

**IN THE HON'BLE NATIONAL GREEN TRIBUNAL,  
PRINCIPAL BENCH, NEW DELHI**

OA No. 581 of 2022

**IN THE MATTER OF:**

**Vikas Kumar**

...Petitioner

Vs

**State of Haryana and Others**

...Respondents

**REPLY ON BEHALF OF RESPONDENT No. 03 THROUGH SH. VIRENDER SINGH PUNIA, REGIONAL OFFICER, HARYANA STATE POLLUTION CONTROL BOARD, SONIPAT IN COMPLAINE OF ORDER DATED 21.11.2022.**

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Regional Officer,  
HSPCB, Sonipat

Dated: 27/01/2023

Place: Sonipat

IN THE HON'BLE NATIONAL GREEN TRIBUNAL,  
PRINCIPAL BENCH, NEW DELHI

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REPLY ON BEHALF OF RESPONDENT No. 03 THROUGH SH. VIRENDER SINGH PUNIA, REGIONAL OFFICER, HARYANA STATE POLLUTION CONTROL BOARD, SONIPAT IN COMPLAINT OF ORDER DATED 21.11.2022.

MOST RESPECTFULLY SHOWETH:

1. That the above subjected OA has been filed against mining activity carried out by Sh. Pradeep Ahlawat in the name of M/s Yodha Mines. This Hon'ble Tribunal vide order dated 21.11.2022, directed the respondents including the answering respondent to file reply alongwith requisite documents.
2. That answering respondent is filing the present reply dealing with the issues concerning with it and liberty is being craved to file additional reply/affidavit with the permission of this Hon'ble Tribunal, as and when need arises.
3. The respondent No. 5 unit is engaged in the activity of sand mining from river bed and said activity falls under Red category as per policy order dated 04.12.2020 regarding categorization of industries. Unit has obtained Environmental Clearance (EC) from Ministry of Environment & Forest and Climate Change (MoEF&CC), Government of India vide No. J-11015/112/2015-IA-II (M) dated 28.01.2016. Copy of Environmental Clearance dated 28.01.2016 is annexed as **ANNEXURE-R/1**. After obtaining Environmental Clearance, unit has obtained Consent to Establish (CTE) vide No. HSPCB/Consent/:2811916SONCTE2818034 dated 20.02.2016 from the answering Board. Copy of CTE dated 20.02.2016 is

annexed as **ANNEXURE-R/2**. The unit obtained 1<sup>st</sup> Consent to Operate (CTO) from the Board vide no. HSPCB/Consent/: 2811916SONCTO2922912 dated 31.03.2016. Copy of CTO dated 31.03.2016 is annexed as **ANNEXURE-R/3**. The CTO was renewed vide No. HSPCB/Consent/: 313100422SONCTO15576963 dated 28.10.2021 valid upto 30.09.2022. Copy of CTO dated 28.10.2021 is annexed as **ANNEXURE-R/4**.

4. That the unit applied for renewal of Consent to Operate vide application No. 25902602 dated 29.06.2022 and same was refused due to not submission of requisite documents. Copy of refusal letter dated 21.08.2022 is annexed as **ANNEXURE-R/5**. Unit had again applied for Consent to Operate vide No. 28808889 dated 29.09.2022, but same was again refused as the unit had not submitted required CTO fees under Water Act, 1974 & Air Act, 1981 alongwith performance security which was required after refusal of CTO and also not submitted other required documents which were required for grant of CTO. Copy of refusal letter dated 07.11.2022 is annexed as **ANNEXURE-R/6**.

The unit had again applied for CTO alongwith required CTO fees, performance security and other required documents on 29.11.2022 and CTO has been granted to unit vide No. HSPCB/Consent/: 313100422SONCTO31059467 dated 10.12.2022 which is valid upto 30.09.2023. Copy of CTO dated 10.12.2022 is enclosed as **ANNEXURE-R/7**.

The unit has submitted latest six monthly compliance report latest on 11.10.2022 with respect to conditions of Environmental Clearance (EC) granted by Ministry of Environment & Forest and Climate Change (MoEF&CC), Government of India vide No. J-11015/112/2015-IA-II (M) dated 28.01.2016, copy of same is annexed herewith as **ANNEXURE-R/8**.

5. That the unit has been inspected on 24.01.2023 by Field Officer, HSPCB, Sonipat Region. During inspection, it has been observed that mining activity is going on by the unit in river bed and away from river stream where temporary bridge is not required as area under mining at present is approachable

without need of bridge. At present, no temporary bridge has been constructed / installed by the unit. Copy of spot inspection report is attached as **ANNEXURE-R/9**.

6. That in the present OA under consideration, permission was granted to M/s Yodha Mines & Minerals by the Competent Authority vide File No. IWRD-220008/162/2021-WS-DIVN-SONEPAT-Irrigation & W.R. Department/76909/2021 dated 23.11.2021 for constructing temporary path for crossing river creak subject to conditions mentioned therein. The concerned agency in this regard is Department of Irrigation and Water Resources, Haryana.

In view of the submissions made herein above, present OA may kindly be dismissed qua the answering respondent.

  
27/1/2023  
Regional Officer,  
HSPCB, Sonipat

**Verification:**

Verified at Sonipat on 27<sup>th</sup> day of January, 2023, that contents of the para no. 1 to 6 of above reply are true and correct as per information derived from the official record.

  
27/1/2023  
Regional Officer,  
HSPCB, Sonipat

**IN THE HON'BLE NATIONAL GREEN TRIBUNAL, NEW DELHI****OA No. 581 of 2022****IN THE MATTER OF:****Vikas Kumar****...Petitioner****Vs****State of Haryana and Others****...Respondents****AFFIDAVIT**

I, Virender Singh Punia, aged about 40 years, do hereby solemnly affirm and declare as under:

1. That I am authorised representative of respondent No.3 in the present matter. I have made myself conversant with the facts of the present case and therefore, I am competent to depose this affidavit.
2. That the accompanying reply has been drafted by my Counsel under my instructions. Same may kindly be read as part of this affidavit as the same are not being repeated herein for the sake of brevity.

  
27/01/2023  
DEPONENT

**VERIFICATION:**

Verified at Sonipat on this 27<sup>th</sup> day of January, 2023 that the contents of above affidavit are true and correct to the best of my knowledge and information derived from official record. No part of it is incorrect and nothing material has been concealed therefrom.

  
27/01/2023  
DEPONENT

**Speed Post**

**F. No. J-11015/112/2015-IA-II (M)**  
**Government of India**  
**Ministry of Environment, Forest & Climate Change**  
**Impact Assessment Division**

3<sup>rd</sup> Floor, Vayu Wing,  
 Indira Paryavaran Bhawan,  
 Jorbagh Road, Aliganj,  
 New Delhi-110 003  
 E-mail: sridhar-mef@nic.in  
 Tele: 011-24695304

**Dated: 28<sup>th</sup> January, 2016**

To,

**M/s Yodha Mines and Minerals**  
 Through Sh. Pradeep Ahlawat S/o Sh. Anand Singh,  
 19-P, Sector-8 Jind (Haryana-126102)  
 Telephone: 8199899991  
 E-mail: [ahlawatpradeep@yahoo.com](mailto:ahlawatpradeep@yahoo.com)

**Sub.: Mining of Sand (Minor Mineral) in the Mines of "Jainpur-2 Sand Unit" with Production Capacity of 16 Lakh TPA Sand (Minor Mineral) by M/s Yodha Mines and Minerals located at Vill.-Jainpur, Tehsil and District-Sonipat, Haryana (Mine Lease area 44.40 Ha.)- Environmental Clearance regarding.**

**Reference:** Online Application IA/HR/MIN/27133/2015

Sir,

This has reference to your online application for the above mentioned proposal of M/s Yodha Mines and Minerals for Sand (Minor Mineral) Mining with annual production capacity 16.0 Lakh Tons of Sand (Minor Mineral) in 44.40 Ha. The mine lease (ML) area lies mainly on the bed of River Yamuna (34.40 Ha) and partly in outside riverbed (10.0 Ha) over an area of 44.40 Ha of District - Sonipat, State - Haryana. The Latitudes and Longitudes of MLA in River bed are North 29°03'56" N, 29°03'56" N, 29°03'24" N and 29°03'24" N and East 77°09'36" E, 77° 09'56" E, 77°09'59" E and 77°09'54" E; in outside river bed are North 29°03'39" N, 29°03'39" N, 29°03'23" N and 29°03'23" N and in East 77°07'35" E, 77°07'40" E, 77°07'40" E and 77°07'32.5" E on Survey of India Topo sheet (OSM) numbers H43R4, H43X1, H43R8. The Project is located in Seismic zone-IV. As per EIA Notification dated 14<sup>th</sup> September, 2006 this project falls under Category "A" or Activity- 1 (a), due to interstate boundary of Haryana and Uttar Pradesh at a distance of 1.0 Km East.

2. The proposal was considered by the Expert Appraisal Committee in its 33<sup>rd</sup> EAC Meeting held during May 15, 2015 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by MoEF&CC vide letter No. J-11015/112/2015-IA-II (M) dated 05-06-2015. The proposal was appraised before the Expert Appraisal Committee in its 1<sup>st</sup> Meeting held during December 21-22, 2015 wherein the Committee recommended the proposal for Environmental Clearance for Mining of Mineral Sand (Minor Mineral) in the river bed (34.40 ha) with production capacity of 14.40 Lakhs TPA (ROM).

3. The land use of the lease area is Govt. waste land i.e. Gair mumkin nadi nallah in riverbed of Yamuna river and Private land in outside riverbed. No forest land is involved. The Letter of Intent (LOI) of mining lease was granted to M/s Yodha Mines and Minerals on 9th March 2015 for 9 years by Director, Department of Mines & Geology, Haryana vide letter No. DMG/Hy/Cont/Jainpur-2/2015/855. The Mining Plan is approved by Director General, Mines and Geology Department, Govt. of Haryana; vide letter no. DMG/Hy/MP/SNP/Jainpur-2/7079 dated 20/07/2015. The proposed production in riverbed is 14.40 lakh TPA and outside river bed is 1.60 lakh TPA.
4. Proposed method of mining is manual opencast method in riverbed and opencast mechanized outside riverbed. The total water requirement is 19 KLD including water demand for domestic purpose, dust suppression and plantation development which shall be met by hired tanker. Excavation will be carried out up to a maximum depth of 3 m from surface of sand deposit and 1 m above from the water level of the River channel whichever is reached earlier. No ground water interception during the mining operations is envisaged as ground water table is 5-10 m bgl in the riverbed and 15-20 m bgl in outside riverbed. The percentage of replenishment in riverbed is 100% every year. The maximum depth of mining in the riverbed will not exceed 3m from the un-mined bed level at any point of time with mining restricted to the central 3/4th width of the river. A safety margin of 2m will be maintained above the ground water table and no mining operation will be permitted below this level.
5. Project Proponent submitted that mining will be done leaving a safety distance from the banks. Mining will be done only during day time and completely stopped in monsoon season. The site elevation is 215 to 209 m AMSL.
6. Mineral will be transported through road. Project Proponent has made the Traffic Analysis survey and reported that frequency of trucks will be deployed 480 per day which increase 180 PCUs per hour for three highways NH1, SH11 and SH57. The level of service (LOS) for NH1 will remain same as "D", for SH11 it will be same as "C" and for SH57 it will change from "B" to "C". Project Proponent reported that haul roads will be repaired regularly and maintained in good conditions. The NH-1 is currently 6-lane Highway and it is proposed to be 8-lane Highway. The expansion (widening of lanes) of highway is going on and will be completed within 3-4 months. Then the scenario of the LOS will be improved positively from D to C.
7. Project Proponent reported that no National Parks, Wildlife Sanctuaries, Tiger Reserves, eco sensitive Zones falls within study area (10 km radius of the mine boundary). Baseline data has been collected from Pre-Monsoon (March to May 2015) within 10 Km radius of the study area. All the physical parameters i.e. air, water noise and soil were within permissible limit. The public hearing for the Proposed Project was conducted on 30.09.2015 at 10:00 am at mine site in village-Jainpur, Tehsil and Distt.- Sonipat, Haryana. The Public hearing was presided over by Sh. Shiv Prasad Sharma, Additional Deputy Commissioner District-Sonipat, Haryana. The issues raised during the public hearing were also considered and discussed during the meeting, which inter-alia, included that priority to local people in employment, effective implementation of measures to control dust pollution, water conservation measures, village development activities and do not harm nearby fields and social development of village.

8. The capital cost of the project is Rs. 14.46 Crores; cost for Environmental Protection is Rs. 18.0 Lakhs; Budget for Occupational Health and Safety is Rs. 10.0 Lakhs. A budget of Rs. 22.0 Lakhs has been proposed for the conservation of wildlife in the area. A budget of Rs. 5.50 Lakhs per annum is earmarked for plantation and its maintenance. For CSR Rs. 20.0 Lakhs/annum will be allocated. The project proponent will deposit 10% of the annual contract money i.e. Rs. 87.0 Lakhs to the Mines and Minerals Development, Restoration and Rehabilitation Fund.

9. There is no court case against this project, however there is a court case in the matter of Mr. Rajbir Singh v/s State of Haryana and others [CWP No. 27700 of 2013], wherein the petitioner had challenged the conditions of the auction notice and the rules relating to payment of rent and compensation to the land owners. The State Government (Dept. of Mines and Geology) has issued LoI subject to the outcome of this case. The above mentioned case is dismissed by Hon'ble Punjab and Haryana High Court, order dated 19.10.2015.

