMF reports were considered. The growth in traffic is assumed in lines with the past growth.

Table 7 Future Growth in Economic Parameters

Year	India GDP	PIA GSDP
2022 -2027	5.15%	5.65%
2027 – 2032	2.9%	3.4%
2032 – 2037	2.4%	2.94%
2037 – 2042	2.4%	2.94%
2042 – 2047	2.4%	2.94%
2047 – 2052	2.4%	2.94%

6.7 Projected Traffic Growth Rates

Based on the projected elasticity values and the growth of PIA, the future average annual compound traffic growth rates by vehicle type have been estimated by using the following relationship:

TGR = (GSDPgr) xE

Where,

TGR – Traffic growth rate for mode GSDPgr – Growth rate of GSDP in PIA E –Elasticity value for mode

The growth of aircraft and passenger traffic are as presented in the table below.

Table 8 Projected Traffic Growth Rates

Year	India GDP	PIA GSDP	Aircrafts	Passenger
2022 -2027	5.15%	5.65%	8.475%	9.6%
2027– 2032	2.9%	3.4%	5.1%	5.8%
2032 – 2037	2.4%	2.94%	4.41%	5%
2037 – 2042	2.4%	2.94%	4.41%	5%
2042 – 2047	2.4%	2.94%	4.41%	5%
2047– 2052	2.4%	2.94%	4.41%	5%

PIA GSDP when calculated with aircraft elasticity gives the growth rate for aircraft projections, whereas PIA GSDP when multiplied with passenger's elasticity gives the growth rate for passenger projection growth rate. These growth rates are used to calculate year wise aircraft and passenger numbers in the traffic forecast chapter.

7 Traffic Survey Analysis

7.1 Traffic volume count: Jammu Airport

For carrying out the traffic survey, vehicle classifications were adopted as mentioned in table below. The vehicle classification used is based on IRC-106-1990.

Table 9 Vehicular Classification

Fast Vehicles	Slow Vehicles
Two wheelers, Motor cycle or scooter etc.	Cycle
Passenger car, pick up van	Cycle rickshaw
Auto-rickshaw	Tonga (Horse drawn vehicle)
Light commercial vehicle	Hand Cart
Truck or Bus	
Agricultural Tractor Trailer	

The various vehicle types having different sizes and characteristics were converted into equivalent passenger car unit. Passenger Car Unit (PCU) values are adopted from Indian Road Congress publication on "Capacity of Roads in urban areas", IRC-106- 1990. The PCU values used are presented in table below.

Table 10 PCU Factor for Vehicles

SN	VEHICLE	EQUIVALENT PCU FACTORS %age composition of Vehicles type in traffic stream 5%	 10% and above
	Fast Vehicles		
1	Two wheelers Motor cycle or scooter	0.5	0.75

	etc.		
2	Passenger car, pick up van	1	1
3	Auto-rickshaw	1.2	2
4	Light commercial vehicle	1.4	2
5	Truck or Bus	2.2	3.7
6	Agricultural Tractor Trailer	4	5
	Slow Vehicles		
7	Cycle	0.4	0.5
8	Cycle rickshaw	1.5	2
9	Tonga (Horse drawn vehicle)	1.5	2
10	Hand Cart	2	3

Source: IRC: 106-1990 (Indian Road Congress)

Traffic volume data recorded on site were analyzed to obtain the following traffic characteristics:

- Average Daily Traffic(ADT)
- Hourly variation and Peak Hour Factor(PHF)
- Directional distribution
- Peak Hour for Vehicular Traffic

Figure 4 TVC Location near Jammu Airport

7.1.1 Peak Hourcharacteristics

Maximum load on any section of the corridor was assessed by analyzing the peak hour characteristics of traffic. Peak hour characteristics of traffic at survey location are as presented in the table below:

Table 11 Peak Hour Traffic Characteristics

Sr.no	Location name	Peak Hour Timings	Peak Hour Vehicles	Peak Hour PCU	% Share
1	RS Pura Road	18:15 to 19:15	3079	2886	9.36%

7.1.2 Hourly Variation of Traffic Volumes

The hourly traffic flow patterns at different locations were compared in order to develop an understanding of the overall travel demand. The variations of traffic flow during different hours of the day at both locations are as presented in the below figure.

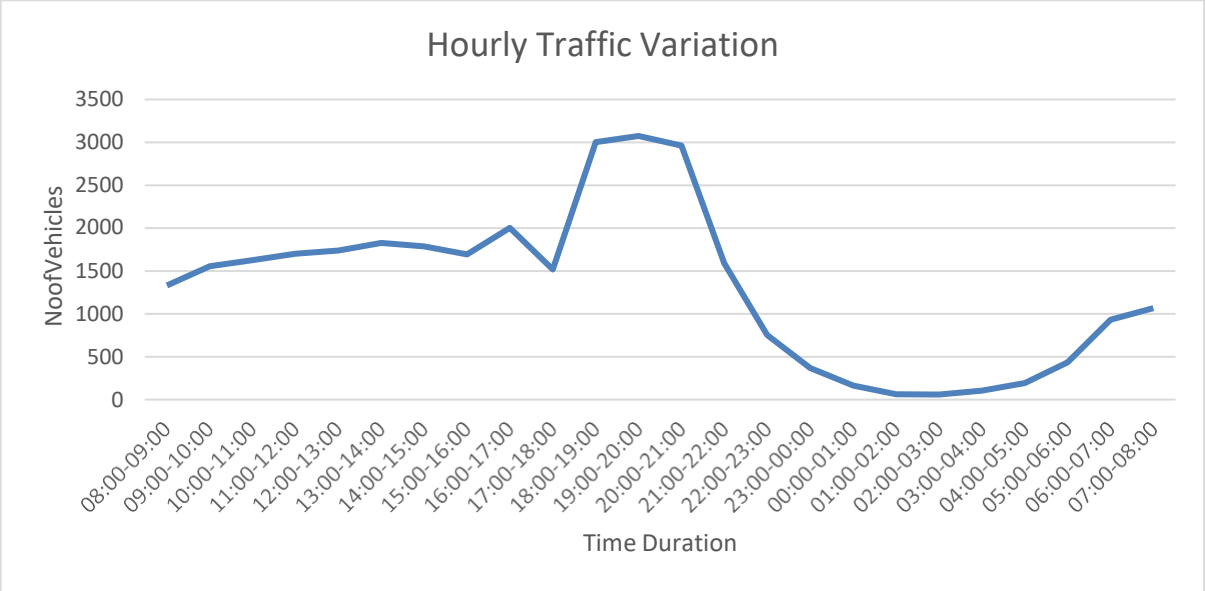

Figure 5 Hourly Traffic Variation

7.1.3 Vehicular Composition

The figures below show the Daily and Peak hour vehicular composition at RS Pura Road. From the analysis it is observed that in daily vehicle composition, two-wheeler has the highest share with 50% and followed by 37% Car and 3% 3W. Form the analysis it is observed that in peak hour vehicle composition, two-wheeler has the highest share with 55% and followed by 35% Car and 2% 3W.

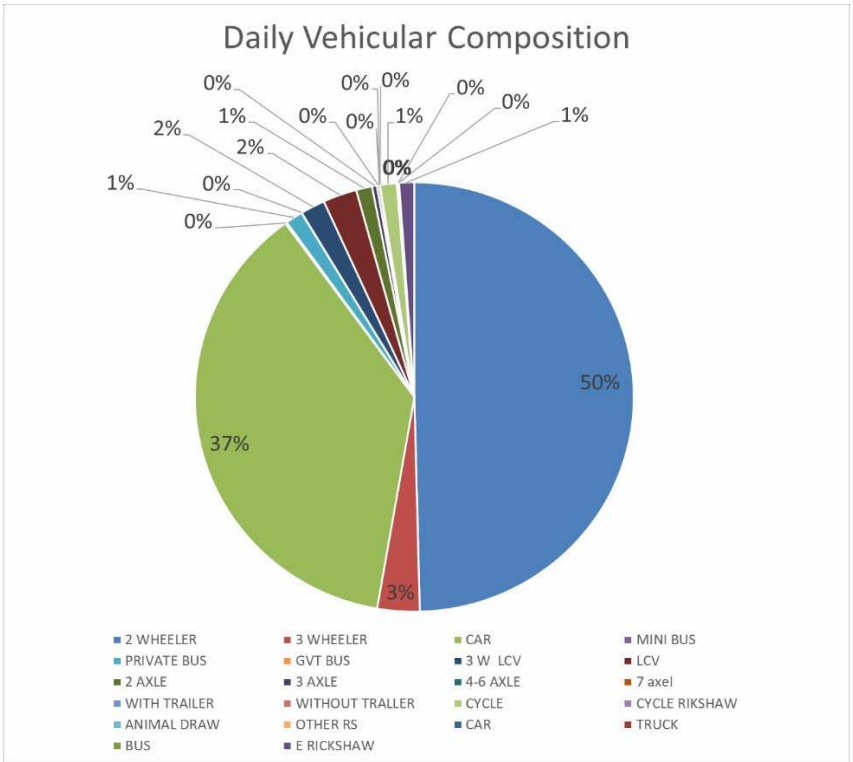

Figure 6 Daily Vehicular Composition

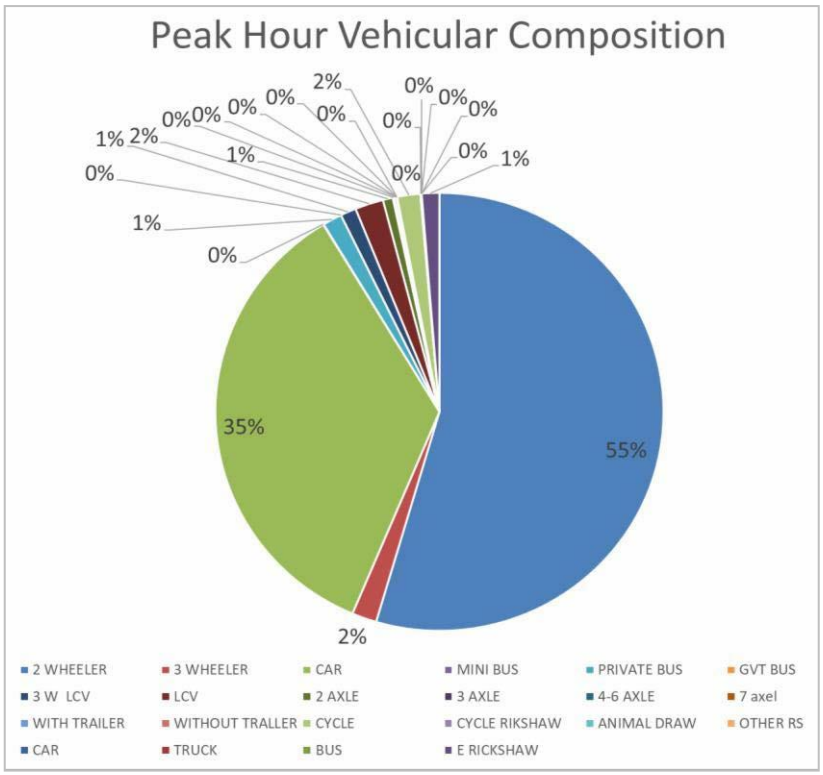

Figure 7 Peak Hour Vehicular Composition

7.1.4 Daily Traffic

The table below shows the daily traffic volume at RS Pura Road approach volume which is the primary access road for the Jammu Airport.

Table 12 Daily Traffic Details on Surveyed Road

Sr.no	Location name	Total Vehicle	Total PCU
1	RS Pura Road	31543	30850

7.1.5 Existing Surrounding Network

Level of Service during the primary survey, Airport approach road configuration has been recorded to estimate the existing network level of service of the network. Level of service explains the congestion levels on the road and level of service is categorized into A to F class, where "A" means road has a smooth flow of traffic and "F" means road is having worst congestion levels on the road. Level of service is derived from the relation between the exiting volume (PCU) on the road and capacity of the road. Capacity is adopted from IRC based lane configuration. The tables below show the existing Level of Service on the Airport approach road.

Table 13 LOS of Surveyed Road

Location name	Lane Configuration	Capacity	Peak Hour PCU	V/C	LOS
RS Pura Road	Four-Lane Divided	7000	2886	0.41	C (Stable Flow)

7.2 Parking Survey

Surveys were carried out at Jammu Airport. At Airport parking facilities are available for two wheelers and cars. Accumulation Survey at Airport parking lots was done on a normal working day for 16 hours.

Figure 8 Parking Survey Location at Jammu Airport

The parking composition detail for the peak hour and for the entire duration period in terms of numbers and ECS is as presented in the tables below.

Table 14 Parking Survey Analysis

Vehicle Type	Peak Hour Vehicle (Number)	Peak Hour Vehicle (PCU)	Peak Hour
Gate 1			
Car	20	44	12:00 – 13:00
2-Wheeler	44	33	08:00 – 09:00
Gate 2			
Car	10	10	19:00 – 20:00
2-Wheeler	36	27	10:00 – 11:00

In terms of number of vehicles, the share of two wheelers is highest around 76% at Gate 1 and 80% at Gate 2. Variety of peak hour observed for car and 2W. Overall peak hour at both the gates is between 09:00 to10:00. The total parking demand during peak hour is 85 vehicles (30 ECS).

8 Traffic Forecast

8.1 General

This chapter presents estimates of airport traffic. The traffic in the airport is forecasted using the respective growth.

8.2 Traffic Projections in Airport

The traffic in the airport is forecasted using the growth rate presented in Table 8 Projected Traffic Growth Rates. The aircraft and passenger traffic are as presented in the below table.

Table 15 Airport Traffic Forecast – HY 2052

Years	Aircraft Movement	Pax (Yearly)	Pax (Daily)
2019-20 (Base Year)	**14088**	**1455433**	3987
2020-21 (Actual)	8200	850909	2331
2021-22	12136	1276364	3497
2022-23	13350	1429527	3917
2023-24	14685	1601070	4386
2024-25	15712	1729156	4737
2025-26	16812	1867488	5116
2026-27	17989	2016888	5526
2027-28	18889	2137901	5857
2028-29	19833	2266175	6209
2029-30	20825	2402145	6581
2030-31	21658	2522253	6910
2032-33	22524	2648366	7256
2034-35	24362	2919823	8000
2035-36	**25336**	**3065814**	8399
2036-37	26349	3219105	8819
2037-38	27403	3380060	9260
2038-39	28499	3549063	9723
2039-40	29639	3726516	10210
2040-41	30825	3912842	10720
2041-42	32058	4108484	11256
2042-43	33340	4313908	11819
2043-44	34674	4529603	12410
2044-45	36061	4756083	13030
2045-46	37503	4993887	13682

The month wise variation in the traffic numbers in FY 2022 as reflected in the airport operation data is presented in the table below. It is observed that, December & March month has highest peak.