10. The Committee deliberated at length the information submitted by PP and recommended the Proposal for environmental clearance for Mining of Mineral Sand (Minor Mineral) in the river bed (34.40) and not in the paleochannel/agricultural land with proposed production capacity of 14.40 Lakhs TPA (ROM). The committee has decided to exclude agriculture land in view of the representations stating that the mining in the paleochannel/agricultural land will result in deterioration of agricultural land, drainage pattern of the area resulting into the ponding effect.

11. The Ministry of Environment, Forest & Climate Change has examined the proposal in accordance with the Environmental Impact Assessment Notification, 2006 and further amendments thereto and hereby accords the environmental clearance under the provisions thereof to the above mentioned proposal of **Mining of Sand (Minor Mineral) in the Mines of "Jainpur-2 Sand Unit" with Production Capacity of 14.4 Lakh TPA Sand (Minor Mineral) from river bed by M/s Yodha Mines and Minerals located at Vill.-Jainpur, Tehsil and District-Sonapat, Haryana (Mine Lease area 34.40 ha in river bed)** subject to compliance of the followings terms and conditions and environmental safeguards mentioned below:-

**A. Specific conditions**

- (i) Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court of Haryana and any other Court of Law, if any, as may be applicable to this project.
- (ii) Environmental clearance is subject to obtaining clearance, under the Wildlife (Protection) Act, 1972 from the National Board of Wildlife, as applicable to the project.
- (iii) No mining activities will be allowed in forest area, if any, for which the Forest Clearance is not available.
- (iv) The Project Proponent shall obtain Consent to Operate from the State Pollution Control Board, Haryana and effectively implement all the conditions stipulated therein.
- (v) Project Proponent shall implement the Disaster Management Plan as the mine lease area is located in Seismic Zone-III. Project Proponent shall appoint a Committee to have a check over any disaster to warn workers well before for the safety of the workers. Emergency helpline number will be displayed at all levels.

- (vi) Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and records maintained; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smokers, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. Recommendations of National Institute for Labour for ensuring good occupational environment for mine workers would also be adopted; All the old age people of the surrounding villages may be provided medical facilities.
- (vii) Project Proponent shall appoint a Monitoring Committee to monitor the replenishment study, traffic management, levels of production, River Bank erosion and maintenance of Road etc.
- (viii) The number of trips of the trucks shall not exceed the estimated quantity of 480 trucks trips per day. Transport of minerals shall be done either by dedicated road or it should be ensured that the trucks/dumpers carrying the mineral should not be allowed to pass through the villages.
- (ix) Project Proponent shall ensure that the road may not be damaged due to transportation of the mineral; and transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and density.
- (x) Implementation of Action Plan on the issues raised during the Public Hearing. The Proponent shall complete all the tasks as per the Action Plan submitted with the budgetary provisions during the Public Hearing.
- (xi) Excavation will be carried out up to a maximum depth of 3 meters from surface of mineral deposit and not less than one meter from the water level of the River channel whichever is reached earlier.
- (xii) The pollution due to transportation load on the environment will be effectively controlled & water sprinkling will also be done regularly. Vehicles with PUC only will be allowed to ply. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Project should obtain 'PUC' certificate for all the vehicles from authorized pollution testing centre.
- (xiii) Washing of all transport vehicle should be done inside the mining lease.
- (xiv) Permanent pillars has to be constructed to demarcate width of extraction of ROM leaving 25% of River width from the bank with depth of 1.5m below the ground and 1.2 m above the ground to observe its stability.
- (xv) An independent study be organised during peak activity, to understand how the actuals compare with the carrying capacities and further decisions taken to maintain sustainability of this essential sand extraction and supply activity. Project Proponent shall ensure that the road may not be damaged due to transportation of the sand; and transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and density.
- (xvi) The pollution due to transportation load on the environment shall be effectively controlled & water sprinkling be done regularly. Vehicles with PUC only shall be allowed to ply. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Project should obtain 'PUC' certificate for all the vehicles from authorized pollution testing centre.
- (xvii) There shall be planning, developing and implementing facility of rainwater harvesting measures on long term basis in consultation with Regional Director, Central Groundwater Board and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board.

- (xviii) Implementation of Environment Management Policy of the Company w.r.t. judicious use of Mineral resources for growth & development synchronizing mining & environment with prosperity.
- (xix) The Project Proponent shall also take all precautionary measures during mining operation for conservation and protection of endangered flora/fauna, if any, spotted in the study area.
- (xx) The illumination and sound at night at project site, disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. Project Proponent must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.
- (xxi) Main haulage road in the mine should be provided with permanent water sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers.
- (xxii) Transportation of the minerals by road passing through the village shall not be allowed. A 'bypass' road should be constructed (say, leaving a gap of at least 200 meters) for the purpose of transportation of the minerals so that the impact of sound, dust and accidents could be mitigated. The Project Proponent shall bear the cost towards the widening and strengthening of existing public road network in case the same is proposed to be used for the Project. No road movement should be allowed on existing village road network without appropriately increasing the carrying capacity of such roads.
- (xxiii) Likewise, Alteration or re-routing of foot paths, pagdandies, cart roads, and village infrastructure/public utilities or roads (for purposes of land acquisition for mining) shall be avoided to the extent possible and in case such acquisition is inevitable, alternative arrangements shall be made first and then only the area acquired. In these types of cases, Inspection Reports by site visit by experts may be insisted upon which should be done through reputed Institutes.
- (xxiv) CSR activities by Companies including the Mining Establishments has become mandatory up to 2% of their financial Turn-over, Socio Economic Development of the neighborhood Habitats could be planned and executed by the Project Proponent more systematically based on the 'Need based door to door survey' by established Social Institutes/Workers. The report shall be submitted to the Ministry of Environment & Forest and its Regional Office located at Dehradun on six monthly basis.
- (xxv) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (xxvi) A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment, Forest & Climate Change 5 years in advance of final mine closure for approval.

**B 1 : Special Conditions:**

The Ministry of Environment, Forest and Climate has constituted a Committee to formulate the "Guidelines for Sustainable Sand Mining in the Country". The Guidelines, inter-alia, included the following recommendations. The

Project Proponent shall implement the following special conditions so as to mitigate the environment impact of mining activities:-

Impact Category	S. No	Environmental Conditions
<b>Stakeholder Engagement</b>	1	In the case of private land not owned by the lease holder an affidavit should be obtained regarding consent of the concerned land owner (s) for carrying out the mining operation.
	2	Stakeholder awareness and ability to raise concerns and getting it to be addressed.
	3	Implementation of Action Plan on the issues raised during the Public Hearing. The Proponent shall complete all the tasks as per the Action Plan submitted with the budgetary provisions during the Public Hearing.
	4	Having valid lease and all the permits is very much needed.
	5	To establish a Monitoring Committee including Local Panchayat, to check on traffic due to transportation and submit an annual report on the same.
	6	The directions given by the Hon'ble Supreme Court of India vide order dated 27.02.2012 in Deepak Kumar case [SLP(C) Nos. 19628-19629 of 2009] and order dated 05.08.2013 of the Hon'ble National Green Tribunal in application No. 171/2013 may be strictly followed.
	7	All the provisions made and restrictions imposed as covered in the Minor Mineral Rule, shall be complied with, particularly regarding Environment Management Practices and its fund management and Payment of compensation to the land owners.
<b>Sustainable Mining Practices</b>	8	District level Survey Report should be prepared and area suitable for mining and area prohibited for mining be identified.
	9	The depth of mining in Riverbed shall not exceed one meter or water level whichever is less, provided that where the Joint Inspection Committee certifies about excessive deposit or over accumulation of mineral in certain reaches requiring channelization, it can go up to 3 meters on defined reaches of the River.
	10	No River sand mining be allowed in rainy season.
	11	To submit annual replenishment report certified by an authorized agency. In case the replenishment is lower than the approved rate of production, then the mining activity / production levels shall be decreased / stopped accordingly till the replenishment is completed.
	12	Ultimate working depth shall be up to 3 m from Riverbed level and not less than one meter from the water level of the River channel whichever is reached earlier. In hilly terrain this depth be preferably restricted to one meter.
	13	In River flood plain mining a buffer of 3 meter to be left from the River bank for mining.
	14	In mining from agricultural field a buffer of 3 meter to be

		left from the adjacent field.
	15	Mining shall be done in layers of 1 meter depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers.
	16	To maintain safety and stability of Riverbanks i.e. 3 meter or 10% of the width of the River whichever is more will be left intact as no mining zone.
	17	No stream should be diverted for the purpose of sand mining. No natural water course and/ or water resources are obstructed due to mining operations.
	18	No blasting shall be resorted to in River mining and without permission at any other place.
	19	Depending upon the location, thickness of sand, deposition, agricultural land/Riverbed, the method of mining may be manual, semi-mechanized or mechanized; however, manual method of mining shall be preferred over any other method.
<b>Identification and Preparation of Mining Site</b>	20	Mining should be done only in area / stretch identified in the District Level Survey Report suitable for mining and so certified by the Sub-Divisional Level Committee after site visit.
	21	Mining should begin only after pucca pillar marking the boundary of lease area is erected at the cost of the lease holder after certification by the mining official and its geo coordinates are made available to the District Level Committee.
	22	The top soil in case of surface land mining shall be stored temporarily in an earmarked site and concurrently used for land reclamation.
<b>Monitoring the Mining of Mineral and its Transportation</b>	23	The EC holder shall keep a correct account of quantity of mineral mined out, dispatched from the mine, mode of transport, registration number of vehicle, person in-charge of vehicle and mine plan. This should be produced before officers of Central Government and State for inspection.
	24	For each mining lease site the access should be controlled in a way that vehicles carrying mineral from that area are tracked and accounted for.
	25	The State / District Level Environment Committee should use technology like Bar Coding, Information and Communications Technology (ICT), Web based and ICT enabled services, mobile SMS App etc. to account for weight of mineral being taken out of the lease area and the number of trucks moving out with the mineral.
	26	There should be regular monitoring of the mining activities in the State to ensure effective compliance of stipulated EC conditions and of the provisions under the Minor Mineral Concessions Rules framed by the State Government.
<b>Noise Management</b>	27	Noise arising out of mining and processing shall be abated and controlled at source to keep within permissible limit.
	28	Restricted working hours. Sand mining operation has to be carried out between 6 am to 7 pm.
<b>Air Pollution and Dust</b>	29	The pollution due to transportation load on the environment will be effectively controlled and water

<b>Management</b>		sprinkling will also be done regularly.
	30	Air Pollution due to dust, exhaust emission or fumes during mining and processing phase should be controlled and kept in permissible limits specified under environmental laws.
	31	The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Wheel washing facility should be installed and used.
<b>Management of Visual Impact</b>	32	The mining operations are to be done in a systematic manner so that the operations shall create a major visual impact on the site.
<b>Bio-Diversity Protection</b>	33	Restoration of flora affected by mining should be done immediately. Twice the number of trees destroyed by mining to be planted preferably of indigenous species. Each EC holder should plant and maintain for lease period at least 5 trees per hectare in area near lease.
	34	No mining lease shall be granted in the forest area without forest clearance in accordance with the provisions of the Forest Conservation Act, 1980 and the rules made thereunder.
	35	Protection of turtle and bird habitats shall be ensured.
	36	No felling of tree near quarry is allowed. For mining lease within 10km of the National Park / Sanctuary or in Eco-Sensitive Zone of the Protected Area, recommendation of Standing Committee of National Board of Wild Life (NBWL) have to be obtained as per the Hon'ble Supreme Court order in I.A. No. 460 of 2004.
	37	Spring sources should not be affected due to mining activities. Necessary Protection measures are to be incorporated.
<b>Management of Instability and Erosion</b>	38	Removal, stacking and utilization of top soil in mining are should be ensured. Where top soil cannot be used concurrently, it shall be stored separately for future use keeping in view that the bacterial organism should not die and should be spread nearby area.
	39	The EC should stipulate conditions for adequate steps to check soil erosion and control debris flow etc. by constructing engineering structures
	40	Use of oversize material to control erosion and movement of sediments
	41	No overhangs shall be allowed to be formed due to mining and mining shall not be allowed in area where subsidence of rocks is likely to occur due to steep angle of slope.
	42	No extraction of stone / boulder / sand in landslide prone areas.
	43	Controlled clearance of riparian vegetation to be undertaken
<b>Waste Management</b>	44	Site clearance and tidiness is very much needed to have less visual impact of mining.
	45	Dumping of waste shall be done in earmarked places as approved in Mining Plan.
	46	Rubbish burial shall not be done in the Rivers.
<b>Pollution</b>	47	The EC holder shall take all possible precautions for the

<b>Prevention</b>		protection of environment and control of pollution.
	48	Effluent discharge should be kept to the minimum and it should meet the standards prescribed.
<b>Protection of Infrastructure</b>	49	Mining shall not be undertaken in a mining lease located in 200-500 meter of bridge, 200 meter upstream and downstream of water supply / irrigation scheme, 100 meters from the edge of National Highway and railway line, 50 meters from a reservoir, canal or building, 25 meter from the edge of State Highway and 10 meters from the edge of other roads except on special exemption by the Sub-Divisional level Joint Inspection Committee.
	50	For carrying out mining in proximity to any bridge or embankment, appropriate safety zone (not less than 200 meters) should be worked out on case to case basis, taking into account the structural parameters, location aspects and flow rate, and no mining should be carried out in the safety zone so worked out.
	51	Mining activities shall not be done for mine lease where mining can cause danger to site of flood protection works, places of cultural, religious, historical, and archeological importance.
<b>Enhancement of Road Safety</b>	52	Vehicles used for transportation of sand are to be permitted only with fitness and PUC Certificates.
	53	Junction at takeoff point of approach road with main road be properly developed with proper width and geometry required for safe movement of traffic by concession holder at his own cost.
	54	Project Proponent shall ensure that the road may not be damaged due to transportation of the mineral; and transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and density.
	55	No stacking allowed on road side along National Highways.
<b>Closure and Reclamation of Mined Out Area</b>	56	The Project Proponent shall undertake phased restoration, reclamation and rehabilitation of land affected by mining and completes this work before abandonment of mine.
	57	Restoration, reclamation and rehabilitation in cluster should be done systematically and jointly by each EC holder in that cluster. This should be appropriately reflected as EC condition in each EC in cluster.
	58	Site specific plan with eco-restoration should be in place and implemented.
<b>Health and Safety</b>	59	Health and safety of workers should be taken care of.
	60	Transport of mineral will not be done through villages / habitations.
	61	The Project Proponent shall make arrangement for drinking water, first aid facility (along with species specific anti-venom provisioning) in case of emergency for the workers.
	62	Project Proponent shall implement the Disaster Management Plan if the mine lease area is located in Seismic Zone-IV. Project Proponent shall appoint a Committee to have a check over any disaster to warn workers well before for the safety of the workers. Emergency helpline number will be displayed at all levels.