Table 16 Passenger projection data – FY 2022

2021 - 2022	Passenger	% Share
April	78114	6.12%
May	36651	2.87%
June	59509	4.66%
July	78928	6.18%
August	102924	8.06%
September	103507	8.11%
October	136585	10.70%
November	146874	11.51%
December	155301	12.17%
January	105326	8.25%
February	116717	9.14%
March	155928	12.22%
Total	**1273288**	**100%**

It can be seen that the months December and March both get the most air traffic in their respective months.

8.3 Traffic Projections Summary

It is observed that by the end of the horizon year i.e., 2041-42, a total of 4108484 passengers would be using the Airport yearly. This amounts to a daily passenger demand of about 11256. This value will be further used for the assessment of Traffic demand on the approach road to the airport and estimation of future parking demand at the airport.

9 Traffic Demand Estimation

This chapter presents the methodology adopted to assess the passenger and traffic demand for developing realistic forecasts for the Jammu Airport.

9.1 Demand Assessment

The Horizon year traffic demand on the airport catchment area will be consist of following types

- Airport demand (Destined Demand)
- Developmental traffic demand (Through PPP Development)
- Through traffic demand (the background traffic on the surrounding network which is not destined airport)

The methodology adopted for this study is that the Airport demand will be forecasted based on the past growth of passenger data. The developmental traffic is estimated based on the proposed development at the airport. The through traffic demand is forecasted based on the past data recorded in CMP report growth rate will be estimated and used to estimate the through traffic in the horizon year.

9.2 Passenger Demand at Airport

Horizon year passenger demand for airport has been estimated based on the growth rate are shown in table below.

Table 17 Growth rates of Air Passengers

Year	Daily Air passengers
2021-2022	3497
2026-2027	5526
2036-2037	8819
2041-2042	11256

So, the daily air passengers that will be in year 2041-2042 will be **11256** passengers.

9.3 Mode Split

The existing access & dispersal mode split of airport traffic has been derived from primary survey analysis (OD survey) and the same has been considered for the horizon year. Mode split is an important input for calculating the parking demand at the airport and additional traffic (vehicular) demand on the adjoining road network. The mode share of public transport and IPT has been increased gradually for the future years.

Table 18 Adopted mode split (Airport Access)

Mode	%age Share	Average Occupancy
Auto	32.60%	1.2
Bike	5.41%	1
PT	51.85%	1.5
Car	10.14%	1.5
Total	**100.00%**	

To estimate the vehicular trips, occupancy rate has been applied in lines with the observed numbers in the base year to assess the horizon years vehicular demand estimation. Based on Primary survey data, for the Horizon year it is assumed that share of Gate 1 and Gate 2 will be 60% and 40% respectively.

Table 19Year-wise Airport Traffic Forecast

Mode	2022	2027	2032	2037
Total Vehicles (Veh/Day)				
Auto	114	179	239	293
Bike	19	30	40	49
PT	181	285	380	467
Car	35	56	74	91
Total	**350**	**550**	**733**	**900**
Total Vehicles (PCU/Day)				
Auto	133	209	251	342
Bike	18	28	37	45
PT	181	285	380	467
Car	35	56	74	91
Total	**368**	**578**	**770**	**945**

9.4 Estimation of Parking & Drop – off%

The number of vehicles entering the airport and using the parking has been adopted in lines with the observed pattern and is as presented in the table below.

Table 20 Proportion of total vehicles using the Parking

Detai	Parking %	Drop off %
Jammu	50%	50%

The above parking and drop off percentage have been applied to the peak hour vehicle entry of the station.

10 Future Road Network Development Plans

After analyzing the Comprehensive Mobility Plan for Jammu 2020, some proposed development pertaining to the road infrastructure in the project influence area have been considered. These proposals are with regards to both link and junction, which are expected to be useful in solving various traffic problems in future such as congestion, bottlenecks, accidents etc.

All such development recommendations and proposals are described below.

10.1 Link-level Proposals

i. **Expressway (Southern Byepass Road)**: The proposed Expressway (Southern Bye-Pass Road) of 90 M wide has been proposed along the western periphery of the planning area connecting with NH-IA on the southern side and the Akhnoor Road on the northernside.

ii. **Spine Road:** This central spine road is the existing NH-44 is to be 60 M wide, forming the

commercial/ recreational spine having high intensity development alongit.

iii. **Arterial Roads:** 45 m wide the major arterial roads will be R.S. Pura Road having width of 45m. TheNagrota Bye-Pass and the part of southern Bye-Pass (GurahSalathian) will be 45m wide Road.

iv. **Sub-Arterial Roads:** 24-30 m Wide The sub-arterial roads are the internal link road that is creating the grid pattern road network.1-1.5 km grid has been created for the 24m road and 1.5km-2 km grid has been created for the 30mroad. **Road Widening:** About 100 km of road network has been identified for widening along with NMT facilities across the city proposed to be upgraded in phase I. The proposed road network is presented in Figurebelow.

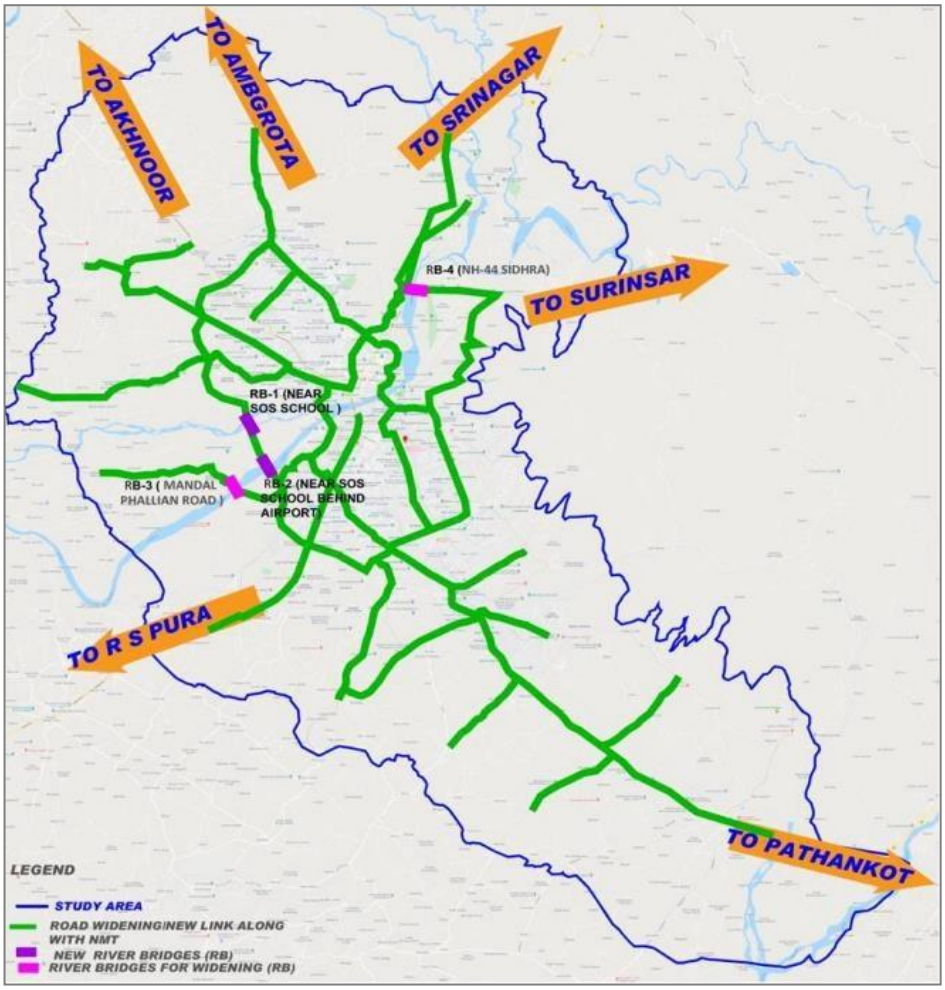

Figure 9 Proposed Road Widening Map

10.2 Node-level Proposals

In order to augment the capacity of existing junctions, Major junctions which cater heavy traffic and face congestion due to poor geometry and absence of traffic control measures have been identified. The total 10 junctions have been identified for geometric improvement in phase I and 2 critical junctions for grade separation in phase II. The improvements of these junctions have been proposed based on the available data and site visits. However, more detailed plans shall be worked out during the detailed study of these locations and additional modifications could be suggested at that stage.

i. **Satwari Junction (Phase II):** It is proposed to be developed into Grade Separated Junctions.

ii. **Kunjwani Junction (Phase II):** It is also proposed to be developed into Grade Separated Junctions.All the junction improvement plans are shown in the map below.

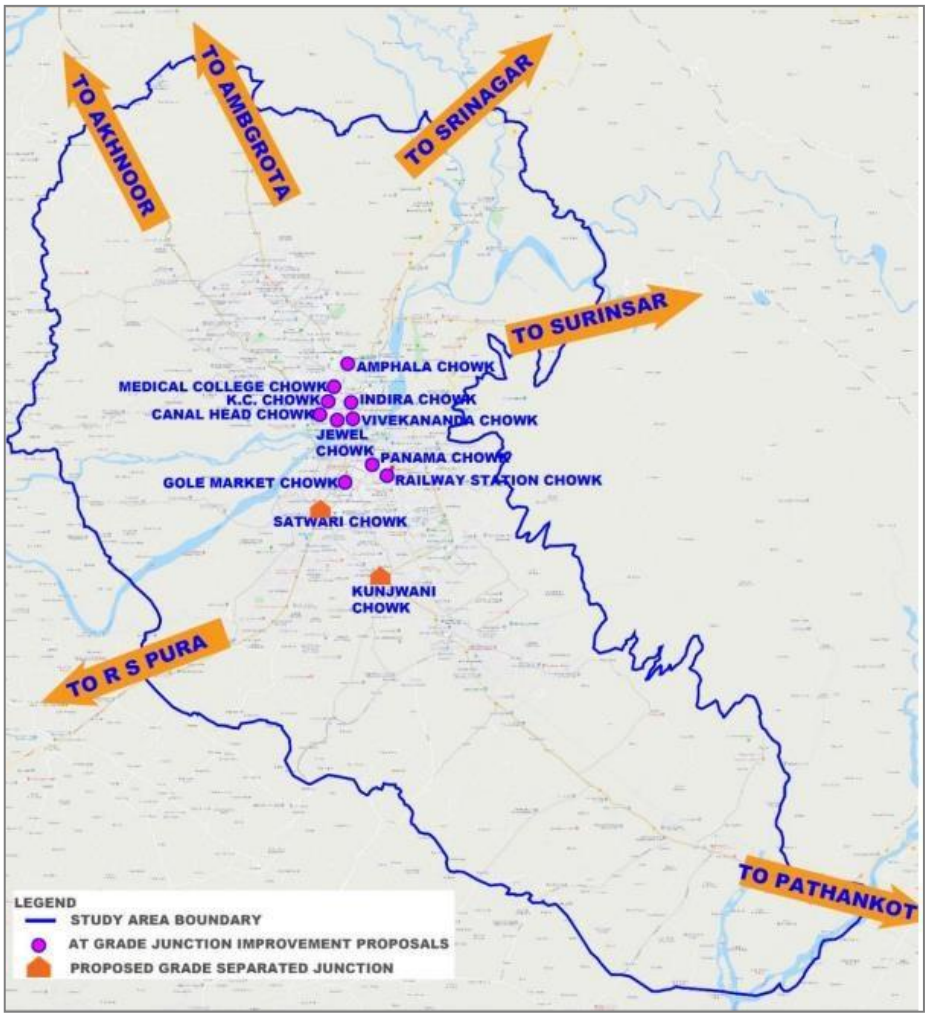

Figure 10 Proposed Junction Improvement Map

11 Summary:

a) The PHT for design shall be as follows:
Current: 3497
Future (at year 2037): 11256

b) The distribution for Parking & Drop-off is taken as 50:50. So, the Surface Car Park is considered to be 20% of complete Car park. Rest of the parking considered for Multilevel Car Park.

उप-राज्यपाल ने जम्मू विश्वविद्यालय में जनरल जोरावर सिंह की प्रतिमा का किया अनावरणा

शहीदी दिवस पर दी श्रद्धांजलि, जम्मू विश्वविद्यालय में चेयर स्थापित करने की घोषणा की

जनरल जोरावर सिंह को श्रद्धांजलि देते उप-राज्यपाल मनोज सिन्हा।

समारोह को संबोधित करते उप-राज्यपाल मनोज सिन्हा तथा उपस्थित गणमान्य नागरिक। (सांकेत)

[illegible] (जम्मू): उप-राज्यपाल मनोज सिन्हा ने शनिवार को जम्मू विश्वविद्यालय में जनरल जोरावर सिंह की प्रतिमा का अनावरण किया और उनके शहादत दिवस पर अपने शहीदों को श्रद्धांजलि अर्पित की। उन्होंने जम्मू विश्वविद्यालय में जनरल जोरावर सिंह की स्मृति में एक चेयर स्थापित करने की सरकार के फैसले की घोषणा की और कहा कि यह प्रयास छात्रों और शोधकर्ताओं को एक मजबूत और समृद्ध जम्मू कश्मीर बनाने के लिए प्रेरित करेगा जिसका सपना जनरल जोरावर सिंह ने देखा था।

स्कूलों में छात्रों को पढ़ाया जाएगा जनरल जोरावर सिंह, ब्रिगेडियर राजिंदर सिंह, मकबूल शेरवानी जैसी हस्तियों का इतिहास

उप-राज्यपाल ने जनरल जोरावर सिंह मैमोरियल एजुकेशनल एंड कॉर्टेबल ट्रस्ट और जे. एंड के. एक्स सर्विसेज लीग द्वारा आयोजित स्मारक कार्यक्रम में भाग लिया और भारत के इतिहास में जनरल जोरावर सिंह के योगदान को उजागर करने के प्रयासों की सराहना की। उन्होंने जम्मू-कश्मीर के अमर नायकों की वीरता और बलिदान का सम्मान करने के लिए यूटी प्रशासन के संकल्प को दोहराया।

सिन्हा ने कहा कि जम्मू-कश्मीर के स्कूलों में छात्रों को जनरल जोरावर सिंह ब्रिगेडियर राजिंदर सिंह, मकबूल शेरवानी जैसी महान हस्तियों का इतिहास पढ़ाया जाएगा। उनका जीवन, साहस, देशभक्ति, अनुशासन, आत्मविश्वास के बारे में एक सबक है और यह छात्रों को भारत को एक विकसित राष्ट्र बनाने के लक्ष्य को प्राप्त करने के लिए प्रेरित करेगा।

तमिल भाषा में जनरल जोरावर सिंह के जीवन पर मोनोग्राफ तैयार करने के निर्देश

उप-राज्यपाल ने जम्मू-कश्मीर कला, संस्कृति और भाषा अकादमी को तमिल भाषा में जनरल जोरावर सिंह के जीवन पर एक मोनोग्राफ तैयार करने के निर्देश दिए। उन्होंने कहा कि राष्ट्र को एकता और अखंडता को बनाए रखना और उसकी रक्षा करना प्रत्येक नागरिक का कर्तव्य है। युवा पीढ़ी को उन महान नेताओं के योग्य उत्तराधिकारी बनने का प्रयास करना चाहिए जिन्होंने देश की नई नियति के निर्माण के लिए संघर्ष और बलिदान दिया।

उन्होंने कहा कि महान नेताओं आदर्शों, मूल्यों और सभ्यतागत ताकत के साथ हमें एक उज्जवल भविष्य के निर्माण पर ध्यान केंद्रित करना चाहिए।

मेजर जनरल गोवर्धन सिंह जम्वाल (सेवानिवृत्त), लैफ्टिनेंट जनरल आर.के. शर्मा (सेवानिवृत्त) और पूर्व मंत्री ठाकुर गुलचैन सिंह चाढ़क ने भी समारोह को संबोधित किया। इस अवसर पर पद्मश्री एस.पी. वर्मा अध्यक्ष गांधी ग्लोबल फैमिली, प्रो. उमेश राय उप-कुलपति जम्मू विश्वविद्यालय, रमेश कुमार संभागीय आयुक्त जम्मू, आनंद जैन आई.जी.पी. जम्मू, देविंदर सिंह कलुरिया अध्यक्ष जनरल जोरावर सिंह मैमोरियल ट्रस्ट और ट्रस्टी रिंपा कलुरिया, दीक्षा कलुरिया, प्रमुख नागरिक और बड़ी संख्या में विद्यार्थी उपस्थित थे।

अनुच्छेद-370 पर सुप्रीम कोर्ट का फैसला राष्ट्र की एकता, अखंडता की जड़ें करेगा मजबूत

उप-राज्यपाल ने कि प्रधानमंत्री नरेंद्र मोदी के नेतृत्व में केंद्र सरकार ने 5 अगस्त 2019 को 'नया जम्मू-कश्मीर' की नींव रखी और सुप्रीम कोर्ट का फैसला लोगों में एक नई आशा लेकर आया है और एकता और अखंडता की जड़ों को और मजबूत करेगा।

देश के सर्वोच्च न्यायालय ने गत सोमवार को अनुच्छेद 370 पर अपना फैसला सुनाया और स्पष्ट कर दिया कि जम्मू-कश्मीर के लोगों के लाभ के लिए संसद में अगस्त 2019 में पारित प्रस्ताव पूरी तरह से संवैधानिक था। मैं उस फैसले का स्वागत करता हूं जो राष्ट्र की एकता और अखंडता की जड़ों को और मजबूत करेगा।

2 बच्चों सहित 5 नए डेंगू मामलों

जम्मू, 12 दिसम्बर (मानस): जम्मू-कश्मीर में मंगलवार को डेंगू के 5 नए मामलों की पुष्टि हुई है। जम्मू-कश्मीर में मंगलवार तक 48,993 संदिग्ध लोगों की जांच की गई जिसमें से 6,374 लोगों में डेंगू की पुष्टि हुई है। आज 209 संदिग्ध लोगों की जांच की गई जिसमें से 5 नए मामलों की पुष्टि हुई है। इनमें 2 बच्चे, 2 पुरुष और 1 महिला शामिल है।

अब तक जम्मू जिले से 4022 डेंगू के मामले सामने आए हैं जबकि साम्बा में 355, कठुआ में भी 604, रियासी में 69, रामबन में 63, कश्मीर संभाग में 40 लोगों में आज साम्बा में 3 व्यक्ति। अभी तक 2 उपचार के लिए गया है जिनमें 1968 को अस्पताल और 7 रोगी अभी उपचाराधीन है। व्यक्तियों की मृत्यु हुई है।

घायलों का उपचार करते डॉक्टर।

कार-बाइक की टक्कर में 2 घायल

बिश्नाह, 12 दिसम्बर (स.ह.): बिश्नाह थाना क्षेत्र के गांव छौरी में मंगलवार को कार और बाइक की टक्कर में दो लोगों के घायल होने का मामला सामने आया है।

पुलिस के अनुसार श्रीरज व हिमांशु दोनों निवासी जटा चुमंबिया काम के सिलसिले में बाइक पर जा रहे थे। गांव खौरी के समीप सामने से आ रही तेज रफ्तार मारुति कार ने टक्कर मार दी जिससे दोनों गंभीर रूप से घायल हो गए। घायल अवस्था में स्थानीय लोगों ने दोनों को उपजिला अस्पताल बिश्नाह पहुंचाया जहां पर डाक्टरों ने उन्हें प्राथमिक उपचार के बाद जी.एम.सी.एच. जम्मू रैफर कर दिया। बिश्नाह पुलिस ने मामला दर्ज कर आगे की कार्रवाई शुरू कर दी है।

न्यू बस स्टैंड के पास प वाहन, 3 कारें भी चपे

साम्बा : न्यू बस स सैन्य वाहन का

साम्बा, 12 दिसम्बर (स.ह.): जम्मू-पठानकोट राष्ट्रीय राजमार्ग पर साम्बा के न्यू बस स्टैंड के पास मंगलवार को एक सैन्य वाहन अनियंत्रित होकर पलट गया। इस दौरान उस अपनी चपेट में ले लिया। हालांकि इस हा चोटें नहीं आई, लेकिन कारें क्षतिग्रस्त हो ग

जानकारी के अनुसार पहेश्वर कैंप से एक तरफ आ रहा था कि पंजवटी के पास चालक नहीं रहा, जिससे उसने अपने वाहन को दूसरे वाहन में साइड भी लेकिन न्यू बस स्टैंड के पास

सार्वजनिक सूचना

आम जनता को सूचित किया जाता है कि पर्यावरण वन और जलवायु परिवर्तन मंत्रालय द्वारा पर्यावरण भवन, जोर बाग ने पर्यावरणीय मंजूरी पहचान संख्या EC23A2902JK5192762N दिनांक 07.12.2023 के तहत भारतीय राष्ट्रीय राजमार्ग प्राधिकरण द्वारा प्रस्तावित 40,000 वर्गमीटर क्षेत्र में जम्मू हवाई अड्डे पर मौजूदा एप्रोनेव के विस्तार के लिए पर्यावरणीय मंजूरी जारी कर दी है।

आम जनता को सूचित किया जाता है कि उक्त पर्यावरण मंजूरी पत्र की प्रति पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय के कार्यालय और वैबसाइट https://parivesh.nic.in पर उपलब्ध है।

(एस.के.गर्ग)
हवाई अड्डा निदेशक, जम्मू विमान क्षेत्र

राजीव नगर में पुलिस ने फिर दी दबिश, नशा तस्करों में दहशत

जम्मू, 12 दिसम्बर (निरचय): मादक पदार्थ धंधे व देह व्यापार के लिए सुर्खियों में रहने वाले राजीव नगर में मंगलवार को एक बार फिर पुलिस ने दबिश दी जिससे नशा तस्करों में दहशत फैल गई। इस दौरान पुलिस ने कुछ घरों को खंगाला व स्थानीय लोगों से पूछताछ की। इस दौरान स्कूल के समीप बनी दुकानों पर सिग्रेट व अन्य तंबाकू उत्पादन न बेचने के लिए दुकानदारों को चेतावनी दी।

राजीव नगर में छापेमारी करती पुलिस। (मोहित)

गौरतलब है कि सोशल मीडिया पर मादक पदार्थ की तस्करी, देह व्यापार व अन्य अपराधिक गतिविधियों के लिए सुर्खियों में आने के बाद पुलिस द्वारा निरंतर इस क्षेत्र में गश्त बढ़ा दी गई है। इससे पहले भी एक माह के दौरान बाग बाहु थाने की प्रभारी इंस्पैक्टर आरती ठाकुर के नेतृत्व में दो बार छापेमारी की है।

इस दौरान मादक पदार्थ तस्करों को भी गिरफ्तार कर कुछ को पी.एस.ए. के तहत जेल की सलाखों के पीछे भी भेज दिया गया है।

मंगलवार को एक बार फिर एस.डी.पी.ओ. ईस्ट के नेतृत्व में थाना प्रभारी त्रिकुटा नगर इंस्पैक्टर शिव देव सिंह, थाना प्रभारी बाग बाहु इंस्पैक्टर आरती ठाकुर, नरवाल पुलिस पोस्ट के प्रभारी ललित शर्मा व भटिंडी चौकी प्रभारी के नेतृत्व में पुलिस को एक बड़ा अमला राजीव नगर में पहुंचा। मौहल्ले में रहने वाले कुछ आदी अपराधियों से भी पूछताछ की गई।

GOVERNMENT MEDICAL COLLEGE RAJOURI
Tele. No:-01962-243209(0) 243209 e-mail:- gmcabrajouri@gmail.com

NOTICE

In continuation to this office Advertisement Notice No. 72 GMCR of 2023 dated 02.12.2023 and Advertisement Notice No. 73 GMCR of 2023 dated 02.12.2023, it is for the information of all the eligible candidates that the last date for receiving of application forms for the above mentioned advertisements is hereby extended till 20.12.2023 up to 04:00 PM.

The other terms and conditions remain same.

No: GMCR/Estb/2023-24/1819-1824
Dated: 09-12-2023

Sd/-
Prof (Dr.) A S Bhatia
Principal
Govt. Medical College
Rajouri

DIP/J-12463/23

GOVERNMENT OF JAMMU AND KASHMIR
OFFICE OF THE COLLECTOR LAND ACQUISITION 220 KV,PDD,
AMBEDEKAR CHOWK, RAILWAY ROAD JAMMU
(Phone & Fax 0191-2437638 E-mail clacpdd@gmail.com

NOTIFICATION

(Under Section 11(1) of RFCTLARR Act, 2013)

Subject: Notification under Section 11(1) of the Right to Fair Compensation & Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 for the acquisition of Land for Construction of towers of LILO-II of 220 KV D/C Hiranagar-Bishnah Transmission line from 400/220KV Jatwal Grid Station under PMDP-15.

Whereas it appears to the Government of UT of Jammu and Kashmir that the Land is required in the Jurisdiction of Jammu & Kashmir, for public purpose namely for Construction of towers of LILO-II of 220 KV D/C Hiranagar-Bishnah Transmission line from 400/220KV Jatwal Grid Station under PMDP-15. It is hereby notified that land in the area specified is likely to be required for the above purpose.

This notification is made under the provisions of section 11(1) of The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013, to all whom it may concern.

The Social Impact Assessment Study was exempted by the Deputy Commissioner Samba, vide Order No. 20 of 2023 dated 08-12-2023 and communication no. DCS/ACR/LAS/2023-24/548-553 dated 08-12-2023 and Order No. 21 of 2023 dated 08-12-2023 and communication no. DCS/ACR/LAS/2023-24/554-559 dated 08-12-2023.

In exercise of powers vested in me under section 11 sub section (1) of The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013, I Shafaat Malook Bhat, Collector Land Acquisition, PDD, Jammu do hereby notify that the land

विल्लो क्लैफ्ट की तस्करी का प्रयास किया विफल

ट्रक में भरे हुए विल्लो क्लैफ्ट।

घायल व्यक्ति ने उपचार के दौरान दम तोड़

जम्मू, 12 दिसम्बर (निरचय): कठुआ जिले के बसोहली क्षेत्र में वाहन की चपेट में आने के कारण घायल व्यक्ति ने जी.एम.सी. अस्पताल जम्मू में दम तोड़ दिया। मृतक की पहचान नजीर अहमद (45) निवासी डोडा के रूप में की गई है। पुलिस मामले की जांच कर रही है।

जानकारी के अनुसार 9 दिसम्बर को जाराटा, बसोहली में भरी इस दुर्घटना के बाद घायल नजीर अहमद को प्राथमिक उपचार के बाद जी.एम.सी. जम्मू रैफर किया गया था। जहां डाक्टरों के अथक प्रयासों के बावजूद मंगलवार को उसकी मौत हो गई। पुलिस ने शव को पोस्टमार्टम के लिए शवगृह में शिफ्ट कर कार्रवाई शुरू कर दी है।

UNION TERRITORY OF JAMMU AND KASHMIR
JAL SHAKTI (I&FC) DEPARTMENT
OFFICE OF THE EXECUTIVE ENGINEER IRRIGATION DIVISION
SHORT TERM NOTICE INVITING e- TENDER

e-NIT No: 21 of 12/2023-24

For and on behalf of Lieutenant Governor, Union Territory of Jammu and Kashmir, e- Bids are invited by I Irrigation Division Kathua, by e-tendering mode on Percentage Basis from approved and eligible contractors reg Govt./CPWD/ MES and Railways for the following works

S No	Name of work	Estimated Cost (in Rs.)	Cost of document (in Rs.)	EMD	Performance Security	Time allowed for completion	Time and date of opening of tender Technical Bid
1	2	3	4	5	6	7	8
1	Silt and Jungle clearance from Main Kathua Canal from RD 5217 to RD 8300m at spots	354800.00	200.00	2% of the tender cost	3% of the allotted cost	30 Days	19-12-2023
2	Silt and Jungle clearance from Main Kathua Canal from RD 8600 to 10050M at spots.	410550.00	200.00	2% of the tender cost	3% of the allotted cost	30 Days	19-12-2023
3	Silt and Jungle clearance from Main Kathua Canal from RD 10050 to 11500M	257700.00	200.00	2% of the tender cost	3% of the allotted cost	20 Days	19-12-2023
4	Silt and Jungle clearance from Main Canal RD 14000 to 17650M including Syphon at RD 16610M	610100.00	200.00	2% of the tender cost	3% of the allotted cost	30 Days	19-12-2023
5	Silt and Jungle clearance from D-4 of Main Kathua Canal from RD 0-2700M and D-5 of Main Kathua Canal from RD 0-1550M	213850.00	200.00	2% of the tender cost	3% of the allotted cost	20 Days	19-12-2023
6	Silt and Jungle clearance from Main Kathua Canal from RD 11500 to 14000M, D-8 of Main Kathua Canal from RD 0-4300M and D-7 of Main Kathua Canal from RD 0-3000M for providing adequate Irrigation Water Supply to the farmers	424250.00	200.00	2% of the tender cost	3% of the allotted cost	30 Days	19-12-2023
7	Silt and Jungle clearance from Main Kathua Canal from RD 17650 to 19600, D-7 of Main Kathua Canal from RD 0-4200M and D-8 of Main Kathua from RD 0-4200 including syphon at RD 0-1041M	421600.00	200.00	2% of the tender cost	3% of the allotted cost	30 Days	19-12-2023
8	Silt and Jungle clearance of D-1 RD 0-5500M, D-2, RD 0-4000M and D-3, RD 0-2000M of Main Kathua Canal	259650.00	200.00	2% of the tender cost	3% of the allotted cost	20 Days	19-12-2023
9	Silt and Jungle clearance from D-1 of Main Kathua Canal from 5000 to 11500M	364800.00	200.00	2% of the tender cost	3% of the allotted cost	30 Days	19-12-2023
10	Silt and Jungle clearance from Chogal Minor (RD 0-1650M) and Rajari Minor (RD 0-1150M)	147600.00	200.00	2% of the tender cost	3% of the allotted cost	20 Days	19-12-2023
11	Silt and Jungle clearance from Jaso Minor (RD 0-5500M) and Dusbu Minor (0-2700M)	222600.00	200.00	2% of the tender cost	3% of the allotted cost	20 Days	19-12-2023
12	Silt and Jungle clearance of Padyari Minor of Main Kathua Canal RD 0-2500M	105500.00	200.00	2% of the tender cost	3% of the allotted cost	30 Days	19-12-2023
13	Silt and Jungle clearance of Padyari Minor D-8 of Main Kathua Canal RD 2600 to 3700M	59500.00	200.00	2% of the tender cost	3% of the allotted cost	30 Days	19-12-2023
14	Silt and Jungle clearance of D-9 of Main Kathua Canal RD 0-4500M	208600.00	200.00	2% of the tender cost	3% of the allotted cost	30 Days	19-12-2023
15	Silt and Jungle clearance of D-8 of Main Kathua Canal from RD 4500 to 6000M	334200.00	200.00	2% of the tender cost	3% of the allotted cost	30 Days	19-12-2023