	63	Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and records maintained; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smokers, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. Recommendations of National Institute for Labour for ensuring good occupational environment for mine workers would also be adopted.
<b>Monitoring the Impact of Mining</b>	64	The Project Proponent shall report monitoring data on replenishment, traffic management, levels of production, River Bank erosion and maintenance of Road etc.
<b>Mineral Conservation</b>	65	Use of alternate material such as M-sand in place of natural River sand shall be encouraged in order to reduce stress on natural eco-system.

#### **B-2: PROCEDURE FOR MONITORING OF SAND MINING**

- (i) Project Proponent must ensure that the security features of Transport Permission viz. (a) Printed on Indian Bank Association (IBA) approved Magnetic Ink Character Recognition Code (MICR) paper; (c) Unique Barcode; (d) Unique Quick Response Code (QR); (e) Fugitive Ink Background; (f) Invisible Ink Mark; (g) Void Pantograph; (h) Watermark.
- (ii) Project Proponent must ensure that the CCTV camera, Personal Computer (PC), Internet Connection, Power Back up, access control of mine lease site; and arrangement for weight or approximation of weight of mined out mineral on basis of volume of the trailer of vehicle used at mine lease site are available.
- (iii) Project Proponent must ensure the Scanning of Transport Permit or Receipt and Uploading on Server.
- (iv) The State Mines and Geology Department should print the Transport Permits / Receipt with security features enumerated at Paragraph (i) above and issue them to the mine lease holder through the District Collector. Once these Transport Permits or Receipts are issued, they would be uploaded on the server against that mine lease area. Each receipt should be preferably with pre-fixed quantity, so the total quantity gets determined for the receipts issued. When the Transport Permit or Receipt barcode gets scanned and invoice is generated, that particular barcode gets used and its validity time is recorded on the server. So all the details of transporting of mined out material can be captured on the server and the Transport Permit or Receipt cannot be reused.
- (v) The staff deployed for the purpose of checking of vehicles carrying mined mineral should be in a position to check the validity of Transport Permit or Receipt by scanning them using website, Android Application and SMS.
- (vi) In case the Vehicle breakdown, the validity of Transport Permit or Receipt shall be extended by sending SMS by driver in specific format to report breakdown of vehicle. The server will register this information and register the breakdown. The State can also establish a call centre, which can register breakdowns of such vehicles and extend the validity period. The subsequent restart of the vehicle also should be similarly reported to the server / call centre.

- (vii) The route of vehicle from source to destination shall be tracked through the system using check points, Radio-frequency identification (RFID) Tags, and Global Positioning System (GPS) tracking.
- (viii) The system shall enable the Authorities to develop periodic report on different parameters like daily lifting report, vehicle log/ history, lifting against allocation, and total lifting. The system can be used to generate auto mails/SMS. This will enable the District Collector / Magistrate to get all the relevant details and will enable the authority to block the scanning facility of any site found to be indulged in irregularity. Whenever any authority intercepts any vehicle transporting illegal sand, it shall get registered on the server and shall be mandatory for the officer to fill in the report on action taken. Every intercepted vehicle should be tracked.

### C. General conditions

- (i) No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment, Forest & Climate Change.
- (ii) No change in the calendar plan including excavation, quantum of mineral and waste should be made.
- (iii) The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and ground water for the project.
- (iv) There shall be planning, developing and implementing facility of rainwater harvesting measures on long term basis in consultation with Regional Director, Central Groundwater Board and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board.
- (v) Regular monitoring of ground water table to be carried out at the upstream and depth of water available in the dug well is to be measured. Monitoring to be done by establishing a network of existing wells and constructing new piezometers.
- (vi) Monitoring of Ambient Air Quality to be carried out based on the Notification, as amended from time to time by the Central Pollution Control Board. Water sprinkling should be increased at places loading and unloading points & transfer point to reduce fugitive emissions.
- (vii) The upliftment of scheduled caste/scheduled tribe population, specific programmes have been taken in to consideration specially with respect to education, health care, livelihood generation, infrastructure development & promotion of sports & culture for SC/ST population and that these will be intensified in future.
- (viii) The top soil, if any, shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time. The maximum height of the dumps shall not exceed 8m and width 20 m and overall slope of the dumps shall be maintained to 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled and afforested. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to

- the Ministry of Environment, Forest & Climate Change and its Regional Office located at Chandigarh on six monthly basis.
- (ix) Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly. The drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and over burden dumps to prevent run off of water and flow of sediments directly into the river and other water bodies and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals.
- (x) Plantation shall be raised in a 20m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, around water body, along the roads etc. by planting the native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.
- (xi) Dimension of the retaining wall at the toe of over burden dumps and OB benches within the mine to check run-off and siltation shall be based on the rain fall data.
- (xii) Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of  $PM_{10}$  and  $PM_{2.5}$  such as haul road, loading and unloading point and transfer points. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
- (xiii) Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintained. Regular monitoring of water quality upstream and downstream of water bodies shall be carried out and record of monitoring data should be maintained and submitted to the Ministry of Environment, Forest & Climate Change, its Regional Office, Chandigarh, Central Groundwater Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.
- (xiv) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring shall be carried out four times in a year - pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to Ministry of Environment, Forest & Climate Change and its Regional Office, Chandigarh, Central Ground Water Authority and Regional Director, Central Ground Water Board.
- (xv) The critical parameters such as  $PM_{10}$  (size less than 10 micro meter),  $PM_{2.5}$  (size less than 2.5 micro meter),  $NO_x$  in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total

Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The circular No. J-20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest & Climate Change, which is available on the website of the Ministry [www.envfor.nic.in](http://www.envfor.nic.in) shall also be referred in this regard for its compliance.

- (xvi) Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> & NO<sub>x</sub> monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board. Data on ambient air quality should be regularly submitted to the Ministry including its Regional office located at Chandigarh and the State Pollution Control Board / Central Pollution Control Board once in six months.
- (xvii) Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.
- (xviii) Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.
- (xix) Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19<sup>th</sup> May, 1993 and 31<sup>st</sup> December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.
- (xx) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
- (xxi) Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.
- (xxii) A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- (xxiii) The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office located at Chandigarh.
- (xxiv) The project authorities should inform to the Regional Office located at Chandigarh regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- (xxv) The Regional Office of this Ministry located at Chandigarh shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- (xxvi) The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment, Forest & Climate Change, its Regional Office, Chandigarh, Central Pollution Control Board and State Pollution Control Board.

- (xxvii) A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.
- (xxviii) State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/ Tehsildar's Office for 30 days.
- (xxix) The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment, Forest & Climate Change at <http://envfor.nic.in> and a copy of the same should be forwarded to the Regional Office of this Ministry located Chandigarh.

12. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

13. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

14. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/ High Court of Punjab and Haryana and any other Court of Law relating to the subject matter.

15. Any appeal against this environmental clearance 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.

Yours faithfully,

  
(Dr. U. Sridharan)  
Scientist 'F'

**Copy to:**

- i. **The Secretary**, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
- ii. **The Secretary**, Department of Environment, Government of Haryana, Chandigarh.
- iii. **The Secretary**, Department of Forest, Government of Haryana, Chandigarh.
- iv. **The Secretary**, Department of Mines and Geology, Government of Haryana, Chandigarh.
- v. **The Additional Principal Chief the Conservator of Forests (C)**, Ministry of Environment & Forests, Regional Office (NZ), Bays No. 24-25, Sector 31-A, Dakshin Marg, Chandigarh-160 030.

- vi. **The Chairman**, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office complex, East Arjun Nagar, New Delhi-1100032.
- vii. **The Member Secretary**, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- viii. **The Chairman**, Haryana Pollution Control Board, Plot No. C-11, Sector-6, Panchkula- 134109, Haryana.
- ix. **The Controller General**, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
- x. The District Collector, Sonipat, District, Haryana.
- xi. Guard File.

  
(Dr. U. Sridharan)  
Scientist 'F'



**HARYANA STATE POLLUTION CONTROL BOARD  
C-11, SECTOR-6, PANCHKULA**

*Website – www.hspcb.gov.in E-Mail - hspcb.pkl@sifymail.com*

*Telephone No. – 0172-2577870-73*

No. HSPCB/Consent/ : 2811916SONCTE2818034

Dated:20/02/2016

To

**M/s : Yodha Mines And Minerals**

**Sand Mine at Jainpur-2 Unit, Village Jainpur, district Sonapat (Haryana)**

**SONIPAT**

**131027**

**Sub. : Issue of Consent to Establish from pollution angle .**

Please refer to your Consent to Establish application received in this office on the subject noted above. Under the Authority of the Haryana State Pollution Control Board vide its agenda Item No. 47.8 dated 28.04.83 sanction to the issue of “Consent to Establish” with respect to pollution control of Water and Air is hereby accorded to the unit Yodha Mines And Minerals, for manufacturing of **Sand**, with the following terms and conditions:-

1. The industry has declared that the quantity of effluent shall be 5 KL/Day i.e 0KL/Day for Trade Effluent, 0 KL/Day for Cooling, 5 KL/Day for Domestic and the same should not exceed .
2. The above “Consent to Establish” is valid for 24 months from the date of its issue to be extended for another one year at the discretion of the Board or till the time the unit starts its trial production whichever is earlier. The unit will have to set up the plant and obtain consent during this period.
3. The officer/official of the Board shall have the right to access and inspection of the industry in connection with the various processes and the treatment facilities being provided simultaneously with the construction of building/machinery. The effluent should conform the effluent standards as applicable
4. That necessary arrangement shall be made by the industry for the control of Air Pollution before commissioning the plant. The emitted pollutants will meet the emission and other standards as laid/will be prescribed by the Board from time to time.
5. The applicant will obtain consent under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21/22 of the Air (Prevention & Control of Pollution) Act,1981 as amended to-date-even before starting trial production
6. The above Consent to Establish is further subject to the conditions that the unit complies with all the laws/rules/decisions and competent directions of the Board/Government and its functionaries in all respects before commissioning of the operation and during its actual working strictly.
7. No in-process or post-process objectionable emission or the effluent will be allowed, if the scheme furnished by the unit turns out to be defective in any actual experience
8. The Electricity Department will give only temporary connection and permanent connection to the unit will be given after verifying the consent granted by the Board, both under Water Act and Air Act.
9. Unit will raise the stack height of DG Set/Boiler as per Board’s norms.
10. Unit will maintain proper logbook of Water meter/sub meter before/after commissioning.

11. That in the case of an industry or any other process the activity is located in an area approved and that in case the activity is sited in an residential or institutional or commercial or agricultural area, the necessary permission for siting such industry and process in an residential or institutional or commercial or agricultural area or controlled area under Town and Country Planning laws CLU or Municipal laws has to be obtained from the competent Authority in law permitting this deviation and be submitted in original with the request for consent to operate.
12. That there is no discharge directly or indirectly from the unit or the process into any interstate river or Yamuna River or River Ghaggar.
13. That the industry or the unit concerned is not sited within any prohibited distances according to the Environmental Laws and Rules, Notification, Orders and Policies of Central Pollution control Board and Haryana State Pollution Control Board.
14. That of the unit is discharging its sewage or trade effluent into the public sewer meant to receive trade effluent from industries etc. then the permission of the Competent Authority owing and operating such public sewer giving permission letter to his unit shall be submitted at time of consent to operate.
15. That if at any time, there is adverse report from any adjoining neighbor or any other aggrieved party or Municipal Committee or Zila Parishad or any other public body against the unit's pollution; the Consent to Establish so granted shall be revoked.
16. That all the financial dues required under the rules and policies of the Board have been deposited in full by the unit for this Consent to Establish.
17. In case of change of name from previous Consent to Establish granted, fresh Consent to Establish fee shall be levied.
18. Industry should adopt water conservation measures to ensure minimum consumption of water in their Process. Ground water based proposals of new industries should get clearance from Central Ground Water Authority for scientific development of previous resource.
19. That the unit will take all other clearances from concerned agencies, whenever required.
20. That the unit will not change its process without the prior permission of the Board.
21. That the Consent to Establish so granted will be invalid, if the unit falls in Aravali Area or non conforming area.
22. That the unit will comply with the Hazardous Waste Management Rules and will also make the non-leachate pit for storage of Hazardous waste and will undertake not to dispose off the same except for pit in their own premises or with the authorized disposal authority.
23. That the unit will submit an undertaking that it will comply with all the specific and general conditions as imposed in the above Consent to Establish within 30 days failing which Consent to Establish will be revoked.
24. That unit will obtain EIA from MoEF, if required at any stage.
25. In case of unit does not comply with the above conditions within the stipulated period, Consent to Establish will be revoked.