NOTE:- Contractors who have got Contractor card issued from Kashmir Province, it is mandatory for them to upload the certificate of Qatar Branch alongwith other qualifying documents failing which their bids shall be [illegible]

की स्मृति में एक चेयर स्थापित करने के सरकार के फैसले की घोषणा की और कहा कि यह प्रयास छात्रों और शोधकर्ताओं को एक मजबूत और समृद्ध जम्मू कश्मीर बनाने के लिए प्रेरित करेगा जिसका सपना जनरल

इतिहास में जनरल जोरावर सिंह के योगदान को उजागर करने के प्रयासों की सराहना की। उन्होंने जम्मू-कश्मीर के अमर नायकों की वीरता और बलिदान का सम्मान करने के लिए यू.टी. प्रशासन के संकल्प को दोहराया।

तमिल भाषा में जनरल सिंह के जीवन पर मोनोग्रा करने के निर्देश

उप-राज्यपाल ने जम्मू कला, संस्कृति और भाषा को तमिल भाषा में जनरल

सार्वजनिक सूचना

आम जनता को सूचित किया जाता है कि पर्यावरण वन और जलवायु परिवर्तन मंत्रालय, इंदिरा पर्यावरण भवन, जोर बाग ने पर्यावरणीय मंजूरी पहचान संख्या EC23A2902JK5192762N दिनांक 07.12.2023 के तहत भारतीय विमानपत्तन प्राधिकरण द्वारा प्रस्तावित 40,000 वर्गमीटर क्षेत्र में जम्मू हवाई अड्डे पर सिविल एन्क्लेव के विस्तार के लिए पर्यावरणीय मंजूरी जारी कर दी है।

आम जनता को सूचित किया जाता है कि उक्त पर्यावरण मंजूरी पत्र की प्रति पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय के कार्यालय और वैबसाइट https://parivesh.nic.in पर उपलब्ध है।

(एस.के.गर्ग)

हवाई अड्डा निदेशक, जम्मू विमान क्षेत्र

राजीव नगर

जम्मू, 12 दिसम्बर

मादक पदार्थ धंधे व देह लिए सुर्खियों में रहने नगर में मंगलवार को ए पुलिस ने दबिश दी जिससे में दहशत फैल गई। इस ने कुछ घरों को खंगाल लोगों से पूछताछ की। इस के समीप बनी दुकानों अन्य तंबाकू उत्पादन न

RB COLLEGE OF EDUCATION

Recognized by Govt. of J&K & Affiliated to University of Jammu
Village Krandi Near DPS, Rajbagh, Kathua (UT J&K)

APPOINTMENT NOTICE 03

POSTS	QUALIFICATION
[illegible]	[illegible]

- Salary Negotiable
- Eligible and Interested candidates may send resume (along with the certificates) through Email - [illegible] on or before 19/12/2023.

For further details
Contact - 9419444678, 9906183844

Sd/-
Chairperson

Automatic payment limit via UPI raised to Rs 1 lakh: RBI

MUMBAI, Dec 12

The Reserve Bank of India on Tuesday increased the limit for automatic payments through UPI to Rs 1 lakh per transaction from the existing Rs 15,000 for certain categories including subscription to mutual funds.

As of now, relaxation in Additional Factor of Authentication (AFA) is permitted while processing e-mandates/standing instructions on cards, prepaid payment instruments and UPI (Unified Payments Interface) for subsequent recurring transactions with values up to Rs 15,000.

"It has been decided to increase the limit from Rs 15,000 to Rs 1,00,000 per transaction for Subscription to mutual funds, payment of insurance premiums and credit card bill payments," the central bank said in a circular on "processing of e-mandates for recurring transactions".

UPI has emerged a preferred mode of payment for a large section of the population with over 11.23 billion transactions recorded in November.

An announcement in this regard was made by Reserve Bank Governor Shaktikanta Das while unveiling the December bi-monthly monetary policy last week. (PTI)

JAMMU MOST TRUSTED MARRIAGE BUREAU ASHIRWAD VIVAH

ALL KINDS OF CASTE
BRAHMIN, MAHAJAN
KHATRI, RAJPUT, SIKH
KASHMIRI PANDIT AND
OTHER DIVORCEE &
WIDOW ALSO AVAILABLE
ADDRESS: POT NO. 373,
SECTOR-3, CHANNI
HIMMAT, JAMMU
MOBILE: 7889635161

PUBLIC NOTICE

General Public is hereby informed that Ministry of Environment Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh has issued Environmental Clearance for "Expansion of Civil Enclave at Jammu Airport over an area of 40,000 m proposed by Airports Authority of India vide EC Identification No. EC23A2902JK5192762[illegible] dated 07.12.2023.

General Public is further informed that copy of said Environment Clearance Letter is available in the office and on https://parivesh.nic.in website of Ministry of Environment Forest and Climate Change.

(S.K Garg)
Airport Director
Civil Enclave, Jammu.

GOVERNMENT MEDICAL COLLEGE JAMMU

Dr. Ashutosh Gupta
(MD, DNB Radiation Oncology)
Principal & Dean
Tel: 0191-2584247
Fax: 0191-2584214
E-mail: pmc-gmcjammu@[illegible].gov.in

Subject - Interview notice for the post of Research Scientist (Medical) for the project Manpower Required for Hospital Based Cancer Registry on Contractual basis consolidated Remuneration in Government Medical College, Jammu.

INTERVIEW NOTICE

In reference to the Advertisement No. GMCJ/Proj/2023/152 Dated 10.06.2023 & GMCJ/Project/2023/263 Dated 01.11.2023, the Interview for the post of Research Scientist I (Medical) of the following candidates for the project Manpower Required for Hospital Based Cancer Registry on contractual basis consolidated Remuneration in Government Medical College, Jammu shall be conducted in the office chamber of undersigned on dated 13.12.2023 at 10:00 am sharp. The candidates are required to bring their original documents and one Xerox copy (self attested) at the time of Interview.

S.No.	Name of Doctor
1	Dr. Aproo Sharma
2	Dr. Girija Priya

No TA/DA shall be paid from this institution.

DIP/J-12500
Dt: 12-12-2023

Sd/-
Principal & Dean
Govt. Medical College
Jammu

NORTHERN RAILWAY

NOTICE INVITING TENDER

[illegible] acting for and on behalf of the President of India invites E-Tenders for the work as under. Bidders will [illegible] 05.01.2024 at 15.00 hrs [illegible] considered.

Tender No	Name of Work	App. Cost (Rs.)	Cost of Tender Form (Rs.)	Date & Time for Submission of tender	Earnest Money ₹ (Rs.)	Completion Period	Opening of Tender	Website Particulars
523-TRD-FZR-2023-24	[illegible]	[illegible]	[illegible]	Upto 05.01.2024 15.00 Hrs	[illegible]	06 Months	05.01.2024 after 15.00 Hrs	www.ireps.gov.in

Note: Tenderer (s) may please note that offers received without Bid Security either in cash through e-payment gateway or as Bank Guarantee bond from a scheduled commercial bank of India or as mentioned in tender documents [illegible] will be considered as incomplete & summarily rejected and for which contractor shall have no claim on Railway.

No. 523-TRD-FZR-2023-24 Dated 11.12.2023
3885/23

SERVING CUSTOMERS WITH A SMILE

OFFICE OF THE EXECUTIVE ENGINEER MECHANICAL DIVISION BHEP, CHANDERKOTE

Email: [illegible]

GIST OF e-TENDER NOTICE

For and on behalf of Managing Director JKPDC, e-tenders are invited from Govt. registered Electrical contractors authorized workshops / manufacturers/ OEMs for the below mentioned job:

S. No.	Name of Work	e-NIT No. & Date	Due Date	Tenders receiving Authority
1	"Installation of CCTV cameras for store and office complex along with allied accessories"	12 of 2023-24 Dated 09/12/2023	30.12.2023 AT 04:00 P.M	Executive Engineer Mechanical Division BHEP, Chanderkote

For details of work, terms and conditions and any other clarifications kindly contact the Office of the undersigned on any working day up to 29.12.2023 till 04:00 PM. The interested bidders can have complete details of the e-NIT from official site www.jktenders.gov.in

DIP/J-4456-P
Dt: 12-12-2023

Sd/-
Executive Engineer,
Mechanical Division
BHEP, Chanderkote

Government of Jammu & Kashmir

KASHMIR POWER DISTRIBUTION CORPORATION LTD

OFFICE OF THE EXECUTIVE ENGINEER ELECTRIC DIVISION (O&M) BIJBEHARA

Contact No/ Fax: - 01932-234398 E-mail:- exenedbij@yahoo.co.in

NOTICE INVITING TENDER

NIT- EDB/e-tender/80 of 2023-24
Dated: - 11-12-2023

For and on behalf of the Governor of Jammu and Kashmir UT, e-tenders are hereby invited from Registered Class A Electrical Contractors for following works under HT/LT Programme 2023-24

S. No	Name of Work	Adv Cost (Rs Lacs)	Cost of e-Bid/ tender document (Rs)	EMD
1	Improvement of HT/LT network at Segregation 11 KV Nanil Feeder Shifting of 11 KV line of 200 KVA Substation at Ganeshpora Aishmuqam, Shifting of Hassanpora Wanpora Tapline of Anwara feeder at HP Tawela HT/LT at Thajwara, LT Network at Itoo Mohalla Matipora and HT/LT at Negipora Kullar under HT/LT Programe 2023-24	4.70	Rs 200	Rs 9400

4	Publishing Date & Time	11-12-2023 (1700 Hrs)
5	Document Download / Sale Start Date & Time	11-12-2023 (1700 Hrs)
6	Seek Clarification Start Date & Time	11-12-2023 (1700 Hrs)
7	Seek Clarification End Date & Time	22-12-2023 (1300 Hrs)
8	Bid Submission Start Date & Time	11-12-2023 (1700 Hrs)
9	Bid Submission End Date & Time	22-12-2023 (1300 Hrs)
10	Bid opening date & Time	23-12-2023 (1300 Hrs)
11	Venue of opening Bids	Electric Division Bijbehara

Position of Funds: Demanded

Please Read Document Carefully

The tender document is available on website. Interested bidders may view, download the e-Bid document, seek clarifications and submit their e-Bid online up to the date and time mentioned in the table above. The Quoted rates shall be firm, inclusive of all taxes and duties, GST, freight, transportation up to working sites. The rates shall include costs, if any, attracted towards mandatory inspections / testing by the designated agencies and the department will not be required to pay / reimburse anything over and above the price quoted. All the bids must be supported by the instrument of EMD of the exact amount as mentioned in the above table and shall have been issued post tender publication date. Moreover, any deviation in the EMD amount is liable for rejection.

In case the bid of the bidder is unbalanced, the bidder has to submit additional performance security deposit in the shape of CDR/FDR/BG as per the Treasury [illegible] failing which the tender shall be rejected.

S.No	Percentage of unbalanced bid w.r.t Quoted percentage of NIT	Additional performance security
01	[illegible]	Nil
02	[illegible]	[illegible]
03	[illegible]	[illegible]
04	[illegible]	[illegible]
05	[illegible]	[illegible]

DIP/J-4464-P
Dt: 12-12-2023

Sd/-
Executive Engineer,
O&M Division Bijbehara

EXECUTIVE ENGINEER, PWD (R&B) DIVISION GANDHI NAGAR, JAMMU & I/C EXECUTIVE ENGINEER, UNIVERSITY WORKS DEPARTMENT G20

e-NIT No: 925 dated: 08-12-2023 (2nd call)

For and on behalf of the Lieutenant Governor, Union Territory of Jammu and Kashmir e-tenders are invited on **Percentage Basis** from approved and eligible Contractors registered with Union Territory of J&K, CPWD, Railways, MES and other State/ Central Governments for the following work:-

S No	Name of the Work	Estd Cost
1	Repair and Renovation of Centralized facilities in the Department of Library Science in connection with NAAC Accreditation of Jammu University	17.26 729

Note: 1. Detailed e-NIT & BOQ is available on the website **www.jktenders.gov.in** and the same can be downloaded/ submitted online from 1600 hours on **08.12.2023 to 18.12.2023** (1400 hours).

2. The bidders are requested to go through the e-NIT thoroughly prior to submission of the bid.

DIP/J-4469-P
Dt: 12-12-2023
No. UWD/2023-24/[illegible]
Dated: 07-12-2023

Sd/-
Executive Engineer, PWD (R&B)
Gandhi Nagar & I/c University
Works Department, University of Jammu

SHRI MATA VAISHNO DEVI UNIVERSITY

Kakryal, Katra – 182 320 (J&K)

CONVOCATION 2023

It is hereby notified for the information of all concerned that the 9th Convocation of Shri Mata Vaishno Devi University, Kakryal, Katra (J&K) is scheduled to be held on 29th December, 2023. Degrees, Medals and Certificates shall be awarded to the eligible students of various UG, PG and Integrated Programs who have graduated in Session 2021-2022 & 2022-23, besides the Ph.D. students. The details of the Convocation 2023 are available and being continuously updated on the webpage https://smvdu.ac.in/convocation

The students desirous of attending the convocation in person to collect their degree certificate are required to register on the website. The last date for online registration is 21 December 2023. A separate mail has also been sent to the students with google form link for uploading relevant documents/certificates in case they are eligible for claiming various Medals/ Certificates to be awarded in this Convocation. For further details visit https://smvdu.ac.in/convocation regularly.