#### **Specific Conditions**

#### **Other Conditions :**

1. That the unit shall keep all the parameters within the prescribed limits and shall comply with all the Norms and Rules as prescribed in the Act;
2. That the unit will provide inter locking arrangement of DG Set with pollution control devices and shall have separate D.G. set to ensure regular and effective running of pollution control devices.
- 3 That the unit will comply with the conditions of EC and submit half yearly compliance report to the designated quarters concerned.
4. That the unit will comply with all the provisions of Hazardous Waste Rules and will make agreement with Authorized recycler of the Board for waste oil.
5. That the CTE so granted shall become invalid in case of violation of any of the above / any law of the land

*Regional Officer, HQ*  
*For and on be'half of chairman*  
*Haryana State Pollution Control Board*

---It is system generated certificate no signature is required---



**HARYANA STATE POLLUTION CONTROL BOARD  
C-11, SECTOR-6, PANCHKULA**

Website – [www.hspcb.gov.in](http://www.hspcb.gov.in) E-Mail - [hspcb.pkl@sifymail.com](mailto:hspcb.pkl@sifymail.com)

Tele Fax No. – 0172-2577870-73

No. HSPCB/Consent/ : 2811916SONCTO2922912

Dated:31/03/2016

To

M/s :Yodha Mines And Minerals  
Sand Mine at Jainpur-2 Unit, Village Jainpur, district Sonapat (Haryana)  
SONIPAT

Subject: Grant of Consent to operate for discharge of effluent under section 25/26 of the Water(Prevention & Control of Pollution) Act, 1974, from **23/02/2016 - 30/09/2017**

Please refer to your consent application received on dated **2016-02-23** in Regional Officer, Sonipat on the subject cited above.

With reference to your above application for consent for the discharge of domestic effluent and trade effluent under Water (Prevention & Control of Pollution) Act, 1974 hereinafter referred as the Act M/s **Yodha Mines And Minerals** is hereby authorized by the Haryana State Pollution Control Board, to discharge their effluent arising out of their premises in accordance with the terms and conditions as mentioned below:-

1. The daily quantity of domestic effluent from the factory shall not exceed **5 KLD**
2. The daily quantity of the industrial effluent (Process, floor & equipment wash, cooling and bleed water) from the factory shall not exceed **0 KLD**
3. **The industry has been assessed for the purpose of Consent to operate fee with investment cost (land, building, plant and machinery) of Rs. 1446.00012 Lakh. In case the investment cost varies as per the annual report for the years duly audited by the Chartered Accountant, the difference of Consent to operate fee, if any, arises, the industry shall pay the same amount within one month of the receipt of notice from the Board in this regard.**
4. The consent to operate shall be valid for the period from **23/02/2016 - 30/09/2017**
5. The industry shall ensure that various characteristics of the effluents remain within the tolerance limits as specified in EPA Standard and as amended from time to time and at no time the concentration of any characteristics should exceed these limits for discharge.
6. The industry would immediately submit the revised application to the Board in the event of any change in the raw material in process, mode of treatment/discharge of effluent.  
In case of change of process at any stage during the consent period, the industry shall submit fresh consent application alongwith the consent to operate fee, if found due, which may be on any account and that shall be paid by the industry and the industry would immediately submit the consent application to the Board in the event of any change during the year in the raw material, quantity, quality of the effluent, mode of discharge, treatment facilities etc.
7. The officer/official of the Board shall reserve the right to access for the inspection of the industry in connection with the various process and the treatment facilities. The consent to operate is subject to review by the Board at any time.
8. The industry shall not discharge any altered quantity/quality of the trade/domestic effluent without prior permission of the Board.

9. Permissible limits for any pollutants mentioned in the consent to operate order should not exceed the concentration permitted in the effluent by the Board.
10. The industry shall pay the balance fee, in case it is found due from the industry at any time later on.
11. In case the industrial unit uses the Municipal/HUDA/Industrial Estate Sewerage system for disposal of effluent for the final disposal they will submit the sewerage connection certificate.
12. If the industry fails to adhere to any of the conditions of this consent to operate order, the consent to operate so granted shall automatically lapse.
13. The industry will plant minimum three varieties (Eucalyptus, Su Babul or any suitable variety) of trees in the vacant area.
14. The consent to operate under Air (Prevention & Control of Pollution) Act, 1981 should be obtained.
15. The industry shall obtain Authorization under Hazardous Waste (Management handling and transbonding movement) Rules, 2008 as amended to date.
16. The industry shall install separate Energy Meter for ETP and also maintain log book for energy and chemical consumption.
17. The industry shall obtain permission from Irrigation Department for discharging effluent into any drain/water bodies.
18. If the industry is closed temporarily at its own, they shall inform the Board and obtain permission before restart of the unit.
19. The industry shall provide non-leachate storage facilities for storage of Hazardous Waste or dispose off same in the common facilities & will adhere to the norms laid down as per the amended notification under HWTM Rules, 2008
20. The industry shall submit A/R once in 3 months in case of 17 categories and other categories. The L&M shall submit A/R once in 6 months.
21. The industry shall comply the Public Liability Insurance Rules, 1991, as amended to date.
22. The industry shall submit Environmental Audit /Report once in a year.
23. The industry shall obtain Environmental Clearance, if applicable as per MOEF Notification.
24. The industry shall inform to HO/RO office immediately by FAX in case of failure of ETP.
25. In case of bye passing the effluent the consent to operate shall be deemed revoke.
26. The industry shall comply all the Directions/ Rules/Instructions issued from time to time by the Board.

Specific Conditions :

**Other Conditions :**

1. 1. First three months are considered as Trial period and unit will submit sample testing fees under air act with in 15 days .
2. That the unit will comply with the conditions of EC and submit half yearly compliance report to the designated quarters concerned.
3. That the unit shall keep all the parameters within the prescribed limits and shall comply with all the Norms and Rules as prescribed in the Act;
4. That the unit will comply with all the provisions of Hazardous Waste Rules and will make agreement with Authorized recycler of the Board for waste oil.
5. Unit will provide septic tank as per BIS standards for domestic effluent .
6. Unit will sprinkle water to control dust emissions during mining and transportation
7. Unit will submit Analysis reports as applicable .
8. Unit will apply for regular CTO before expiry of trial CTO with all required documents & fees.
9. That the trial CTO/ CTE so granted shall become invalid in case of violation of any of the above / any law of the land

*Regional Officer, HQ  
For and be'half of chairman  
Haryana State Pollution Control Board,  
Panchkula.*



## HARYANA STATE POLLUTION CONTROL BOARD

**Star Complex, Opp. General Hospital, Delhi Road,  
Sonepat Ph. 0130-2236119(O) Email:-  
hspcbrosr@gmail.com  
E-mail: hspcb@hry.nic.in**



No. HSPCB/Consent/ : 313100421SONCTO15576963

Dated:28/10/2021

To.

M/s :Yodha Mines And Minerals  
Sand Mine at Jainpur-2 Unit, Village Jainpur, district Sonepat (Haryana)

Subject: Grant of consent to operate to M/s Yodha Mines And Minerals.

Please refer to your application no. 15576963 received on dated 2021-09-02 in regional office Sonapat. With reference to your above application for consent to operate, M/s Yodha Mines And Minerals is here by granted consent as per following specification/Terms and conditions.

<b>Consent Under</b>	BOTH
<b>Period of consent</b>	01/10/2021 - 30/09/2022
<b>Industry Type</b>	Mining and ore beneficiation
<b>Category</b>	RED
Investment(In Lakh)	1446.0001
Total Land Area(Sq. meter)	0.0
Total Builtup Area(Sq. meter)	0.0
<b>Quantity of effluent</b>	
1. Trade	0.0 KL/Day
2. Domestic	5.0 KL/Day
Number of outlets	1.0
<b>Mode of discharge</b>	
1. Domestic	septic tank
2. Trade	0
<b>Domestic Effluent Parameters</b>	
1. NA	
<b>Trade Effluent Parameters</b>	
1. NA	
Number of stacks	1
<b>Height of stack</b>	
1. na	
<b>Emission parameters</b>	
1. PM10	100 mg/m3
<b>Product Details</b>	
1. Sand	4383 Metric Tonnes/day

<b>Capacity of boiler</b>	
1. na	Ton/hr
<b>Type of Furnace</b>	
1. na	
<b>Type of Fuel</b>	
1. NA	
<b>Raw Material Details</b>	
na	Metric Tonnes/Day

*Regional Officer, Sonipat  
Haryana State Pollution Control Board.*

### Terms and conditions

1. The applicants shall maintain good house keeping both within factory and in the premises. All hose pipelines valves, storage tanks etc. shall be leak proof. In plant allowable pollutants levels, if specified by State Board should be met strictly.
2. The applicant/company shall comply with and carry out directive/orders issued by the Board in this consent order at all subsequent times without negligence of his /its part. The applicant/company shall be liable for such legal action against him as per provision of the law/act in case of violation of any order/directives. Issued at any time and or non compliance of the terms and conditions of his consent order.
3. The applicant shall make an application for grant of consent at least 90 days before the date of expiry of this consent.
4. Necessary fee as prescribed for obtaining renewal consent shall be paid by the applicant alongwith the consent application.
5. If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above required variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard vary all or such condition and there upon the applicant shall be bound to comply with the conditions so varied.
6. The industry shall provide adequate arrangement for fighting the accidental leakages, discharge of any pollutants gas/liquids from the vessels, mechanical equipment etc. which are likely to cause environment pollution.
7. The industry shall comply noise pollution (Regulation and control) Rules, 2000.
8. The industry shall comply all the direction/Rules/Instructions as may be issued by the MOEF/CPCB/HSPCB from time to time.
9. The industry shall ensure that various characteristics of the effluents remain within the tolerance limits as specified in EPA Standard and as amended from time to time and at no time the concentration of any characteristics should exceed these limits for discharge.
10. The industry would immediately submit the revised application to the Board in the event of any change in the raw material in process, mode of treatment/discharge of effluent. In case of change of process at any stage during the consent period, the industry shall submit fresh consent application alongwith the consent to operate fee, if found due, which may be on any account and that shall be paid by the industry and the industry would immediately submit the consent application to the Board in the event of any change during the year in the raw material,

quantity, quality of the effluent, mode of discharge, treatment facilities etc.

11. The officer/official of the Board shall reserve the right to access for the inspection of the industry in connection with the various process and the treatment facilities. The consent to operate is subject to review by the Board at any time.

12. Permissible limits for any pollutants mentioned in the consent to operate order should not exceed the concentration permitted in the effluent by the Board.

13. The industry shall pay the balance fee, in case it is found due from the industry at any time later on.

14. If the industry fails to adhere to any of the conditions of this consent to operate order, the consent to operate so granted shall automatically lapse.

15. If the industry is closed temporarily at its own, they shall inform the Board and obtain permission before restart of the unit.

16. The industry shall comply all the Directions/ Rules/Instructions issued from time to time by the Board.

#### **Specific Conditions :**

1. That the unit will submit the analysis report of APCM provided by the unit each year to ascertain the adequacy of Pollution control device provided by the unit.

2. That the unit will operate its APCM regularly and effectively and will comply with the provisions of Water Act, 1974 and Air Act, 1981.

3. That the unit will comply with the conditions of Environment clearance obtained by the unit.

4. That the unit will provide flow meter at the source of water supply and will maintain the log book for the same.

5. That the unit will adopt cleaner technology thereby reducing pollution load of unit.

6. That the unit will not increase its production capacity and will not made any expansion within existing plant without prior permission of the Board.

7. That the unit will deposit the balance consent fee as per schedule, if any.

8. That the unit will submit the compliance of the conditions of consent to operate granted by the Board yearly.

9. That the unit will liable to pay Environment Compensation in case of non compliance with the provisions of Environment laws and condition imposed by the Board.

10. That concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this CTO and attract action under the provisions of Water Act, 1974 and Air Act, 1981.

11. That the unit will comply with the direction issued by the HSPCB/CPCB/NGT/MoEFF&CC time to time.

*Regional Officer, Sonipat  
Haryana State Pollution Control Board.*

**HARYANA STATE POLLUTION CONTROL BOARD**

**Star Complex, Opp. General Hospital, Delhi Road,  
Sonepat Ph. 0130-2236119(O) Email:-  
hspcbrosr@gmail.com**



No. HSPCB/Consent/ : 313100422SONCTO25902602

Dated:21/08/2022

To

M/s :Yodha Mines And Minerals

**Sand Mine at Jainpur-2 Unit, Village Jainpur, district Sonepat (Haryana)  
SONIPAT**

**Subject: Refusal of consent to operate under Water Act, 1974 and Air Act, 1981.**

Please refer to your application no. 25902602 dated 2022-06-29 received in the Board for consent to operate under Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

Your above referred application has been examined by the Board and it has been established that the application submitted by you is incomplete and not conforming to the requirement of the provisions of the Water (Prevention & Control of Pollution) Act, 1974, and Air (Prevention & Control of Pollution) Act, 1981, as per policy of the Board. Accordingly, Show Cause Notice for refusal of consent under above said Act containing the said shortcoming/ incompleteness was issued by the Board on dated **2022-08-17**. But you have failed to submit the satisfactory reply of the above said show cause notice and submit compliance of the observations. You have failed to take corrective measures the shortcomings and incompleteness in your application as per given below:-

- 1. As per Environmental Clearance (EC) condition, unit cannot be operated in rainy season i.e. after 30.06.2022, whereas unit in its reply dt. has submitted that unit is operational.
2. Not submitted the latest analysis reports of ground water monitoring as well as Ambient Air Monitoring for PM10, PM2.5, SO2 & NOx.
3. Not submitted CA certificate w.r.t. capital investment cost for the preceding year. Capital investment cost should include the original cost of land, building, plant & machinery without depreciation but with upto date additions.
4. Environmental Clearance (EC) obtained vide No. F.N. J-11015/112/2015-IA-II(M) dated 28.01.2016 from MoEF&CC valid upto 07 years and EC will be expired on 27.01.2023, CTO can't be granted beyond the EC validity period.
5. Not submitted six monthly compliance report of the E.C conditions.
6. Not submitted the report of Replenishment study of the mining in the River bed as per EC condition.
7. Not submitted copy of reports of regularly Monitoring of Ground Water level and quality have to be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring have to be carried out four times in a year: Pre-monsoon (April-May), Monsoon (August), Post monsoon (November) and winter (January) and the data collected may be sent regularly to the

ministry of Environment, Forest & Climate Change, its Regional Office Chandigarh, Central Ground water authority Regional Director, Ground Central Water Board, State Pollution Control Board and Central Pollution Control Board, but unit has not submitted the reports to HSPCB Sonipat . 8. Not submitted copy of data on ambient air quality which will be regularly submitted to the ministry including its Regional Office located at Chandigarh and the State pollution Control Board/ Central Pollution Control Board once in six months but date wise data along with Analysis reports has not been submitted for PM10, PM2.5, SO2 & NOx. 9. Not submitted copy of the Environment statement for the preceding year.

In view of the above stated facts, the consent under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act, 1981 sought vide your above referred application, is hereby refused due to the above shortcomings / incompleteness.

In future, your unit would be discharging effluent into the atmosphere at your own risk in violation of the above said Act and rendering yourself liable for legal action under section 43/44 of the Water (Prevention & Control of Pollution) Act, 1974 and section 38/39 of Air (Prevention and Control of Pollution) Act, 1981.

**HARYANA STATE**

NAVEEN GULIA

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Date: 2022.08.21 12:58:42  
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*Regional Officer, Sonipat*

*Haryana State Pollution Control Board.*



**HARYANA STATE POLLUTION CONTROL BOARD**

Star Complex, Opp. General Hospital, Delhi Road,  
Sonepat Ph. 0130-2236119(O) Email:-  
hspcbrosr@gmail.com



No. HSPCB/Consent/ : 313100422SONCTO28808889

Dated:07/11/2022

To

M/s :Yodha Mines And Minerals  
Sand Mine at Jainpur-2 Unit, Village Jainpur, district Sonepat (Haryana)  
SONIPAT

**Subject: Refusal of consent to operate under Water Act, 1974 and Air Act, 1981.**

Please refer to your application no. 28808889 dated 2022-09-29 received in the Board for consent to operate under Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

Your above referred application has been examined by the Board and it has been established that the application submitted by you is incomplete and not conforming to the requirement of the provisions of the Water (Prevention & Control of Pollution) Act, 1974, and Air (Prevention & Control of Pollution) Act, 1981, as per policy of the Board. Accordingly, Show Cause Notice for refusal of consent under above said Act containing the said shortcoming/ incompleteness was issued by the Board on dated **2022-10-02**. But you have failed to submit the satisfactory reply of the above said show cause notice and submit compliance of the observations. You have failed to take corrective measures the shortcomings and incompleteness in your application as per given below:-

4. Not submitted required CTO fees Rs. 4,25,000/- under Water Act & Air Act. 2. Not submitted performance security of Rs. 5,00,000/- required after refusal of previous CTO as per policy of the Board. 3. As per Environmental Clearance (EC) condition, unit cannot be operated in rainy season i.e. after 30.06.2022, whereas unit has submitted analysis reports from Pvt. Lab. of the month September-October, 2022, when the unit was non-operational. 4. Environmental Clearance (EC) obtained vide No. F.N. J-11015/112/2015-IA-II(M) dated 28.01.2016 from MoEF&CC valid upto 07 years and EC will be expired on 27.01.2023, CTO can't be granted beyond the EC validity period. 5. OA No. 581/2022 titled "Vikas Kumar Vs State of Haryana" has also been filed against the unit in Hon'ble National Green Tribunal for violation of Environmental Laws/Rules/Acts.

In view of the above stated facts, the consent under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act, 1981 sought vide your above referred application, is hereby refused due to the above shortcomings / incompleteness.

In future, your unit would be discharging effluent into the atmosphere at your own risk in

violation of the above said Act and rendering yourself liable for legal action under section 43/44 of the Water (Prevention & Control of Pollution) Act, 1974 and section 38/39 of Air (Prevention and Control of Pollution) Act, 1981.

NAVEEN  
GULIA

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NAVEEN GULIA  
Date: 2022.11.07  
14:05:00 +05'30'

*Regional Officer, Sonipat*

*Haryana State Pollution Control Board.*





## HARYANA STATE POLLUTION CONTROL BOARD

Star Complex, Opp. General Hospital, Delhi Road,  
Sonepat Ph. 0130-2236119(O) Email:-  
hspcbrosr@gmail.com  
E-mail: hspcb@hry.nic.in



No. HSPCB/Consent/ : 313100422SONCTO31059467

Dated:10/12/2022

To.

M/s :Yodha Mines And Minerals  
Sand Mine at Jainpur-2 Unit, Village Jainpur, district Sonepat (Haryana)

Subject: Grant of consent to operate to M/s Yodha Mines And Minerals.

Please refer to your application no. 31059467 received on dated 2022-11-29 in regional office Sonipat. With reference to your above application for consent to operate, M/s Yodha Mines And Minerals is here by granted consent as per following specification/Terms and conditions.

<b>Consent Under</b>	BOTH
<b>Period of consent</b>	10/12/2022 - 30/09/2023
<b>Industry Type</b>	Mining and ore beneficiation
<b>Category</b>	RED
Investment(In Lakh)	1446.0
Total Land Area(Sq. meter)	444000.0
Total Builtup Area(Sq. meter)	0.0
<b>Quantity of effluent</b>	
1. Trade	0.0 KL/Day
2. Domestic	5.0 KL/Day
Number of outlets	1.0
<b>Mode of discharge</b>	
1. Domestic	Septic Tank
2. Trade	N.A.
<b>Domestic Effluent Parameters</b>	
1. NA	
<b>Trade Effluent Parameters</b>	
1. NA	
Number of stacks	1
<b>Height of stack</b>	
1. NA	
<b>Emission parameters</b>	
1. PM10	100 micro gm/m <sup>3</sup>
2. PM2.5	60 micro gm/m <sup>3</sup>
<b>Product Details</b>	

1. Sand	5333 Metric Tonnes/day
<b>Capacity of boiler</b>	
1. NA	Ton/hr
<b>Type of Furnace</b>	
1. NA	
<b>Type of Fuel</b>	
1. NA	
<b>Raw Material Details</b>	
Sand mining	5333 Metric Tonnes/Day

*Regional Officer, Sonipat*  
*Haryana State Pollution Control Board.*

### **Terms and conditions**

1. The applicants shall maintain good house keeping both within factory and in the premises. All hose pipelines valves, storage tanks etc. shall be leak proof. In plant allowable pollutants levels, if specified by State Board should be met strictly.
2. The applicant/company shall comply with and carry out directive/orders issued by the Board in this consent order at all subsequent times without negligence of his /its part. The applicant/company shall be liable for such legal action against him as per provision of the law/act in case of violation of any order/directives. Issued at any time and or non compliance of the terms and conditions of his consent order.
3. The applicant shall make an application for grant of consent at least 90 days before the date of expiry of this consent.
4. Necessary fee as prescribed for obtaining renewal consent shall be paid by the applicant alongwith the consent application.
5. If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above required variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard vary all or such condition and there upon the applicant shall be bound to comply with the conditions so varied.
6. The industry shall provide adequate arrangement for fighting the accidental leakages, discharge of any pollutants gas/liquids from the vessels, mechanical equipment etc. which are likely to cause environment pollution.
7. The industry shall comply noise pollution (Regulation and control) Rules, 2000.
8. The industry shall comply all the direction/Rules/Instructions as may be issued by the MOEF/CPCB/HSPCB from time to time.
9. The industry shall ensure that various characteristics of the effluents remain within the tolerance limits as specified in EPA Standard and as amended from time to time and at no time the concentration of any characteristics should exceed these limits for discharge.
10. The industry would immediately submit the revised application to the Board in the event of any change in the raw material in process, mode of treatment/discharge of effluent. In case of change of process at any stage during the consent period, the industry shall submit fresh consent application alongwith the consent to operate fee, if found due, which may be on any account and that shall be paid by the industry and the industry would immediately submit the

consent application to the Board in the event of any change during the year in the raw material, quantity, quality of the effluent, mode of discharge, treatment facilities etc.

11. The officer/official of the Board shall reserve the right to access for the inspection of the industry in connection with the various process and the treatment facilities. The consent to operate is subject to review by the Board at any time.

12. Permissible limits for any pollutants mentioned in the consent to operate order should not exceed the concentration permitted in the effluent by the Board.

13. The industry shall pay the balance fee, in case it is found due from the industry at any time later on.

14. If the industry fails to adhere to any of the conditions of this consent to operate order, the consent to operate so granted shall automatically lapse.

15. If the industry is closed temporarily at its own, they shall inform the Board and obtain permission before restart of the unit.

16. The industry shall comply all the Directions/ Rules/Instructions issued from time to time by the Board.

#### **Specific Conditions :**

1. Unit will submit six monthly compliance report of the E.C conditions. 2. Unit will submit report of Replenishment study of the mining in the River bed as per EC condition. 3. Unit will submit Regularly Monitoring of Ground Water level and quality have to be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring have to be carried out four times in a year: Pre-monsoon (April-May), Monsoon (August), Post monsoon (November) and winter (January) and the data collected may be sent regularly to the ministry of Environment, Forest & Climate Change, its Regional Office Chandigarh, Central Ground water authority Regional Director, Ground Central Water Board, State Pollution Control Board and Central Pollution Control Board, but unit has not submitted the reports to HSPCB Sonipat. 4. Unit will submit data on ambient air quality should be regularly submitted to the ministry including its Regional Office located at Chandigarh and the State pollution Control Board/ Central Pollution Control Board once in six months but date wise data along with Analysis reports has not been submitted for PM10, PM2.5, SO2 & NOx. 5. Unit will submit analysis reports of ground water monitoring as well as Ambient Air Monitoring for PM10, PM2.5 within one month from the issuance of CTO from the laboratory of Board. 6. CTO so granted will depend upon outcome of OA No. 581/2022 titled "Vikas Kumar Vs State of Haryana" filed against the unit in Hon'ble National Green Tribunal for violation of Environmental Law/Rule, if outcome of said OA will be against the unit, CTO so granted will be considered revoke automatically.

*Regional Officer, Sonipat  
Haryana State Pollution Control Board.*



# Yodha Mines & Minerals

M.: 9817134101

The Director,  
Ministry of Environment, Forests & Climate Change (IA Division),  
Indira Paryavaran Bhavan, Vayu Wing, 3<sup>rd</sup> Floor,  
Aliganj, Jor Bagh Road,  
New Delhi-110003

**Sub: Submission of Six Monthly Compliance Report of Stipulated Conditions of Environmental Clearance for Mining of Mineral sand (Minor Mineral) with proposed production capacity of 16 Lakhs TPA by M/s Yodha Mines & Minerals, located at village Jianpur, tehsil and District-Sonipat Haryana (MLA-44.40 Ha.) for the Submission period of June 2022.**

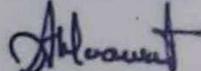
Ref. No. J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016

Sir,

In accordance to the EC letter as above stated received from Ministry of Environment, Forests & Climate Change vide letter J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016. We are submitting herewith six monthly compliance report of stipulated conditions of Environment Clearance (Soft) along with laboratory analysis results the specific and general conditions and relevant annexure.

We fully assure you that we will comply with all conditions as specified in the Environment clearance granted us.