Helpdesk can be contacted at 8899246533 or by email at convocation@smvdu.ac.in

No. SMVDU/ DSW/23/2911
Dated: 11/12/2023

Sd/-
Registrar

GOVERNMENT OF JAMMU AND KASHMIR JAMMU AND KASHMIR SERVICES SELECTION BOARD (JKSSB)

CPO Chowk, Panjtirthi, Jammu/ Zamzam Complex, Rambagh, Srinagar
www.jkssb.nic.in

Subject: Document Verification of candidates falling under consideration zone for the post of Junior Engineer (Civil) - regarding.

NOTIFICATION

Whereas, the Jammu and Kashmir Services Selection Board (JKSSB), vide Notification No. JKSSB-COE0EXAM(UT)/ 89/2023-03 (7314803), dated: 07-12-2023, issued the result/score-sheet of the candidates who appeared in the OMR Based Written Examination held on 19-11-2023 for the post of Junior Engineer (Civil), UT Cadre, Public Works (R&B) Department advertised vide Advertisement Notification No. 06 of 2022 under Item No. 201.

Accordingly, keeping in view the need and objective to fill all requisitioned vacancies, the candidates who are falling under the consideration zone for the aforementioned post, given in Annexure-A to this notification, are hereby called upon to appear physically before the designated Document Verification Committees of the Board for the verification/scrutiny of their documents/certificates w.e.f. 13-12-2023 (Wednesday) from 10.00 AM to 05.00 PM, as per the schedule indicated against each at JKSSB, Central Office, CPO Chowk, Panjtirthi, Jammu (Jammu Centre based candidates) and JKSSB, Central Office, ZamZam Building, Rambagh, Srinagar (Kashmir Centre based Candidates). The candidate(s) who fail to appear before the respective Document Verification Committee(s) on the scheduled date shall forfeit their right to selection.

Further, the candidates are required to produce following original documents/certificates in original, along-with two self-attested copies, before the designated Document Verification Committee:

1. Copy of Online Application Form(s).
2. Two passport size recent colour photographs.
3. One original photo ID Proof i.e. Aadhar card/Voter Card/Pan Card/Passport etc.
4. D.O.B Certificate (10th Diploma/Marks card).
5. Valid Category Certificate, if any, applicable.
6. Domicile Certificate.
7. 10+2 Marks Sheet/Diploma.
8. 3 years diploma in Civil Engineering from Government recognized Institute/Indian University degree in Civil Engineering or AMIE Section (A&B) INDIA.
9. Bonafide certificate on the format prescribed by the Board duly issued by the Controller/Registrar of the concerned University/Board/Institute in respect of candidates, who have obtained the qualification from outside the UT of J&K.
10. Other documents as per prescribed qualification mentioned in the Advertisement Notification.

Sd/-
Reyaz Ahmad Malik, JKAS
Controller of Examinations
J&K Services Selection Board

DIP/J-12505
Dt: 12-12-2023

Government of Jammu and Kashmir

OFFICE OF THE CHIEF ENGINEER PMGSY (JKRRDA) JAMMU.

NOTICE INVITING e-TENDERS

e-NIT No:-CEJ/PMGSY/757 of 2023-24 Dated:- 09/12/2023

Chief Engineer PMGSY (JKRRDA) Jammu on behalf of The Government of Jammu & Kashmir, invites e-tenders on %age Above/Excess (+) OR %age Below/ Less (-) basis (i.e. on Percentage Rate Basis) from approved and eligible Contractors registered with J&K U.T.Govt, CPWD, Railways or equivalent and other State/U.T Govts up to **1700 Hrs. on 22-12-2023** for each of the following works including their maintenance for five years from the date of completion on **OMMAS**.

S.No	Name of the Work/Package No.	Name of the PIU	Constt. Part (Rs. in Lacs)	Maint. Part (Rs. in Lacs)	Total (Rs. in Lacs)	Cost of Documents (Rs. in Lacs)	Bid Security (EMD) @2% of total cost rounded to the nearest thousand (Rs. in Lacs)	Time Allowed for completion	Cat of tender	Time and date of opening of technical bids	Class of Contractor
1	2	3	4	5	6	7	8	9	10	11	12
1	Construction of 75 Mtr. Span Bridge in km 5th RD 350-450 on Bandhole to Parla Chapper road Package No. JK14-536 Regular PMGSY (Batch I 2017-18), Block Dudu District Udhampur **Adv. Cost inclusive of GST - Rs. 214.61 Lacs**	Ramnagar	214.61	-	214.61	0.055	4.30	03 Months	1st	26-12-2023 1100 hrs	[illegible]
2	Balance Work for Construction and Maintenance of road from L027 Mangal to Upper Dhar, Package No. JK07-227, Stage-II, Regular PMGSY (Batch I, 2018-19) Block Bilawar District Kathua Length 7.250 kms **Adv. Cost excluding maintenance but inclusive of GST-Rs. 211.71 Lacs**	Billawar	211.71	31.08	242.79	0.055	4.86	03 Months	1st	26-12-2023 1100 hrs	[illegible]

1. (a) The Bidding document can be downloaded from the website http://pmgsytendersjk.gov.in from 1055 Hrs on 12-12-2023 to 22-12-2023 upto 1700Hrs.
(b) The Bids shall be deposited **ONLINE ONLY** in electronic format on the website http://pmgsytendersjk.gov.in from 1000 Hrs on 14-12-2023 to 1700 Hrs on 22-12-2023.
(c) Pre bid meeting will be held on 13-12-2023 at 1200 Hrs.
(d) Technical Qualification Part of Bids will be opened online at 1100 Hrs on 26-12-2023.
2. The date and time of opening of Financial Bids shall be notified on Web Site http://pmgsytendersjk.gov.in
3. For Complete information refer to the bidding document.
4. For further details kindly visit our website [illegible]

DIP/J-12443
Dt: 11-12-2023

Sd/-
Chief Engineer PMGSY (JKRRDA) Jammu
For and on behalf of The Government of Jammu and Kashmir

OFFICE OF THE EXECUTIVE ENGINEER, ELECTRIC DIVISION (JPDCL) UDHAMPUR

Jammu Power Distribution Corporation Limited (JPDCL), Jammu
Power Development Department
Email: xenmreudh@gmail.com *Tel No. 01992*78040 *Fax No. 01992*78040

Notice Inviting Tender

e-NIT No: ED/UDH/118 of 2023-24

- INVITATION:-

For and on behalf of the Lieutenant Governor of the UT of Jammu and Kashmir, the Executive Engineer (Distribution), Electric Division, JPDCL Udhampur, hereinafter referred as Employer, invites online e-bids from reputed Companies or Class 'A' registered Electrical Contractors for **Survey, Supply, Transportation, Carriage, Erection, Testing and Commissioning for Creation of 63 KVA & 250 KVA Sub stn. alongwith Erection of 11 KV line on 9 mtr ST poles, 30mm² ACSR Weasel Conductor and LT line on 8 mtr. long ST Poles at WSS Balhan under JJM on turnkey basis.**

Bidders are advised to study the Bidding Document carefully. Submission of e-Bid against this NIT shall be deemed to have been done after careful consumer study and examination of the procedures, terms and conditions of the Standard Bidding Document with full understanding of its implications.

- The tender document is available at website **http://jktenders.gov.in**. Interested Bidders may view, download the e-Bid document, seek clarifications and submit their e-Bid online up to the date and time mentioned in the table below.

A	Tender Document Sale/Download Start Date	08.12.2023; 4:00 PM
B	Tender Document Sale/Download End Date	30.12.2023; 04:00 PM
C	e-Bid submission (start) date & time	08.12.2023; 10:00 AM
D	e-Bid submission (end) date & time	30.12.2023; 03:00 PM
E	Submission of Hard Copy of Tender Fee & EMD Instrument (End) date & time	30.12.2023; 04:30 PM
F	Commercial and Technical Bid opening date & time	01.01.2024; 03:00 PM
G	Online financial e-Bid opening date & time (Only of the technically qualified Bidders)	Will be communicated to the Technically Qualifying Bidders.
H	Venue of opening of techno-commercial Bids	Soft Copy Electronically & Hard copy in the Office of the Executive Engineer, (Distribution), JPDCL Udhampur
I	Tender Value	Rs. 87.48 Lakhs
J	Cost of e-Bid document	Rs. 2000/- (Non-Refundable)
K	Amount of Earnest Money Deposit (EMD)	Rs. 175000/-

- The Bidders need to submit the proof cost of e-Bid document as stated in the above table through Demand Draft from any Nationalized Scheduled Bank in favour of Executive Engineer, Electric Division, *JPDCL Udhampur*, payable at Udhampur. The original demand draft shall be submitted in a separate envelope to the Office of the Executive Engineer, Electric Division, *JPDCL Udhampur* and should reach **at least one day before opening** of commercial and technical e-Bid. The scanned copy of the Demand Draft must be uploaded along with the e-Bids.
- Bidders must quote for all the particulars of the item in the Technical Bid and in the price schedule BOQ of financial bid. The bids of Bidders who will not quote for all the particulars for any item in technical and financial bids shall be liable to be rejected at the discretion of the Employer keeping in view the interest of the JPDCL.
- All the e-Bids must be accompanied by the scanned copy of EMD in the form of CDR/FDR/Bank Guarantee only from any Nationalized Scheduled bank only pledged to Executive Engineer, Electric Division, *JPDCL Udhampur*, with the payable at Udhampur. No Interest shall be payable on Earnest Money deposited with the Department.
- Hard Copy of original instruments of EMD shall be submitted in the office of the Executive Engineer, Electric Division, *JPDCL Udhampur*, **at least one day before** opening of commercial and technical e-Bid.
- The date and time of opening of Financial-Bids shall be notified on Web Site **http://jktenders.gov.in**. This is conveyed to the technically qualified Bidders automatically through an e-mail message on their e-mail address. The Financial-bids shall be opened accordingly online on the same Web Site.
- The e-Bids will be electronically opened in the presence of Bidder's representatives, who choose to attend at the venue, date and time mentioned in the above table. An authority letter of Bidder's/OEM representative will be required to be produced.
- The JPDCL reserves the right to cancel any or all the e-Bids/ the e-Bid process without assigning any reason thereof if any major lapse deviation is found. The decision of the JPDCL will be final and binding.
- In the event of date specified for e-Bids opening being declared a holiday for JPDCL office then the due date for opening of e-Bids shall be the following working day at the appointed time and place.
- All the required documents excluding Price Schedule (BOQ) should be uploaded by the e-Bidders electronically in the PDF format, whereas Price Schedule (BOQ) should be uploaded electronically in the same BOQ sheet provided with the SBD.
- To participate in e-bidding process, Bidders have to get 'Digital Signature Certificate (DSC)' as per Information Technology Act-2000 to participate in online bidding.

Hard Copy ORIGINAL INSTRUMENT of EMD & Cost of Tender Document must be delivered to the Office of the Executive Engineer, Electric Division, *JPDCL Udhampur* in sealed cover at least one day before the scheduled date of opening of the commercial and technical e-Bids. The sealed cover shall be super scribed as "COST OF TENDER DOCUMENTS & EMD INSTRUMENT AGAINST e-NIT NO. ED/UDH/118 of 2023-24 Dated 08-12-2023".

DIP/J-4466-P
Dt: 12-12-2023

Sd/-
Executive Engineer
Electric Division JPDCL
Udhampur

ment instruments and UPI (Unified Payments Interface), for subsequent recurring transactions with values up to Rs 15,000.

"...It has been decided to increase the limit from Rs 15,000 to Rs 1,00,000 per transaction for... Subscription to mutual funds, payment of insurance premiums, and credit card

UPI has emerged a preferred mode of payment for a large section of the population with over 11.23 billion transactions recorded in November.

An announcement in this regard was made by Reserve Bank Governor Shaktikanta Das, while unveiling the December bi-monthly monetary policy last week. (PTI)

PUBLIC NOTICE

General Public is hereby informed that Ministry of Environment Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh has issued Environmental Clearance for "Expansion of Civil Enclave at Jammu Airport over an area of 40,000 m proposed by Airports Authority of India vide EC Identification No. EC23A2902JK5192762N dated 07.12.2023.

General Public is further informed that copy of said Environment Clearance Letter is available in the office and on https://parivesh.nic.in website of Ministry of Environment Forest and Climate Change.

(S.K Garg)
Airport Director
Civil Enclave, Jammu.

AIRPORTS AUTHORITY OF INDIA

भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

ENVIRONMENT POLICY

Airports Authority of India (AAI) being the sole Air Navigation Service (ANS) provider and operator of majority of Indian Airports is consistently and continuously honoring Corporate Social Responsibility (CSR) and is committed to Green House Gas (GHG) management and emission reduction to support India's Nationally Determined Contributions (NDCs) for reduction of adverse impact on society, community and ecosystem. AAI is adopting "***Panchamrit Mantra***", declared by Hon'ble Prime Minister in Glasgow Summit COP-26 to ensure greener, cleaner and healthier environment for generations to come.

As a part of this policy, AAI is committed to reduce carbon intensity in a phased manner and achieve the goal of carbon neutrality and net-zero emissions by implementation of suitable measures including but not limited to:

- Optimizing energy consumption by enacting energy efficiency and conservation measures including maximizing the usage of affordable green and renewable energy resources
- Reducing the fossil fuel consumption by promoting and adopting alternative greener fuels and ensuring judicious and deliberate use of natural resources.
- Integrating net-zero building design concepts and optimum usage of eco-friendly and biodegradable products without compromising structural integrity requirements and safety standards.
- Integrating sustainable transportation technologies and strategies with use of Electric and Hybrid vehicles.
- Implementing sustainable waste-management practices and appropriate disposal.
- Conserving natural resources by inculcating the culture of refuse, reduce, reuse, repurpose and recycle.
- Implementing water conservation through rain water harvesting, waste water reclamation and other emerging practices to reduce wastage.
- Documenting and quantifying GHG resources and mitigating carbon footprint by adopting best and technologically advanced procedures and implementing best industry practices in vogue.
- Monitoring air-quality and implementing best practices in vogue to improve indoor air quality at airport terminals.
- Implementing/Adopting best Air Traffic Management facilities, practices and procedures.
- Directing, educating, sensitizing, motivating and imparting training to all employees and stakeholders to enable them to understand desired behavior towards environment health.
- Fulfilling all applicable environmental compliance obligations.

AAI is dedicated for upholding this policy with responsibility and strives to periodically review the same in-line with emerging requirements and practices.