**For YODHA MINES & MINERALS**

  
Authorized Signatory

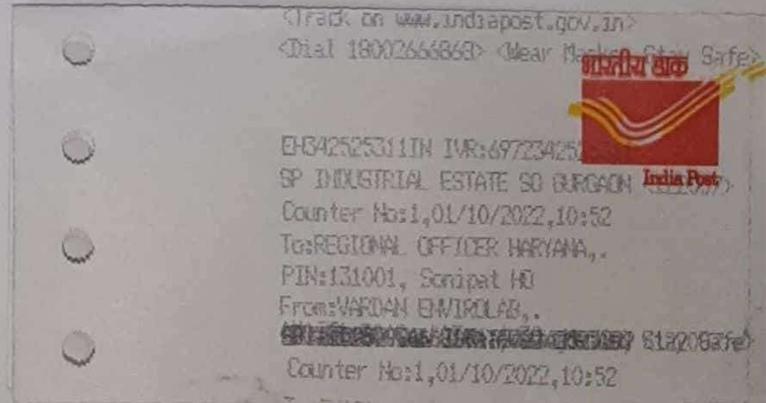
Authorized Signatory,

**For M/s Yodha Mines & Minerals**

Name -  
Designation -  
E-mail -  
Contact No. -

Copy to:

1. The Director, Ministry of Environment & Forests, Northern Regional Office, Sector-31, Dakshin Marg, Chandigarh-160030
2. The Member Secretary, Haryana State Pollution Control Board, Sector-6, Panchkula.
3. State Environment Impact Assessment Authority (SEIAA), Bay No. 55-58, Paryatan Bhavan, Sector-2, Panchkula, Haryana.
4. The Regional Officer, Haryana State Pollution Control Board, Star Complex, Opp. General Hosp. Delhi Road, Sonapat, Haryana.



Address : Village- Jainpur, Tehsil- Rai, District- Sonapat, Haryana

**85**  
Project: Environmental Clearance for Mining of Sand (Miner Mineral) in the Mines of Jainpur-2 Sand Unit  
with Production Capacity of 16 Lakhs TPA Sand (Miner Mineral) by M/s Yodha Mines and Minerals  
(EC No. J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016)

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**SIX MONTHLY ENVIRONMENTAL COMPLIANCE MONITORING REPORT OF  
STIPULATED CONDITIONS OF ENVIRONMENTAL CLEARANCE  
(October 2021 – March 2022)**

**FOR**

**Sand Mining (Miner Mineral)  
At Vill- Jainpur Sand Unit, Dist. Sonapat,  
Haryana**

**SUBMITTED BY:  
M/s Yodha Mines and Mineral  
19 P, Sec-8 Jind, Haryana**

**86**  
**Project: Environmental Clearance for Mining of Sand (Miner Mineral) in the Mines of Jainpur-2 Sand Unit with Production Capacity of 16 Lakhs TPA Sand (Miner Mineral) by M/s Yodha Mines and Minerals (EC No. J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016)**

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**87**  
Project: Environmental Clearance for Mining of Sand (Miner Mineral) in the Mines of Jainpur-2 Sand Unit  
with Production Capacity of 16 Lakhs TPA Sand (Miner Mineral) by M/s Yodha Mines and Minerals  
(EC No. J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016)

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	<b>Annexure</b>	
1.	Environment Clearance	
2.	CTO	
3.	Lab Report	
4.	Previous year Compliance receiving	

# 1

## PURPOSE OF THE PROJECT

### 1.1 Introduction

M/s Yodha Mines and Minerals has obtained Environmental Clearance Letter from Ministry of Environment, Forest & Climate Change, for the Mining of Mineral sand (Minor Mineral) with Proposed Production Capacity 16.0 lakhs TPA Sand, Located at Village – Jainpur, Tehsil & District- Sonipat, Haryana (MLA-44.40 Ha.) **on Dated: 28.01.2016.**

Total area of the mining site is 44.40 Ha. Total Project cost is 14.46. crores. Approval for the mining scheme and progressive mine closure plan was obtained from the Department of Mines & Geology vide letter no. **DMG/HY/MP/SNP/Jainpur-2/7077-7080 Dated 20.07.2015.**

### 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 management to submit six monthly compliance reports in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1<sup>st</sup> June and 1<sup>st</sup> December of each calendar year” and as per compliance of condition mentioned in Environment Clearance Letter. Six monthly compliance reports should be submitted to the Regulatory Authority of Central and State Government.

It is mandatory to submit a Six Monthly Compliance Report to show the status & compliance of all the Conditions mentioned in Environment clearance Letter, along with monitoring of various Environmental Parameters (as per CPCB Norms).

The regulatory authorities in this case are Ministry of Mines New Delhi, Department of Environment Chandigarh, Department of Forest Chandigarh, Department of Mines and Geology Chandigarh, (APCCF)MoEF& CC, Chandigarh and HSPCB, Panchkula, CPCB New Delhi, Central Ground Water Authority New Delhi, Indian Bureau of Mines Nagpur, District Collector Sonipat Haryana and State Environment Impact Assessment Authority, Haryana. Various scheduled Site Visits were conducted by a team of Experts to Monitor Pollution related parameters as defined by CPCB / HSPCB. Samples for water and soil were also collected for further analysis.

Based on the Specific and General Conditions mentioned in the EC Letter, a Compliance Report was prepared on behalf of Project Proponent; details of which are present in Chapter-2 entitled “**ADHERENCE OF SPECIFIC AND GENERAL CONDITIONS**”.

This report is supposed to submit after every six month as per the conditions stipulated in Environment Clearance Order. The Environmental assessment has been carried out to verify:

This report is supposed to submit after every six month as per the conditions stipulated in Environment Clearance Order. The Environmental assessment has been carried out to verify:

- 1) That the proposed project has not any adverse effect on the project site as well as it's surrounding.
- 2) That there is compliance with the conditions stipulated in the Environmental Clearance Letter.

**M/s Yodha Mines and Minerals, Project: Environmental Clearance for Proposed Mining of Sand (Minor Mineral) with proposed production capacity of 16 Lakhs TPA Sand (Minor Mineral) By M/S Yodha Mines and Minerals Located at Village – Jainpur, Tehsil and District- Sonapat Haryana J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016**

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- 3) That the Project proponent is implementing the environmental safeguards and environmental pollution mitigates measures as suggested in approved Mining Plan and Form-1, Environmental Management Plan with true spirit.
- 4) The non-conformity in the project with respect to the environmental implication of the project.

**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,
- 4) Analysis of Samples collected during Monitoring,
- 5) Interpretation of Monitoring Results,
- 6) Preparation of six monthly Environmental Compliance Report.

**1.4 Generic Structure of Report:**

1. Purpose of the Report, explaining the need of a Compliance Report and Methodology Adopted for preparation of Report. .
2. Compliance Report, explaining the entire specific & general conditions given in the EC Letter and providing details w.r.t. each condition/ guideline.
3. Monitoring Reports & Analysis, showing the level of pollution/emission within the project site for various Environment Parameters.
4. Photographs showing status of the project and sampling/monitoring of environmental parameters.
5. Supporting Documents related mandatory for the project.

M/s Yodha Mines and Minerals, Project: Environmental Clearance for Proposed Mining of Sand (Minor Mineral) with proposed production capacity of 16 Lakhs TPA Sand (Minor Mineral) By M/S Yodha Mines and Minerals Located at Village – Jainpur, Tehsil and District- Sonapat Haryana J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016

# 2

## ADHERENCE OF SPECIFIC AND GENERAL CONDITIONS

### Part A: Specific Conditions

S. No.	Specific Conditions	Reply
1.	Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court of Haryana and any other Court of Law, if any, as may be applicable to this project.	Agreed. <b>Environment Clearance is attached as Annexure-1.</b>
2.	Environmental clearance is subject to obtaining clearance, under the Wildlife (Protection) Act, 1972 from the National Board of Wildlife, as applicable to the project.	There is no WLS situated within 10 km radius of the lease area. Hence No clearance under the wildlife (Protection) Act, 1972 from the National Board of Wildlife is required.
3.	No mining activities will be allowed in forest area, if any, for which the forest clearance is not available.	There is no forest land situated within lease area, Hence no Forest clearance is required.
4.	The project proponent shall obtain to Consent to operate from the state pollution control board, Haryana and effectively implement all conditions stipulated therein.	Project proponent has obtained CTO from State Pollution Control Board, Haryana. The letter number of the CTO is <b>313100421SONCTO15576963</b> dated- <b>28.10.2021</b> , <b>Valid up to 30.09.2022.</b> Copy of the same is enclosed as <b>Annexure- 2.</b>
5.	Project Proponent shall implement the Disaster Management Plan as the mine lease area is located in Seismic Zone-IV. Project Proponent shall appoint a Committee to have a check over any disaster to warn workers well before for the safety of the workers. Emergency helpline number will be displayed at all levels.	Noted and Agreed.  We have taken all the precautionary measures at site for any disaster situation and Emergency helpline number are also displayed at all levels.
6.	The project proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the project and records maintained; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smokers, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. Recommendations of National Institute for labour for ensuring good occupational environment for mine workers would also be adopted. All the old age people of surrounding villages may be provided medical facilities.	Noted and Agreed. Occupational health specialist has been appointed for regular and periodical medical examination of workers and regularly check-up of workers are being done.
7.	Project proponent shall appoint a monitoring committee to monitor the replenishment study, traffic management, levels of production, River Bank erosion and maintenance of Road etc.	We have appointed reputed agency to conduct the replenishment study in the due course of time.

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**Clearance for Proposed Mining of Sand (Minor Mineral)**  
**with proposed production capacity of 16 Lakhs TPA Sand (Minor Mineral) By M/S Yodha Mines and Minerals**  
**Located at Village – Jainpur, Tehsil and District- Sonapat Haryana**  
**J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016**

8.	The number of trips of the truck shall not exceed 480 Trucks Trips/day. Transport of minerals shall be done either by dedicated road or it should be ensured that the tuck/dumpers carrying the minerals should not be allowed to pass thought the villages.	Noted & Agreed. The transportation of minerals is being done by dedicated road only.
9.	Project Proponent shall ensure that the road may not be damaged due to transportation of the minerals transport of minerals will be as per IRC Guideline with respect to with traffic congestion and density.	We ensure that the road is not being damage due to the transportation of minerals as per IRC Guideline and maintenance of road is being done on regular basis.
10.	Implementation of Action plan on the issue raised during the public hearing, the project proponent shall complete all the task as per the Action plan submitted with budgetary provisions during the public hearing.	Action plan of issues raised during public hearing had been submitted already and implementation of the same is being carrying out.
11.	Excavation will be carried a maximum depth of 3 meters from surface of river bed one meter above the ground water level of the River Channel whichever is reached earlier.	Noted. Excavation is being carried out as per the approved mine plan.
12.	The pollution due to transportation load on the environmental will be effectively controlled & water sprinkling will also be done regularly. Vehicles with PUC only will be allowed to ply. The minerals transportation shall be carried out through covered truck only and the vehicles carrying the mineral shall not be overloaded. Project should obtain 'PUC' certificate for all the vehicles from authorized pollution testing centre.	Noted and Agreed. Water sprinkling is being regularly done at the haul road. Mineral is being transported through covered trucks only within the permissible carrying capacity.
13.	Washing of all transport vehicles should be done inside the mining lease.	Agreed & being Complied.
14.	Permanent pillars has to be constructed to demarcate width of extraction of Reserve of Minerals leaving 25% of River width from the bank with depth of 1.5m below the ground and 1.2m above the ground to observe its stability.	Noted & Complied.
15.	An Independent Study be organised during peak activity, to understand how the actual compare with the carrying capacities and further decisions taken to maintain sustainability of this essential sand extraction and supply activity. Project proponent shall ensure that the road may not be damaged due to transportation of the sand; and transport of mineral will be as per IRC Guidelines with respect to complying with traffic congestion and density.	Noted & Agreed.
16.	The pollution due to transportation load on the environment shall be effectively controlled & water sprinkling be done regularly. Vehicles with PUC only shall be allowed to ply. The mineral transportation shall be carried out through covered trucks only and the vehicle carrying the mineral shall not be overloaded. Project should obtain PUC certificate for all the vehicle from authorized pollution testing centre.	Noted and Agreed. Water sprinkling is being regularly done at the haul road. Mineral is being transported through covered trucks only within the permissible carrying capacity.
17.	There shall be planning, developing and implementing facility of rainwater harvesting measures in long term basis in consultation with Regional Director, Central Groundwater Board and implementation of conservation measures to augment	Noted and Agreed.

**M/s Yodha Mines and Minerals, Project: Environmental Clearance for Proposed Mining of Sand (Minor Mineral) with proposed production capacity of 16 Lakhs TPA Sand (Minor Mineral) By M/S Yodha Mines and Minerals Located at Village – Jainpur, Tehsil and District- Sonapat Haryana J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016**

	ground water resources in the area in consultation with Central Ground Water Board.	
18.	Implementation of environment Management policy of the company w.r.t. judicious use of mineral resources for growth & development synchronizing mining & environment with prosperity.	Noted and agreed.
19.	The project Proponent shall also take all precautionary measures during mining operation for conservation and protection of endangered flora/fauna, if any, spotted in the study area.	The Project Proponent has prepared and submitted the conservation plan in considering of precautionary measures for conservation and protection of endangered flora and fauna and Schedule-I species during mining operation.
20.	The illumination and sound at night project site, disturb the villages in respect of both human and animal population, consequent sleeping disorders and stress may effect the health in the villages located close to mining operation. Habitation have a right for darkness and minimal noise level at night. Project proponent must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.	Mining is being done during day time so there will be minimum impact at night of noise, light and vibration to the nearby villages and animals. Further due care and following mitigation measure is being done for the abatement any impact of peaceful living of villagers', animals and habitants. <ul style="list-style-type: none"> <li>➤ Silencer in the machineries provided to reduce generation of noise.</li> <li>➤ Regular Noise monitoring is being conducting regularly at project site.</li> </ul> LAB Reports are attached as <b>Annexure-3</b> .
21.	Main haulage road in the mine should be provided with permanent water sprinklers and other roads should be regularly wetted with tankers fitted with sprinklers.	Noted & Agreed. Water sprinkling is being regularly done on haul road.
22.	Transportation of the minerals by road passing through the village shall not be allowed. A 'bypass' road should be constructed (say, leaving a gap of at least 200 meters) for the purpose of transportation of the minerals so that the impact of sound, dust and accidents could be mitigated. The Project Proponent shall bear the cost towards the widening and strengthening of existing public road network in case the same is proposed to be used for the Project. No road movement should be allowed on existing village road network without appropriately increasing the carrying capacity of such roads.	Agreed. Transportation of minerals is being done with dedicated road only and maintenance of the same is also being carrying out.
23.	Likewise, Alteration or re-routing of foot paths, pagdandies, cart roads, and village infrastructure/public utilities or roads (for purposes of land acquisition for mining) shall be avoided to the extent possible and in case such acquisition is inevitable, alternative arrangements shall be made first and then only the area acquired. In these types of cases, Inspection Reports by site visit by experts may be insisted upon which should be done through reputed Institutes.	Noted and Agreed. No Alteration or re-routing of foot paths, pagdandies, cart roads, and village infrastructure/public utilities or roads is required.
24.	CSR activities by Companies including the Mining Establishments has become mandatory up to 2% of their financial Turn-over, Socio Economic Development of the neighbourhood Habitats could be planned and executed by the Project Proponent more	Noted.