Sanjeev Kumar
(Sanjeev Kumar)
Chairman, AAI
Dated: 16/08/2022

Vardan Envirolab LLP
Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051 (HR)
ISO 9001 | ISO 14001 | ISO 45001

Test Report

Sample Number : VEL/AP/01

Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Report No. : VEL/AP/2511240100
Format No : 7.8 F-03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025

Name of Sample : **AMBIENT AIR**
Sample Group : Atmospheric Pollution

General Information

Sampling Location	:	Office Building
Sample Collected By	:	VEL Representative (Mr. Priyanshu)
Sampling Equipment used	:	RDS/FPS
Instrument Code	:	VEL/INS/ENV/RDS/FPS/01
Instrument Calibration Status	:	Calibrated
Meteorological condition during monitoring	:	Clear Sky
Date of Monitoring	:	22/11/2025 To 23/11/2025
Time of Monitoring	:	11:00 AM To 11:00 AM
Ambient Temperature (°C)	:	Min.12°C, Max.24°C
Surrounding Activity	:	Human & Vehicular Activities
Scope of Monitoring	:	Regulatory Requirement
Sampling & Analysis Protocol	:	IS : 5182
Sampling Duration	:	24.0 Hours.
Parameter Required	:	As per work order

S.No.	Parameters	Test Method	Results	Units	Limit as per NAAQS
Discipline : Chemical					
1	Particulate Matter (as PM -2.5)	IS:5182 (P-24) : 2019	72.15	µg/m³	60
2	Particulate Matter (as PM -10)	IS:5182 (P- 23) :2006 RA: 2017	136.20	µg/m³	100
3	Nitrogen Dioxides (as NO2)	IS 5182 (P- 6) :2006 RA:2022	32.57	µg/m³	80
4	Sulphur Dioxide (as SO2)	IS 5182 (P- 2) : RA:2023	15.42	µg/m³	80
5	#Carbon Monoxide (as CO)	IS 5182 (P-10) : 1999	0.71	mg/m³	4.0

Note - # indicates 1 hour monitoring of CO.

End of Report

Reviewed By

Authorized Signatory

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Test Report

Sample Number : VEL/AP/02

Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Report No. : VEL/AP/2511240101
Format No : 7.8 F-03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025

Name of Sample : **AMBIENT AIR**
Sample Group : Atmospheric Pollution

General Information

Sampling Location	:	Parking Area
Sample Collected By	:	VEL Representative (Mr. Priyanshu)
Sampling Equipment used	:	RDS/FPS
Instrument Code	:	VEL/INS/ENV/RDS/FPS/02
Instrument Calibration Status	:	Calibrated
Meteorological condition during monitoring	:	Clear Sky
Date of Monitoring	:	22/11/2025 To 23/11/2025
Time of Monitoring	:	11:20 AM To 11:20 AM
Ambient Temperature (°C)	:	Min.12°C, Max.24°C
Surrounding Activity	:	Human & Vehicular Activities
Scope of Monitoring	:	Regulatory Requirement
Sampling & Analysis Protocol	:	IS : 5182
Sampling Duration	:	24.0 Hours.
Parameter Required	:	As per work order

S.No.	Parameters	Test Method	Results	Units	Limit as per NAAQS
Discipline : Chemical					
1	Particulate Matter (as PM -2.5)	IS:5182 (P-24) : 2019	75.16	µg/m³	60
2	Particulate Matter (as PM -10)	IS:5182 (P- 23) :2006 RA: 2017	185.34	µg/m³	100
3	Nitrogen Dioxides (as NO2)	IS 5182 (P- 6) :2006 RA:2022	35.20	µg/m³	80
4	Sulphur Dioxide (as SO2)	IS 5182 (P- 2) : RA:2023	17.15	µg/m³	80
5	#Carbon Monoxide (as CO)	IS 5182 (P-10) : 1999	0.85	mg/m³	4.0

Note - # indicates 1 hour monitoring of CO.

End of Report

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Test Report

Sample Number : VEL/AP/03

Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Report No. : VEL/AP/2511240102
Format No : 7.8 F-03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025

Name of Sample : **AMBIENT AIR**
Sample Group : Atmospheric Pollution

General Information

Sampling Location	:	Project Site
Sample Collected By	:	VEL Representative (Mr. Priyanshu)
Sampling Equipment used	:	RDS/FPS
Instrument Code	:	VEL/INS/ENV/RDS/FPS/03
Instrument Calibration Status	:	Calibrated
Meteorological condition during monitoring	:	Clear Sky
Date of Monitoring	:	22/11/2025 To 23/11/2025
Time of Monitoring	:	11:40 AM To 11:40 AM
Ambient Temperature (°C)	:	Min.12°C, Max.24°C
Surrounding Activity	:	Human & Vehicular Activities
Scope of Monitoring	:	Regulatory Requirement
Sampling & Analysis Protocol	:	IS : 5182
Sampling Duration	:	24.0 Hours.
Parameter Required	:	As per work order

S.No.	Parameters	Test Method	Results	Units	Limit as per NAAQS
Discipline : Chemical					
1	Particulate Matter (as PM -2.5)	IS:5182 (P-24) : 2019	85.34	µg/m³	60
2	Particulate Matter (as PM -10)	IS:5182 (P- 23) :2006 RA: 2017	195.34	µg/m³	100
3	Nitrogen Dioxides (as NO2)	IS 5182 (P- 6) :2006 RA:2022	36.10	µg/m³	80
4	Sulphur Dioxide (as SO2)	IS 5182 (P- 2) : RA:2023	18.47	µg/m³	80
5	#Carbon Monoxide (as CO)	IS 5182 (P-10) : 1999	0.84	mg/m³	4.0

Note - # indicates 1 hour monitoring of CO.

End of Report

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Test Report

Sample Number : VEL/AP/04

Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Report No. : VEL/AP/2511240103
Format No : 7.8 F-03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025

Name of Sample : **AMBIENT NOISE**
Sample Group : Atmospheric Pollution

General Information

Sampling Location	:	Office Building
Sample Collected By	:	VEL Representative (Mr. Priyanshu)
Sampling Equipment used	:	Sound Level Meter
Instrument Code	:	VEL/INS/ENV/SLM/04
Instrument Calibration Status	:	Calibrated
Meteorological condition during monitoring	:	Clear Sky
Date of Monitoring	:	22/11/2025 To 23/11/2025
Time of Monitoring	:	11:10 AM To 11:10 AM
Ambient Temperature (°C)	:	Min.12°C, Max.24°C
Surrounding Activity	:	Human & Vehicular Activities
Scope of Monitoring	:	Regulatory Requirement
Sampling & Analysis Protocol	:	IS:9989 RA:2020
Sampling Duration	:	24.0 Hours.
Parameter Required	:	As per work order

S.No.	Parameters	Test Method	Test Results		Units
			Day Time (6:00 am to 10:00 pm)	Night Time (10:00 pm to 6:00 am)	
Discipline : Chemical					
1	Leq	IS:9989 RA:2020	60.45	51.46	dB (A)

Ambient Noise Quality Standards as per Noise Pollution (Regulation and Control) Rules, 2000

Area Code	Category of Area/Zone	Limits in dB(A) Leq*	
		Day Time	Night Time
A	Industrial area	75	70
B	Commercial area	65	55
C	Residential area	55	45
D	Silence Zone	50	40

Day time shall mean from 6.00 a.m. to 10.00 p.m., Night time shall mean from10.00 p.m. to 6.00 a.m., Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority, Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
*dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale 'A' which is relatable to human hearing

Note-*A "decibel" is a unit in which noise is measured.

End of Report

VARDAN ENVIROLAB GURUGRAM

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Test Report

Sample Number : VEL/AP/05

Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Report No. : VEL/AP/2511240104
Format No : 7.8 F-03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025

Name of Sample : **AMBIENT NOISE**
Sample Group : Atmospheric Pollution

General Information

Sampling Location	:	Parking Area
Sample Collected By	:	VEL Representative (Mr. Priyanshu)
Sampling Equipment used	:	Sound Level Meter
Instrument Code	:	VEL/INS/ENV/SLM/05
Instrument Calibration Status	:	Calibrated
Meteorological condition during monitoring	:	Clear Sky
Date of Monitoring	:	22/11/2025 To 23/11/2025
Time of Monitoring	:	11:50 AM To 11:50 AM
Ambient Temperature (°C)	:	Min.12°C, Max.24°C
Surrounding Activity	:	Human & Vehicular Activities
Scope of Monitoring	:	Regulatory Requirement
Sampling & Analysis Protocol	:	IS:9989 RA:2020
Sampling Duration	:	24.0 Hours.
Parameter Required	:	As per work order

S.No.	Parameters	Test Method	Test Results		Units
			Day Time (6:00 am to 10:00 pm)	Night Time (10:00 pm to 6:00 am)	
Discipline : Chemical					
1	Leq	IS:9989 RA:2020	62.74	52.18	dB (A)

Ambient Noise Quality Standards as per Noise Pollution (Regulation and Control) Rules, 2000

Area Code	Category of Area/Zone	Limits in dB(A) Leq*	
		Day Time	Night Time
A	Industrial area	75	70
B	Commercial area	65	55
C	Residential area	55	45
D	Silence Zone	50	40

Day time shall mean from 6.00 a.m. to 10.00 p.m., Night time shall mean from10.00 p.m. to 6.00 a.m., Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority, Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
*dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale 'A' which is relatable to human hearing

Note-*A "decibel" is a unit in which noise is measured.

End of Report

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Test Report

Sample Number : VEL/AP/06

Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Report No. : VEL/AP/2511240105
Format No : 7.8 F-03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025

Name of Sample : **AMBIENT NOISE**
Sample Group : Atmospheric Pollution

General Information

Sampling Location	:	Project Site
Sample Collected By	:	VEL Representative (Mr. Priyanshu)
Sampling Equipment used	:	Sound Level Meter
Instrument Code	:	VEL/INS/ENV/SLM/06
Instrument Calibration Status	:	Calibrated
Meteorological condition during monitoring	:	Clear Sky
Date of Monitoring	:	22/11/2025 To 23/11/2025
Time of Monitoring	:	12:00 PM To 12:00 PM
Ambient Temperature (°C)	:	Min.12°C, Max.24°C
Surrounding Activity	:	Human & Vehicular Activities
Scope of Monitoring	:	Regulatory Requirement
Sampling & Analysis Protocol	:	IS:9989 RA:2020
Sampling Duration	:	24.0 Hours.
Parameter Required	:	As per work order

S.No.	Parameters	Test Method	Test Results		Units
			Day Time (6:00 am to 10:00 pm)	Night Time (10:00 pm to 6:00 am)	
Discipline : Chemical					
1	Leq	IS:9989 RA:2020	63.47	50.34	dB (A)

Ambient Noise Quality Standards as per Noise Pollution (Regulation and Control) Rules, 2000

Area Code	Category of Area/Zone	Limits in dB(A) Leq*	
		Day Time	Night Time
A	Industrial area	75	70
B	Commercial area	65	55
C	Residential area	55	45
D	Silence Zone	50	40

Day time shall mean from 6.00 a.m. to 10.00 p.m., Night time shall mean from10.00 p.m. to 6.00 a.m., Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority, Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
*dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale 'A' which is relatable to human hearing

Note-*A "decibel" is a unit in which noise is measured.

End of Report

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Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051 (HR)
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Test Report

Sample Number : VEL/AP/07

Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Report No. : VEL/AP/2511240106
Format No : 7.8 F-03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025

Name of Sample : **Stack Emission Monitoring**
Sample Group : Atmospheric Pollution

General Information

Sampling Location	:	DG Set Area (RECD)
Sample Collected By	:	VEL Representative (Mr. Priyanshu)
Instrument Code	:	VEL/INS/ENV/SMK/01
Date of Sampling	:	22/11/2025
Sampling duration (Minutes)	:	41.0
Stack attached to	:	DG Set No.2 (1010 KVA)
Make of stack	:	MS
Type of Fuel Used	:	HSD
Diameter of stack(m)	:	0.30 Mtr.
Height of stack(m)	:	15.24 Mtr.
Instrument calibration status	:	Calibrated
Meteorological Condition	:	Clear Sky
Ambient Temperature - Ta (°C)	:	24.0
Temperature of Stack Gases - Ts (°C)	:	240.0
Velocity of Stack Gases (m/sec.)	:	9.45
Flow rate of PM (LPM)	:	21.0
Flow rate of Gas (LPM)	:	2.0
Sampling condition	:	Isokinetic
Protocol used	:	IS 11255 & EPA

S.No.	Test Parameters	Test Method	Results	Units	Limits as per CAQM
Discipline : Chemical					
1	PM (at 15 % O2 Correction)	IS:11255 (P-1)	23.51	mg/Nm3	50.0
2	NOX (at 15 % O2 Correction)	VEL/EN/STP/146,Issue No.-01, Issue date 01/11/2023	410.12	mg/Nm3	650.0
3	Carbon Monoxide (as CO) (at 15 % O2 Correction)	VEL/EN/STP/146,Issue No.-01, Issue date 01/11/2023	70.61	mg/Nm3	100.0
4	NMHC (at 15 % O2 Correction)	VEL/EN/STP/137,Issue No.-01, Issue date 01/11/2023	25.31	mg/Nm3	Not Specified

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ISO 9001 | ISO 14001 | ISO 45001

Test Report

Sample Number : VEL/AP/08

Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Report No. : VEL/AP/2511240107
Format No : 7.8 F-03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025

Name of Sample : **Stack Emission Monitoring**
Sample Group : Atmospheric Pollution

General Information

Sampling Location	:	DG Set Area (RECD)
Sample Collected By	:	VEL Representative (Mr. Priyanshu)
Instrument Code	:	VEL/INS/ENV/SMK/01
Date of Sampling	:	22/11/2025
Sampling duration (Minutes)	:	41.0
Stack attached to	:	DG Set No.1 (750 KVA)
Make of stack	:	MS
Type of Fuel Used	:	HSD
Diameter of stack(m)	:	0.30 Mtr.
Height of stack(m)	:	15.24 Mtr.
Instrument calibration status	:	Calibrated
Meteorological Condition	:	Clear Sky
Ambient Temperature - Ta (°C)	:	24.0
Temperature of Stack Gases - Ts (°C)	:	240.0
Velocity of Stack Gases (m/sec.)	:	8.12
Flow rate of PM (LPM)	:	22.0
Flow rate of Gas (LPM)	:	2.0
Sampling condition	:	Isokinetic
Protocol used	:	IS 11255 & EPA

S.No.	Test Parameters	Test Method	Results	Units	Limits as per CPCB
Discipline : Chemical					
1	Particulate Matter (as PM)	IS:11255 (P-1) : 2019	0.014	gm/kw-hr	0.03
2	Oxide of Nitrogen (as NOx)	VEL/EN/STP/146,Issue No.-01, Issue date 01/11/2023	0.284	gm/kw-hr	0.67
3	Total Hydrocarbon (as HC)	VEL/EN/STP/137,Issue No.-01, Issue date 01/11/2023	0.055	gm/kw-hr	0.19
4	Carbon Monoxide (as CO)	VEL/EN/STP/146,Issue No.-01, Issue date 01/11/2023	0.348	gm/kw-hr	3.5