**M/s Yodha Mines and Minerals, Project: Environmental Clearance for Proposed Mining of Sand (Minor Mineral) with proposed production capacity of 16 Lakhs TPA Sand (Minor Mineral) By M/S Yodha Mines and Minerals Located at Village – Jainpur, Tehsil and District- Sonipat Haryana J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016**

	systematically based on the 'Need based door to door survey' by established Social Institutes/Workers. The report shall be submitted to the Ministry of Environment & Forest and its Regional Office located at Dehradun on six monthly basis.	
25.	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Housing arrangement had been constructed for the labour at the site with all amenities. Whereas rest shelter, first aid facility, crèche, soak pit and other basic sanitary facilities are being developed at the mine site.
26.	A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment, Forest & Climate Change 5 years in advance of final mine closure for approval.	Noted & Agreed.

**B 1: Special Conditions:**

Impact Category	S. No	Environmental Conditions	Reply
<b>Stakeholder Engagement</b>	1	In the case of private land not owned by the lease holder an affidavit should be obtained regarding consent of the concerned land owner (s) for carrying out the mining operation.	No Private land involved in the project.
	2	Stakeholder awareness and ability to raise concerns and getting it to be addressed.	Being Complied.
	3	Implementation of Action Plan on the issues raised during the Public Hearing. The Proponent shall complete all the tasks as per the Action Plan submitted with the budgetary provisions during the Public Hearing.	Noted & being Complied.
	4	Having valid lease and all the permits is much needed.	Noted.
	5	To establish a Monitoring Committee including Local Panchayat, to check on traffic due to transportation and submit an annual report on the same.	Noted & being Complied.
	6	The directions given by the Hon'ble Supreme Court of India vide order dated 27.02.2012 in Deepak Kumar case order date 27.02.2012 in Deepak Kumar case [SLP(C) Nos.19628-19629 of 2009]and order dated 05.08.2013 of the Hon'ble National Green Tribunal in application No. 171/2013 may be strictly followed.	Noted & Agreed.

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**M/s Yodha Mines and Minerals, Project: Environmental Clearance for Proposed Mining of Sand (Minor Mineral) with proposed production capacity of 16 Lakhs TPA Sand (Minor Mineral) By M/S Yodha Mines and Minerals Located at Village – Jainpur, Tehsil and District- Sonapat Haryana J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016**

	7	All the provisions made and restrictions imposed Covered in the Minor Mineral Rule, shall be complied with, particularly regarding Environment Management Practices and its fund management and Payment of compensation to the land owners.	Noted & being Complied.
<b>Sustainable Mining Practices</b>	8	District level Survey Report should be prepared and area suitable for mining and area prohibited for mining be identified.	Noted.
	9	The depth of mining In riverbed shall not exceed one meter or water level whichever is less, provided that where the Joint Inspection Committee certifies about excessive deposit or over accumulation of mineral in certain reaches requiring channelization, it can go up to 3 meters on defined reaches of the River.	Noted. Mining is being done as per approved mining plan.
	10	No River sand mining be allowed in rainy season.	Noted & Agreed.
	11	To submit annual replenishment report certified by an Authorized agency. In case the replenishment is lower than the approved rate of production, then the mining activity / production levels shall be decreased / stopped accordingly till the replenishment is completed.	Agreed. We have appointed reputed agency to conduct the replenishment study in the due course of time.
	12	Ultimate working depth shall be up to 3 m from Riverbed level and not less than one meter from the water level of the River channel whichever is reached earlier. In hilly terrain this depth be preferably restricted to one meter.	Agreed. Mining is being done as per approved mining plan.
	13	In River flood plain mining a buffer of 3 meter to be left from the River bank for mining.	Noted. Mining is being done as per approved Mining plan.
	14	In mining from agricultural field a buffer of 3 meter to be left from the adjacent field.	Noted. Mining is being done as per approved mining plan.
	15	Mining shall be done in layers of 1 meter depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers.	Noted. Mining is being done as per approved Mining plan.
	16	To maintain safety and stability of Riverbanks i.e. 3 meter or 10% of the width of the River whichever is more will be left intact as no mining zone.	Noted. Mining is being done as per approved mining plan.
	17	No stream should be diverted for the Purpose of sand mining. No natural water course and/ or water resources are obstructed due to mining operations.	Noted and Agreed. No natural water course and/ or water resources get obstructed due to mining operations. Mining is being done as per approved mining plan.
	18	No blasting shall be resorted to in River mining and without permission at any other place.	Noted and Agreed.

**M/s Yodha Mines and Minerals, Project: Environmental Clearance for Proposed Mining of Sand (Minor Mineral) with proposed production capacity of 16 Lakhs TPA Sand (Minor Mineral) By M/S Yodha Mines and Minerals Located at Village – Jainpur, Tehsil and District- Sonapat Haryana J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016**

	19	Depending upon the location, thickness of sand, Deposition, agricultural land/Riverbed, the method of mining may be manual, semi-mechanized or mechanized; however, manual method of mining shall be preferred over any other method.	Noted and Agreed. Mining is being done as per approved mining plan.
<b>Identification and Preparation of Mining Site</b>	20	Mining should be done only in area / stretch identified in the District Level Survey Report suitable for mining and so certified by the Sub-Divisional Level Committee after site visit.	Agreed and Complied. Mining is being done as per approved Mining plan.
	21	Mining should begin only after pucca pillar marking the Boundary of lease area is erected at the cost of the lease holder after certification by the mining official and its geo coordinates are made available to the District Level Committee.	Noted.
	22	The top soil in case of surface land mining shall be stored temporarily in an earmarked site and concurrently used for land reclamation.	As a project is a river bed mining project. No top soil is present in the lease area.
<b>Monitoring the Mining of Mineral and its Transportation</b>	23	The EC holder shall keep a correct account of quantity of mineral mined out, dispatched from the mine, mode of transport, registration number of vehicle, person in-charge of vehicle and mine plan. This should be produced before officers of Central Government and State for inspection.	Agreed & being complied. All the records have been maintained properly.
	24	For each mining lease site the access should be controlled in a way that vehicles carrying mineral from that area are tracked and accounted for.	Noted & Agreed.
	25	The State / District Level Environment Committee should use technology like Bar Coding, Information and Communications Technology (ICT), Web based and ICT enabled services, mobile SMS App etc. to account for weight of mineral being taken out of the lease area and the number of trucks moving out with the mineral.	Noted & Agreed.
	26	There should be regular monitoring of the mining activities in the State to ensure effective compliance of stipulated EC conditions and of the provisions under the Minor Mineral Concessions Rules framed by the State Government.	Six monthly monitoring of the mining activity has been done and compliance report are being submitted to the concern Authorities.
<b>Noise Management</b>	27	Noise arising out of mining and processing shall be abated and controlled at source to keep within permissible limit.	Noted. Lab report attached as <b>Annexure-3</b> .
	28	Restricted working hours. Sand mining operation has to be carried out between 6 am to 7 pm.	Noted & Agreed.

**M/s Yodha Mines and Minerals, Project: Environmental Clearance for Proposed Mining of Sand (Minor Mineral) with proposed production capacity of 16 Lakhs TPA Sand (Minor Mineral) By M/S Yodha Mines and Minerals Located at Village – Jainpur, Tehsil and District- Sonipat Haryana J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016**

<b>Air Pollution And Dust Management</b>	29	The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly.	Noted and agreed.  Regular water sprinkling is being carrying out to prevent generation of dust due to movement of dumpers and other vehicles at haul road.
	30	Air Pollution due to dust, exhaust emission or fumes during mining and processing phase should be controlled and kept in permissible limits specified under environmental laws.	Regular water sprinkling is being carrying out to prevent generation of dust due to movement of dumpers and other vehicles at haul road. Green belt has also been developed to prevent the same. Ambient air quality monitoring has been carried out at mine area regularly and results are within the permissible limits. Lab reports are attached as <b>Annexure- 3</b> .
	31	The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Wheel washing facility should be installed and used.	Noted and agreed.  All the vehicles movement for minerals transportation is under control.  Vehicles covered with tarpaulin during transport and all the vehicles has PUC certificate. Wheel washing facility is available in the lease area.
<b>Management of Visual Impact</b>	32	The mining operations are to be done in a systematic manner so that the operations shall create a major visual impact on the site.	Noted and agreed.
<b>Bio-Diversity Protection</b>	33	Restoration of flora affected by mining should be done immediately. Twice the number of trees destroyed by mining to be planted preferably of indigenous species. Each EC holder should plant and maintain for lease period at least 5 trees per hectare in area near lease.	Agreed & Complied.
	34	No mining lease shall be granted in the forest area without forest clearance in accordance with the provisions of the Forest Conservation Act, 1980 and the rules made the reunder.	No forest area involves in this mine lease area and NOC from forest department has been issued for the same.
	35	Protection of turtle and bird habitats shall be ensured.	Noted.
	36	No felling of tree near quarry is allowed. For mining lease within 10km of the National Park / Sanctuary or in Eco Sensitive Zone of the Protected Area, recommendation of Standing Committee of National Board of Wild Life (NBWL) have to be obtained as per the Hon'ble Supreme Court order in I.A. No. 460 of 2004.	The project area is not falling within 10km of the National Park / Sanctuary or in Eco Sensitive Zone of the Protected Area, hence NO NBWL recommendation is required.

**M/s Yodha Mines and Minerals, Project: Environmental Clearance for Proposed Mining of Sand (Minor Mineral) with proposed production capacity of 16 Lakhs TPA Sand (Minor Mineral) By M/S Yodha Mines and Minerals Located at Village – Jainpur, Tehsil and District- Sonapat Haryana J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016**

	37	Spring sources should not be affected due to mining activities. Necessary Protection measures are to be incorporated.	Noted and agreed.
<b>Management of Instability and Erosion</b>	38	Removal, stacking and utilization of top soil in mining are should be ensured. Where top soil cannot be used concurrently, it shall be stored separately for future use keeping in view that the bacterial organism should not die and should be spread nearby area.	As a project is a river bed mining project. No top soil is present in the lease area.
	39	The EC should stipulate conditions for adequate steps to check soil erosion and control debris flow etc. by constructing engineering structures	Noted and agreed.
	40	Use of oversize material to control erosion and movement of sediments	Agreed.
	41	No overhangs shall be allowed to be formed due to mining and mining shall not be allowed in area where subsidence of rocks is likely to occur due to steep angle of slope.	Noted and Agreed. The project Proponent is carrying out mining activity as per the approved mining plan.
	42	No extraction of stone / boulder / sand in landslide prone areas.	Noted.
	43	Controlled clearance of riparian vegetation to be undertaken.	Noted and Agreed.
<b>Waste Management</b>	44	Site clearance and tidiness is very much needed to have less visual impact of mining.	Noted and Agreed.
	45	Dumping of waste shall be done in earmarked places as approved in Mining Plan.	Agreed. The project Proponent is carrying out mining activity as per the approved mining plan.
	46	Rubbish burial shall not be done in the Rivers.	Noted & Agreed.
<b>Pollution Prevention</b>	47	The EC holder shall take all possible precautions for the protection of environment and control of pollution.	Agreed & being complied.
	48	Effluent discharge should be kept to the minimum and it should meet the standards prescribed.	Noted
<b>Protection of Infrastructure</b>	49	Mining shall not be undertaken in a mining lease located in 200-500 meter of bridge, 200 meter upstream and downstream of water supply/irrigation scheme, 100 meters from the edge of National Highway and railway line, 50 meters from a reservoir, canal or building, 25 meter from the edge of State Highway and 10 meters from the edge of other roads except on special exemption by the Sub-Divisional level Joint Inspection Committee.	Noted and Agreed. The project Proponent is carrying out mining activity as per the approved mining plan.