End of Report

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Test Report

Sample Number : VEL/AP/09

Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Report No. : VEL/AP/2511240108
Format No : 7.8 F-03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025

Name of Sample : **Stack Emission Monitoring**
Sample Group : Atmospheric Pollution

General Information

Sampling Location	:	DG Set Area (RECD)
Sample Collected By	:	VEL Representative (Mr. Priyanshu)
Instrument Code	:	VEL/INS/ENV/SMK/01
Date of Sampling	:	22/11/2025
Sampling duration (Minutes)	:	40.0
Stack attached to	:	DG Set No.4 (750 KVA)
Make of stack	:	MS
Type of Fuel Used	:	HSD
Diameter of stack(m)	:	0.30 Mtr.
Height of stack(m)	:	15.24 Mtr.
Instrument calibration status	:	Calibrated
Meteorological Condition	:	Clear Sky
Ambient Temperature - Ta (°C)	:	24.0
Temperature of Stack Gases - Ts (°C)	:	231.0
Velocity of Stack Gases (m/sec.)	:	8.64
Flow rate of PM (LPM)	:	21.0
Flow rate of Gas (LPM)	:	2.0
Sampling condition	:	Isokinetic
Protocol used	:	IS 11255 & EPA

S.No.	Test Parameters	Test Method	Results	Units	Limits as per CPCB
Discipline : Chemical					
1	Particulate Matter (as PM)	IS:11255 (P-1) : 2019	0.013	gm/kw-hr	0.03
2	Oxide of Nitrogen (as NOx)	VEL/EN/STP/146,Issue No.-01, Issue date 01/11/2023	0.278	gm/kw-hr	0.67
3	Total Hydrocarbon (as HC)	VEL/EN/STP/137,Issue No.-01, Issue date 01/11/2023	0.062	gm/kw-hr	0.19
4	Carbon Monoxide (as CO)	VEL/EN/STP/146,Issue No.-01, Issue date 01/11/2023	0.384	gm/kw-hr	3.5

End of Report

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Authorized Signatory

Test Report

Sample Number : VEL/AP/10

Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Report No. : VEL/AP/2511240109
Format No : 7.8 F-03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025

Name of Sample : **Stack Emission Monitoring**
Sample Group : Atmospheric Pollution

General Information

Sampling Location	:	DG Set Area (RECD)
Sample Collected By	:	VEL Representative (Mr. Priyanshu)
Instrument Code	:	VEL/INS/ENV/SMK/01
Date of Sampling	:	22/11/2025
Sampling duration (Minutes)	:	38.0
Stack attached to	:	DG Set No.3 (380 KVA)
Make of stack	:	MS
Type of Fuel Used	:	HSD
Diameter of stack(m)	:	0.30 Mtr.
Height of stack(m)	:	15.24 Mtr.
Instrument calibration status	:	Calibrated
Meteorological Condition	:	Clear Sky
Ambient Temperature - Ta (°C)	:	24.0
Temperature of Stack Gases - Ts (°C)	:	142.0
Velocity of Stack Gases (m/sec.)	:	7.54
Flow rate of PM (LPM)	:	22.0
Flow rate of Gas (LPM)	:	2.0
Sampling condition	:	Isokinetic
Protocol used	:	IS 11255 & EPA

S.No.	Test Parameters	Test Method	Results	Units	Limits as per CPCB
Discipline : Chemical					
1	Particulate Matter (as PM)	IS 11255 (P-1) :2019	0.012	g/kw-hr	0.02
2	Oxide of Nitrogen (as NOx)	VEL/EN/STP/146,Issue No.-01, Issue date 01/11/2023	0.268	g/kw-hr	0.40
3	Total Hydrocarbon (as HC)	VEL/EN/STP/137,Issue No.-01, Issue date 01/11/2023	0.052	g/kw-hr	0.19
4	Carbon Monxide (as CO)	VEL/EN/STP/146,Issue No.-01, Issue date 01/11/2023	0.341	g/kw-hr	3.5

End of Report

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Test Report

Sample Number : VEL/AP/11

Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Report No. : VEL/AP/2511240110
Format No : 7.8 F-03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025

Name of Sample : **Stack Emission Monitoring**
Sample Group : Atmospheric Pollution

General Information

Sampling Location	:	DG Set Area (OLD Airport)
Sample Collected By	:	VEL Representative (Mr. Priyanshu)
Instrument Code	:	VEL/INS/ENV/SMK/01
Date of Sampling	:	22/11/2025
Sampling duration (Minutes)	:	41.0
Stack attached to	:	DG Set (125 KVA)
Make of stack	:	MS
Type of Fuel Used	:	HSD
Diameter of stack(m)	:	0.10 Mtr.
Height of stack(m)	:	1.98 Mtr.
Instrument calibration status	:	Calibrated
Meteorological Condition	:	Clear Sky
Ambient Temperature - Ta (°C)	:	24.0
Temperature of Stack Gases - Ts (°C)	:	95.0
Velocity of Stack Gases (m/sec.)	:	7.36
Flow rate of PM (LPM)	:	21.0
Flow rate of Gas (LPM)	:	2.0
Sampling condition	:	Isokinetic
Protocol used	:	IS 11255 & EPA

S.No.	Test Parameters	Test Method	Results	Units	Limits as per CPCB
Discipline : Chemical					
1	Particulate Matter (as PM)	IS 11255 (P-1) :2019	0.019	g/kw-hr	0.02
2	Oxide of Nitrogen (as NOx)	VEL/EN/STP/146,Issue No.-01, Issue date 01/11/2023	0.244	g/kw-hr	0.40
3	Total Hydrocarbon (as HC)	VEL/EN/STP/137,Issue No.-01, Issue date 01/11/2023	0.043	g/kw-hr	0.19
4	Carbon Monxide (as CO)	VEL/EN/STP/146,Issue No.-01, Issue date 01/11/2023	0.361	g/kw-hr	3.5

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Test Report

Sample Number : VEL/AP/12

Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Report No. : VEL/AP/2511240111
Format No : 7.8 F-03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025

Name of Sample : **DG Noise**
Sample Group : Atmospheric Pollution

General Information

Sampling Location	:	DG Set (125 KVA-OLD Airport)
Sample Collected By	:	VEL Representative (Mr. Priyanshu)
Sampling Equipment used	:	Sound Level Meter
Instrument Code	:	VEL/INS/ENV/SLM/07
Instrument Calibration Status	:	Calibrated
Meteorological condition during monitoring	:	Clear Sky
Date of Monitoring	:	22/11/2025
Scope of Monitoring	:	Regulatory Requirement
Sampling & Analysis Protocol	:	IS 4758
Sampling duration (Minutes)	:	30.0
Parameter Required	:	As Per Work Order

S.No.	Parameters	Test Method	Open the canopy of DG Set Results dB(A)	Close the canopy of DG Set (1.0 mtr. Distance) Result dB(A)	Insertion Loss
Discipline : Chemical					
1	**Leq**	**IS: 4758**	**96.5**	**70.3**	**26.2**
2	**CPCB Limit in Leq dB (A)**	**--**	**--**	**75.0 (Max.)**	**25.0 (Min.)**

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Test Report

Sample Number : VEL/AP/13

Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Report No. : VEL/AP/2511240112
Format No : 7.8 F-03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025

Name of Sample : **DG Noise**
Sample Group : Atmospheric Pollution

General Information

Sampling Location	:	DG Set No.1 (750 KVA)
Sample Collected By	:	VEL Representative (Mr. Priyanshu)
Sampling Equipment used	:	Sound Level Meter
Instrument Code	:	VEL/INS/ENV/SLM/07
Instrument Calibration Status	:	Calibrated
Meteorological condition during monitoring	:	Clear Sky
Date of Monitoring	:	22/11/2025
Scope of Monitoring	:	Regulatory Requirement
Sampling & Analysis Protocol	:	IS 4758
Sampling duration (Minutes)	:	30.0
Parameter Required	:	As Per Work Order

S.No.	Parameters	Test Method	Open the canopy of DG Set Results dB(A)	Close the canopy of DG Set (1.0 mtr. Distance) Result dB(A)	Insertion Loss
Discipline : Chemical					
1	Leq	IS: 4758	95.4	70.1	25.3
2	CPCB Limit in Leq dB (A)	--	--	75.0 (Max.)	25.0 (Min.)

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Test Report

Sample Number : VEL/AP/14

Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Report No. : VEL/AP/2511240113
Format No : 7.8 F-03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025

Name of Sample : **DG Noise**
Sample Group : Atmospheric Pollution

General Information

Sampling Location	:	DG Set No.2 (1010 KVA)
Sample Collected By	:	VEL Representative (Mr. Priyanshu)
Sampling Equipment used	:	Sound Level Meter
Instrument Code	:	VEL/INS/ENV/SLM/07
Instrument Calibration Status	:	Calibrated
Meteorological condition during monitoring	:	Clear Sky
Date of Monitoring	:	22/11/2025
Scope of Monitoring	:	Regulatory Requirement
Sampling & Analysis Protocol	:	IS 4758
Sampling duration (Minutes)	:	30.0
Parameter Required	:	As Per Work Order

S.No.	Parameters	Test Method	Open the canopy of DG Set Results dB(A)	Close the canopy of DG Set (1.0 mtr. Distance) Result dB(A)	Insertion Loss
Discipline : Chemical					
1	Leq	IS: 4758	94.5	69.1	25.4
2	CPCB Limit in Leq dB (A)	--	--	75.0 (Max.)	25.0 (Min.)

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Test Report

Sample Number : VEL/AP/15

Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Report No. : VEL/AP/2511240114
Format No : 7.8 F-03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025

Name of Sample : **DG Noise**
Sample Group : Atmospheric Pollution

General Information

Sampling Location	:	DG Set No.3 (380 KVA)
Sample Collected By	:	VEL Representative (Mr. Priyanshu)
Sampling Equipment used	:	Sound Level Meter
Instrument Code	:	VEL/INS/ENV/SLM/07
Instrument Calibration Status	:	Calibrated
Meteorological condition during monitoring	:	Clear Sky
Date of Monitoring	:	22/11/2025
Scope of Monitoring	:	Regulatory Requirement
Sampling & Analysis Protocol	:	IS 4758
Sampling duration (Minutes)	:	30.0
Parameter Required	:	As Per Work Order

S.No.	Parameters	Test Method	Open the canopy of DG Set Results dB(A)	Close the canopy of DG Set (1.0 mtr. Distance) Result dB(A)	Insertion Loss
Discipline : Chemical					
1	Leq	IS: 4758	99.7	72.3	27.4
2	CPCB Limit in Leq dB (A)	--	--	75.0 (Max.)	25.0 (Min.)

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Test Report

Sample Number : VEL/AP/16

Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Report No. : VEL/AP/2511240115
Format No : 7.8 F-03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025

Name of Sample : **DG Noise**
Sample Group : Atmospheric Pollution

General Information

Sampling Location	:	DG Set No.4 (750 KVA)
Sample Collected By	:	VEL Representative (Mr. Priyanshu)
Sampling Equipment used	:	Sound Level Meter
Instrument Code	:	VEL/INS/ENV/SLM/07
Instrument Calibration Status	:	Calibrated
Meteorological condition during monitoring	:	Clear Sky
Date of Monitoring	:	22/11/2025
Scope of Monitoring	:	Regulatory Requirement
Sampling & Analysis Protocol	:	IS 4758
Sampling duration (Minutes)	:	30.0
Parameter Required	:	As Per Work Order

S.No.	Parameters	Test Method	Open the canopy of DG Set Results dB(A)	Close the canopy of DG Set (1.0 mtr. Distance) Result dB(A)	Insertion Loss
Discipline : Chemical					
1	Leq	IS: 4758	98.4	72.2	26.2
2	CPCB Limit in Leq dB (A)	--	--	75.0 (Max.)	25.0 (Min.)

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Test Report

Sample Number : VEL/PE/01

Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Report No. : VEL/PE/2511240024
Format No : 7.8 F-03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025
Sampling Date : 22/11/2025
Sampling Quantity : 2.0 Ltr. + 250 ml
Sampling Type : Grab

Name of Sample : **Waste Water (STP Inlet)**
Sample Group : Pollution & Environment
Location : STP Plant (200 KLD)
Sample Collected By : VEL Representative (Mr. Priyanshu)
Environmental Condition : 25±2°C
Sampling and Analysis Protocol : IS,APHA & STP

S.No.	Test Parameters	Test Method	Result	Unit
Discipline : Chemical				
1	pH (at 25°C)	IS:3025 (P-11):2022(Electode Method)	6.51	--
2	Total Suspended Solids	IS: 3025 (P-17):2022(Gravimetric Method)	250.00	mg/L
3	Total Nitrogen	VEL/STP/EN/ 08, Issue No.- 01,Issue date 01/11/2023	18.00	mg/L
4	BOD (3 Days at 27°C)	IS:3025:Part-44: 2023	152.00	mg/L
5	COD at 150°C	APHA, 24th Edition 2023, 5220 B Open Reflux Method	540.00	mg/L
6	Total Phosphorous (as P)	IS:3025:P-31/Sec- 1):2022 (Stannous Chloride method)	9.00	mg/L

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Test Report

Sample Number : VEL/PE/01 **Report No.** : VEL/PE/2511240024

S.No.	Test Parameters	Test Method	Result	Unit
Discipline : Biological				
7	Fecal Coliform	IS 1622 (3.3): 1981	500	MPN/100ml

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Test Report

Sample Number : VEL/PE/02

Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Report No. : VEL/PE/2511240025
Format No : 7.8 F-03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025
Sampling Date : 22/11/2025
Sampling Quantity : 2.0 Ltr. + 250 ml
Sampling Type : Grab

Name of Sample : **Waste Water (STP Outlet)**
Sample Group : Pollution & Environment
Location : STP Plant (200 KLD)
Sample Collected By : VEL Representative (Mr. Priyanshu)
Environmental Condition : 25±2°C
Parameter Required : As Per Work Order
Analysis Protocol : IS,APHA & STP

S.No.	Test Parameters	Test Method	Result	Unit	Environment (Protection) Amendment Rules, 2017		
					Inland Surface Water	Public Sewers	Land for Irrigation
Discipline : Chemical							
1	pH (at 25°C)	IS:3025 (P-11):2022(Electode Method)	7.61	--	6.5 - 9.0	6.5 - 9.0	6.5 - 9.0
2	Total Suspended Solids,max	IS: 3025 (P-17):2022(Gravimetric Method)	32.00	mg/L	50	50	50
3	Total Nitrogen	VEL/STP/EN/ 08, Issue No.-01,Issue date 01/11/2023	6.00	mg/L	--	--	--
4	BOD (3 Days at 27°C),Max	IS:3025:Part-44: 2023	12.00	mg/L	20	20	20
5	COD at 150°C	APHA, 24th Edition 2023, 5220 B Open Reflux Method	85.00	mg/L	--	--	--
6	Total Phosphorous (as P)	IS:3025:P-31/Sec- 1):2022 (Stannous Chloride method)	0.34	mg/L	--	--	--

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Test Report

Sample Number : VEL/PE/02 **Report No.** : VEL/PE/2511240025

S.No.	Test Parameters	Test Method	Result	Unit	Environment (Protection) Amendment Rules, 2017		
					Inland Surface Water	Public Sewers	Land for Irrigation
Discipline : Biological							
7	Fecal Coliform	IS 1622 (3.3): 1981	60	MPN/100ml	<1000	<1000	<1000

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Test Report

Sample Number : VEL/W/01
Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Report No. : VEL/W/2511240013
Format No : 7.8 F 03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025
Sampling Date : 22/11/2025
Sampling Quantity : 5.0 Ltr. + 250 ml
Sampling Type : Grab

Name of Sample : **Tap Water**
Sample Group : Water/Residues and contaminants in Water
Location : Parking Area
Sample Collected by : VEL Representative (Mr. Priyanshu)
Environmental Condition : 25±2°C
Sampling and Analysis Protocol : APHA & IS

S.No.	Test Parameters	Test Method	Results	Units	Requirement as per IS:10500-2012	
					Acceptable Limits	Permissible Limits
Discipline : Chemical						
1	pH (at 25°C)	IS:3025 (Part 11):2022 (Using by Electrode)	7.41	--	6.5 to 8.5	No Relaxation
2	Colour,max	IS:3025 (Part-4) :2021 (Visual Comparison Method)	BLQ(LOQ-1.0)	Hazen	5	15
3	Turbidity,max	IS:3025:P-10: 2023 (Nephlometric	<1.0	NTU	1	5
4	Odour	IS:3025 Part-5: 2018	Agreeable	--	Agreeable	Agreeable
5	Taste	IS 3025 (Part 8): 2023	Agreeable	--	Agreeable	Agreeable
6	Total Dissolved Solids (at 180°C ± 1°C),max	IS:3025:P-16: 2023 (Gravimetric Method)	220.00	mg/L	500	2000
7	Calcium (as Ca),max	IS:3025:Part-40: 1991 (EDTA Titrimetric Method)	24.00	mg/L	75	200
8	Alkalinity (as CaCO3)	IS:3025:Part 23:2023 (Indicator Method)	152.00	mg/L	200	600
9	Chloride (as Cl),max	IS:3025:Part-32:1988 (Argentometric Method)	78.32	mg/L	250	1000
10	Magnesium (as Mg),max	IS:3025:P-46:2023 (Volumetric method using EDTA)	17.49	mg/L	30	100

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Test Report

Sample Number : VEL/W/01 **Report No.** : VEL/W/2511240013

S.No.	Test Parameters	Test Method	Results	Units	Requirement as per IS:10500-2012	
					Acceptable Limits	Permissible Limits
11	Total Hardness (as CaCo3),max	IS:3025:P-21:2009 (EDTA Method)	132.00	mg/L	200	600
12	Sulphate (as SO4),max	IS:3025: (Part 24/Sec-1):2022(Turbidity Method)	23.30	mg/L	200	400
13	Fluoride (as F),max	APHA 4500 F-D: 24th Edition : 2023 (SPADNS Method	0.15	mg/L	1.0	1.5
14	Nitrate (as NO3),max	IS :3025 P-34/Sec1)2023: (Screening Method)	12.47	mg/L	45.0	No Relaxation
15	Iron (as Fe),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.01)	mg/L	1.0	No Relaxation
16	Aluminium (as Al),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.005)	mg/L	0.03	0.2
17	Boron (as B),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.01)	mg/L	0.5	2.4
18	Total Chromium (as Cr),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.002)	mg/L	0.05	No Relaxation
19	Phenolic Compounds (C6H5OH),max	Clause-6 of IS:3025 (P-43/Sec-1):2022, (With Chloroform Extraction Method)	BLQ(LOQ-0.001)	mg/L	0.001	0.002
20	Mineral Oil,max	IS 3025 (Part 39),Infrared Spectroscopic Method	BLQ(LOQ-0.5)	mg/L	1.0	No Relaxation
21	Anionic Detergents (as MBAS),max	IS:3025:P-68:2019 (Methylene Blue Method)	BLQ(LOQ-0.05)	mg/L	0.2	1.0
22	Zinc (as Zn),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.01)	mg/L	5.0	15.0
23	Copper (as Cu),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.002)	mg/L	0.05	1.5
24	Manganese (as Mn),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.01)	mg/L	0.1	0.3
25	Selenium (as Se),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.001)	mg/L	0.01	No Relaxation

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Test Report

Sample Number : VEL/W/01 **Report No.** : VEL/W/2511240013

S.No.	Test Parameters	Test Method	Results	Units	Requirement as per IS:10500-2012	
					Acceptable Limits	Permissible Limits
26	Cadmium (as Cd),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.002)	mg/L	0.003	No Relaxation
27	Lead (as Pb),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.002)	mg/L	0.01	No Relaxation
28	Cyanide (as CN),max	IS 3025 (P-27/Sec1) :2021(Pyridine Barbituric Acid Method	BLQ(LOQ-0.02)	mg/L	0.05	No Relaxation
29	Arsenic (as As),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.005)	mg/L	0.01	No Relaxation
30	Mercury (as Hg),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.005)	mg/L	0.001	No Relaxation

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Test Report

Sample Number : VEL/W/01 **Report No.** : VEL/W/2511240013

S.No.	Test Parameters	Test Method	Results	Units	Requirement as per IS:10500-2012	
					Acceptable Limits	Permissible Limits
Discipline : Biological						
31	Total Coliform	IS 15185	Absent	/100 ml	Shall not be detectable in any 100 ml sample	--
32	E.coli	IS 15185	Absent	/100 ml	Shall not be detectable in any 100 ml sample	--

BLQ-Below Limit of Quantification, LOQ- Limit of Quantification

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Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051 (HR)

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Test Report

Sample Number : VEL/W/02

Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Report No. : VEL/W/2511240014
Format No : 7.8 F 03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025
Sampling Date : 22/11/2025
Sampling Quantity : 5.0 Ltr. + 250 ml
Sampling Type : Grab

Name of Sample : **Drinking Water**
Sample Group : Water/Residues and contaminants in Water
Location : Office Area
Sample Collected by : VEL Representative (Mr. Priyanshu)
Environmental Condition : 25±2°C
Sampling and Analysis Protocol : APHA & IS

S.No.	Test Parameters	Test Method	Results	Units	Requirement as per IS:10500-2012	
					Acceptable Limits	Permissible Limits
Discipline : Chemical						
1	pH (at 25°C)	IS:3025 (Part 11):2022 (Using by Electrode)	7.36	--	6.5 to 8.5	No Relaxation
2	Colour,max	IS:3025 (Part-4) :2021 (Visual Comparison Method)	BLQ(LOQ-1.0)	Hazen	5	15
3	Turbidity,max	IS:3025:P-10: 2023 (Nephlometric	<1.0	NTU	1	5
4	Odour	IS:3025 Part-5: 2018	Agreeable	--	Agreeable	Agreeable
5	Taste	IS 3025 (Part 8): 2023	Agreeable	--	Agreeable	Agreeable
6	Total Dissolved Solids (at 180°C ± 1°C),max	IS:3025:P-16: 2023 (Gravimetric Method)	124.00	mg/L	500	2000
7	Calcium (as Ca),max	IS:3025:Part-40: 1991 (EDTA Titrimetric Method)	14.00	mg/L	75	200
8	Alkalinity (as CaCO3)	IS:3025:Part 23:2023 (Indicator Method)	95.34	mg/L	200	600
9	Chloride (as Cl),max	IS:3025:Part-32:1988 (Argentometric Method)	45.00	mg/L	250	1000
10	Magnesium (as Mg),max	IS:3025:P-46:2023 (Volumetric method using EDTA)	7.77	mg/L	30	100

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Test Report

Sample Number : VEL/W/02 **Report No.** : VEL/W/2511240014

S.No.	Test Parameters	Test Method	Results	Units	Requirement as per IS:10500-2012	
					Acceptable Limits	Permissible Limits
11	Total Hardness (as CaCo3),max	IS:3025:P-21:2009 (EDTA Method)	67.00	mg/L	200	600
12	Sulphate (as SO4),max	IS:3025: (Part 24/Sec-1):2022(Turbidity Method)	6.00	mg/L	200	400
13	Fluoride (as F),max	APHA 4500 F-D: 24th Edition : 2023 (SPADNS Method	BLQ(LOQ-0.2)	mg/L	1.0	1.5
14	Nitrate (as NO3),max	IS :3025 P-34/Sec1)2023: (Screening Method)	2.18	mg/L	45.0	No Relaxation
15	Iron (as Fe),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.01)	mg/L	1.0	No Relaxation
16	Aluminium (as Al),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.005)	mg/L	0.03	0.2
17	Boron (as B),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.01)	mg/L	0.5	2.4
18	Total Chromium (as Cr),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.002)	mg/L	0.05	No Relaxation
19	Phenolic Compounds (C6H5OH),max	Clause-6 of IS:3025 (P-43/Sec-1):2022, (With Chloroform Extraction Method)	BLQ(LOQ-0.001)	mg/L	0.001	0.002
20	Mineral Oil,max	IS 3025 (Part 39),Infrared Spectroscopic Method	BLQ(LOQ-0.5)	mg/L	1.0	No Relaxation
21	Anionic Detergents (as MBAS),max	IS:3025:P-68:2019 (Methylene Blue Method)	BLQ(LOQ-0.05)	mg/L	0.2	1.0
22	Zinc (as Zn),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.01)	mg/L	5.0	15.0
23	Copper (as Cu),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.002)	mg/L	0.05	1.5
24	Manganese (as Mn),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.01)	mg/L	0.1	0.3
25	Selenium (as Se),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.001)	mg/L	0.01	No Relaxation

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Test Report

Sample Number : VEL/W/02 **Report No.** : VEL/W/2511240014

S.No.	Test Parameters	Test Method	Results	Units	Requirement as per IS:10500-2012	
					Acceptable Limits	Permissible Limits
26	Cadmium (as Cd),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.002)	mg/L	0.003	No Relaxation
27	Lead (as Pb),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.002)	mg/L	0.01	No Relaxation
28	Cyanide (as CN),max	IS 3025 (P-27/Sec1) :2021(Pyridine Barbituric Acid Method	BLQ(LOQ-0.02)	mg/L	0.05	No Relaxation
29	Arsenic (as As),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.005)	mg/L	0.01	No Relaxation
30	Mercury (as Hg),max	VEL/W/STP/03, Issue No. - 01,Issue date-01/11/2023:2023	BLQ(LOQ-0.005)	mg/L	0.001	No Relaxation

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Test Report

Sample Number : VEL/W/02 **Report No.** : VEL/W/2511240014

S.No.	Test Parameters	Test Method	Results	Units	Requirement as per IS:10500-2012	
					Acceptable Limits	Permissible Limits
Discipline : Biological						
31	Total Coliform	IS 15185	Absent	/100 ml	Shall not be detectable in any 100 ml sample	--
32	E.coli	IS 15185	Absent	/100 ml	Shall not be detectable in any 100 ml sample	--

BLQ-Below Limit of Quantification, LOQ- Limit of Quantification

End of Report

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Test Report

Sample Number : VEL/PE/01

Name & Address of the Party : M/s Airports Authority of India
Expansion of Civil Enclave at Jammu Airport,Jammu & Kashmir.

Name of Sample : **SOIL**
Sample Group : Pollution & Environment
Location : Project Site
Sample Collected By : VEL Representative (Mr. Priyanshu)
Environmental Condition : 25±2°C
Parameter Required : As Per Work Order
Sampling and Analysis Protocol : IS:2720 & STP

Report No. : VEL/PE/2511240023
Format No : 7.8 F-03
Party Reference No : Nil
Reporting Date : 29/11/2025
Period of Analysis : 24/11/2025-29/11/2025
Receipt Date : 24/11/2025
Sampling Date : 22/11/2025
Sampling Quantity : 2.0 Kg
Sampling Type : Composite
Packing Status : Temp. Sealed

S.No.	Parameters	Test Method	Results	Units
Discipline : Chemical				
1	pH (at 25°C)	IS : 2720 (P-26)	7.52	--
2	Electrical Conductivity	IS :14767	0.364	mS/cm
3	Colour	VEL/EN/STP/67, Issue No.- 01, Issue date 01/11/2023	Brownish	--
4	Water holding capacity	VEL/EN/STP/86, Issue No.- 01, Issue date 01/11/2023	32.41	%
5	Bulk density	VEL/EN/STP/59, Issue No.- 01, Issue date 01/11/2023	1.55	gm/cc
6	Chloride (as Cl)	VEL/EN/STP/69, Issue No.- 01, Issue date 01/11/2023	152.34	mg/kg
7	Calcium (as Ca)	VEL/EN/STP/72, Issue No.- 01, Issue date 01/11/2023	132.54	mg/kg
8	Sodium (as Na)	VEL/EN/STP/62, Issue No.- 01, Issue date 01/11/2023	104.15	mg/kg
9	Potassium (as K)	VEL/EN/STP/61, Issue No.- 01, Issue date 01/11/2023	85.34	mg/kg
10	Organic Matter	IS 2720 (P-22)	0.51	%

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Test Report

Sample Number : VEL/PE/01 **Report No.** : VEL/PE/2511240023

S.No.	Parameters	Test Method	Results	Units
11	Magnesium (as Mg)	VEL/EN/STP/72, Issue No.- 01, Issue date 01/11/2023	36.12	mg/kg
12	Available Nitrogen (as N)	IS:14684	215.34	kg. /hec.
13	Available Phosphours	VEL/EN/STP/73, Issue No.- 01, Issue date 01/11/2023	26.30	kg. /hec.
14	Total Zinc (as Zn)	VEL/HW/STP/03, Issue No.- 01, Issue date 01/11/2023	22.15	mg/kg
15	Total Manganese (as Mn)	VEL/HW/STP/03, Issue No.- 01, Issue date 01/11/2023	14.15	mg/kg
16	Total Chromium (as Cr)	VEL/HW/STP/03, Issue No.- 01, Issue date 01/11/2023	10.32	mg/kg
17	Total Lead (as Pb)	VEL/HW/STP/03, Issue No.- 01, Issue date 01/11/2023	5.10	mg/kg
18	Total Cadmium (as Cd)	VEL/HW/STP/03, Issue No.- 01, Issue date 01/11/2023	BLQ(LOQ-0.5)	mg/kg
19	Total Copper (as Cu)	VEL/HW/STP/03, Issue No.- 01, Issue date 01/11/2023	8.24	mg/kg
20	Soil Texture	VEL/EN/STP/64, Issue No.- 01, Issue date 01/11/2023	Sandy Loam	--

BLQ-Below Limit of Quantification, LOQ- Limit of Quantification

End of Report

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