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**M/s Yodha Mines and Minerals, Project: Environmental Clearance for Proposed Mining of Sand (Minor Mineral) with proposed production capacity of 16 Lakhs TPA Sand (Minor Mineral) By M/S Yodha Mines and Minerals Located at Village – Jainpur, Tehsil and District- Sonipat Haryana J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016**

	50	For carrying out mining in proximity to any bridge or embankment, appropriate safety zone (not less than 200 meters) should be worked out on case to case basis, taking into account the structural parameters, location aspects and flow rate, and no mining should be carried out in the safety zone so worked out.	Noted & Agreed.
	51	Mining activities shall not be done for mine lease where mining can cause danger to site of flood protection works, places of cultural, religious, historical, and archaeological importance.	Noted and Agreed.  The project Proponent is carrying out mining activity as per the approved mining plan.
<b>Enhance ment of Road Safety</b>	52	Vehicles used for transportation of sand are to be permitted only with fitness and PUC Certificates.	Noted and Agreed.  All the vehicle used for transportation of mineral are PUC Certified.
	53	Junction at take-off point of approach road with main road be properly developed with proper width and geometry required for safe movement of traffic by concession holder at his own cost.	Noted.
	54	Project Proponent shall ensure that the road may not be damaged due to transportation of the mineral; and transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and density.	Noted and Agreed.  Project Proponent ensures that the road will not be damaged due to transportation of the mineral.
	55	No stacking allowed on road side along National Highways.	Noted and Agreed.
<b>Closure and Reclamat ion of Mined Out Area</b>	56	The Project Proponent shall undertake phased restoration, reclamation and rehabilitation of land affected by mining and completes this work before abandonment of mine.	Noted and Agreed.
	57	Restoration, reclamation and rehabilitation in cluster should be done systematically and jointly by each EC holder in that cluster. This should be appropriately reflected as EC condition in each EC in cluster.	Noted and Agreed.
	58	Site specific plan with eco-restoration should be in place and implemented.	Noted and Agreed.
<b>Health and Safety</b>	59	Health and safety of workers should be taken care of.	Noted and Agreed.  <ul style="list-style-type: none"> <li>➤ Sanitary facilities are being provided.</li> <li>➤ All necessary &amp; statutory first aid and medical facilities are being provided to the workers.</li> <li>➤ Preventive measures have been taken for occupational health &amp; safety of workers.</li> </ul>

**M/s Yodha Mines and Minerals, Project: Environmental Clearance for Proposed Mining of Sand (Minor Mineral) with proposed production capacity of 16 Lakhs TPA Sand (Minor Mineral) By M/S Yodha Mines and Minerals Located at Village – Jainpur, Tehsil and District- Sonapat Haryana J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016**

	60	Transport of mineral will not be done through villages / habitations.	Noted & Agreed.
	61	The Project Proponent shall make arrangement for drinking water, first aid facility (along with species specific anti- venom provisioning) in case of emergency for the workers.	All the facilities for mine workers have been provided on site.
	62	Project Proponent shall implement the Disaster Management Plan. If the mine lease area is located in Seismic Zone-IV. Project Proponent shall appoint a Committee to have a check over any disaster to warn workers well before for the safety of the workers. Emergency helpline number will be displayed at all levels.	Noted and agreed.  We have taken all the precautionary measures at site for any disaster situation and Emergency helpline number are also displayed at all levels.
	63	Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and records maintained; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smokers, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken, accordingly. Recommendations of National Institute for Labour for ensuring good occupational environment for mine workers would also be adopted.	Noted and agreed  <ul style="list-style-type: none"> <li>• Occupational health and safety of all the workers is being kept on priority.</li> <li>• Dust mask is being provided to be workers working in the dust prone areas as additional personal protective equipment's.</li> <li>• Workers are informed and kept aware about occupational health hazards due to such activities and preventive measures.</li> <li>• Workers health related problem is being properly addressed.</li> </ul>
<b>Monitoring The Impact of Mining</b>	64	The Project Proponent shall report monitoring data on replenishment, traffic management, levels of production, River Bank erosion and maintenance of Road etc.	Noted & Agreed.
<b>Mineral Conservation</b>	65	Use of alternate material such as M-sand in place of natural River sand shall be encouraged in order to reduce stress on natural eco-system.	Noted and agreed

**B-2: Procedure for monitoring of sand mining**

S. No.	Specific Conditions	Reply
i.	Project Proponent must ensure that the security features of Transport Permission viz. (a) Printed on Indian Bank Association (IBA) approved Magnetic Ink Character Recognition Code (MICR) paper; (c) Unique Barcode; (d) Unique Quick Response Code (QR); (e) Fugitive Ink Background; (f) Invisible Ink Mark; (g) Void Pantograph; (h) Watermark.	Noted & Agreed.
ii.	Project Proponent must ensure that the CCTV camera, Personal Computer (PC), Internet Connection, Power Back up, access control of mine lease site; and arrangement for weight or approximation of weight of mined out mineral on basis of volume of the trailer of vehicle used at mine lease site are available.	Agreed & Complied.
iii.	Project Proponent must ensure the Scanning of Transport	Noted and being Complied.

**M/s Yodha Mines and Minerals, Project: Environmental Clearance for Proposed Mining of Sand (Minor Mineral) with proposed production capacity of 16 Lakhs TPA Sand (Minor Mineral) By M/S Yodha Mines and Minerals Located at Village – Jainpur, Tehsil and District- Sonapat Haryana J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016**

	Permit or Receipt and Uploading on Server.	
iv.	The State Mines and Geology Department should print the Transport Permits 1 Receipt with security features enumerated at Paragraph (i) above and issue them to the mine lease holder through the District Collector. Once these Transport Permits or Receipts are issued, they would be uploaded on the server against that mine lease area. Each receipt should be preferably with pre-fixed quantity, so the total quantity gets determined for the receipts issued. When the Transport Permit or Receipt barcode gets scanned and invoice is generated, that particular barcode gets used and its validity time is recorded on the server. So all the details of transporting of mined out material can be captured on the server and the Transport Permit or Receipt cannot be reused.	Noted & Agreed.
v.	The staff deployed for the purpose of checking of vehicles carrying mined mineral should be in a position to check the validity of Transport Permit or Receipt by scanning them using website, Android Application and SMS.	Noted.
vi.	In case the Vehicle breakdown, the validity of Transport Permit or Receipt shall be extended by sending SMS by driver in specific format to report breakdown of vehicle. The server will register this information and register the breakdown. The State can also establish a call centre, which can register breakdowns of such vehicles and extend the validity period. The subsequent restart of the vehicle also should be similarly reported to the server /call centre.	Noted and Agreed.
Vii	The route of vehicle from source to destination shall be tracked through the system using check points, Radio-frequency identification (RFID) Tags, and Global Positioning System (GPS) tracking.	Noted and Agreed.
viii.	The system shall enable the Authorities to develop periodic report on different parameters like daily lifting report, vehicle log/ history, lifting against allocation, and total lifting. The system can be used to generate auto mails/SMS. This will enable the District Collector/Magistrate to get all the relevant details and will enable the authority to block the scanning facility of any site found to be indulged in irregularity. Whenever any authority intercepts any vehicle transporting illegal sand, it shall get registered on the server and shall be mandatory for the officer to fill in the report on action taken. Every intercepted vehicle should be tracked.	Noted.

**Part C. General Conditions**

S. No.	Specific Conditions	Reply
i.	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment, Forest & Climate Change.	No change in mining technology and scope of working will be made without prior approval of the Ministry of Environment, Forest & Climate Change.
ii.	No change in the calendar plan including excavation, quantum of mineral and waste should be made	Noted. There is no change in calendar plan of any activity.
iii.	The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and ground water for the project.	Noted & Agreed.
iv.	There shall be planning, developing and implementing facility of rainwater harvesting	Noted & Agreed.

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	measures on long term basis in consultation with Regional Director, Central Groundwater Board and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board.	
v.	Regular monitoring of ground water table to be carried out at the upstream and depth of water available in the dug well is to be measured. Monitoring to be done by establishing a network of existing wells and constructing new piezometers.	Ground water is being monitored regularly as per condition. The lease holder has engaged NABL accredited Laboratory to conduct Water Monitoring. In this reporting period, monitoring is being conducted in the Month <b>Post monsoon (November)</b> and <b>Winter (January)</b> . The monitoring reports of water quality are enclosed as <b>Annexure-2</b> . Data of ground water level is given in table – <b>3.11, chapter-3</b>
vi.	Monitoring of Ambient Air Quality to be carried out based on the Notification, as amended from time to time by the Central Pollution Control Board. Water sprinkling should be increased at places loading and unloading points & transfer point to reduce fugitive emissions.	Agreed. Lab report of ambient air quality is attached as <b>Annexure-3</b> .
vii.	The upliftment of scheduled caste/scheduled tribe population, specific programmes have been taken in to consideration especially with respect to education, health care, livelihood generation, infrastructure development & promotion of sports & culture for SC/ST population and that these will be intensified in future.	Noted and Agreed.
viii.	The top soil, if any, shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time. The maximum height of the dumps shall not exceed 8m and width 20 m and overall slope of the dumps shall be maintained to 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled and afforested. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest & Climate Change and its Regional Office located at Chandigarh on six monthly bases.	As a project is a river bed mining project. No top soil is present in the lease area. Previous Compliance receiving is attached as <b>Annexure-4</b> .
ix.	Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly. The drains, settling tanks and check dams of appropriate size, gradient and	Noted & Agreed.

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	length shall be constructed both around the mine pit and over burden dumps to prevent run off of water and flow of sediments directly into the river and other water bodies and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals.	
x.	Plantation shall be raised in a 20m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, around water body, along the roads etc. by planting the native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.	Noted & Agreed. Plantation is being done with the consultation of DFO/ Agriculture Department as per Approved mine plan.
xi.	Dimension of the retaining wall at the toe of over burden dumps and OB benches within the mine to check run-off and siltation shall be based on the rain fall data.	Noted & Agreed.
xii.	Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM <sub>10</sub> and PM <sub>2.5</sub> such as haul road, loading and unloading point and transfer points. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	Noted & Agreed. Regular water sprinkling is being carried out in critical areas prone to air pollution. All the parameters values are within the limits and Lab reports are attached as <b>Annexure-3</b> .
xiii.	Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintained. Regular monitoring of water quality upstream and downstream of water bodies shall be carried out and record of monitoring data should be maintained and submitted to the Ministry of Environment, Forest & Climate Change, its Regional Office, Chandigarh, Central Groundwater Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.	Noted and Agreed. Monitoring reports are attached as <b>Annexure-3</b> .
xiv.	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring shall be carried out four times in a year - pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to Ministry of Environment, Forest & Climate Change and its Regional Office, Chandigarh, Central Ground Water Authority and Regional Director, Central Ground	Regular monitoring of ground water level and quality is being carried out in and around the mine lease. Lab reports are attached as <b>Annexure-3</b> . Ground water Level monitoring data in and round the mine area for <b>Post monsoon (November)</b> and <b>Winter (January)</b> are given in <b>Table 3.11</b> of the <b>chapter-3</b> .

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	Water Board.	
xv.	The critical parameters such as PM <sub>10</sub> (size less than 10 micro meter), PM <sub>2.5</sub> (size less than 2.5 micro meter), NO <sub>x</sub> in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The circular No. J-20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest & Climate Change, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.	Agreed & being complied. Lab reports enclosed as <b>Annexure-3</b> .
xvi.	Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> & NO <sub>x</sub> monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board. Data on ambient air quality should be regularly submitted to the Ministry including its Regional office located at Chandigarh and the State Pollution Control Board / Central Pollution Control Board once in six months.	Agreed, Lab reports enclosed as <b>Annexure- 3</b> .
xvii.	Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.	Noted & Agreed. Water sprinkling is being done regularly at places of loading and unloading points & point to reduce fugitive emissions.
xviii.	Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.	Noted.
xix.	Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 <sup>th</sup> May, 1993 and 31 <sup>st</sup> December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.	Not Applicable.
xx.	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.	Agreed.  ➤ Dust masks have been provided to be workers working in the dust prone areas additional personal protective equipment. ➤ Water sprinkling is being also carrying regularly to prevent fugitive emission.
xxi.	Occupational health surveillance program of the workers should be undertaken periodically to observe	Noted & Agreed. Occupational health and safety of all the workers is being

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	any contractions due to exposure to dust and take corrective measures, if needed.	kept on priority. ➤ Dust mask is being provided to the workers working in the dust prone areas as additional personal protective equipment's. ➤ Workers are informed and kept aware about occupational health hazards due to such activities and preventive measures.
xxii.	A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.	Agreed & Complied.
xxiii.	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office located at Chandigarh.	Noted. The funds earmarked for environmental protection measures are kept in separate account and will not be diverted for other purpose. Year wise Plan in this regard has been submitted to the ministry.
xxiv.	The project authorities should inform to the Regional Office located at Chandigarh regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	Noted and Agreed. Project Proponent regularly submit six monthly compliance reports with monitoring reports to the northern regional office of MoEF, the respective office of HSPCB and SEIAA Haryana.
xxv.	The Regional Office of this Ministry located at Chandigarh shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.	Noted and Agreed. We regularly submit six monthly compliance reports with monitoring reports to the northern regional office of MoEF, the respective office of HSPCB and SEIAA Haryana.
xxvi.	The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment, Forest & Climate Change, its Regional Office, Chandigarh, Central Pollution Control Board and State Pollution Control Board.	Noted & being complied.
xxvii.	A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.	Noted & Agreed
xxviii.	State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/ Tehsildar's Office for 30 days.	Noted.
xxix.	The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment, Forest & Climate Change at <a href="http://envfor.nic.in">http://envfor.nic.in</a> and a copy of the same should be forwarded to the Regional Office of this Ministry located Chandigarh.	Noted.

# 3

## DETAILS OF ENVIRONMENTAL MONITORING

### 3.1 Monitoring Portfolio:

This report is prepared for the period October 2021 to March 2022 as per EC conditions. The samples were analysed at NABL approved Environmental laboratory. Following environmental components has been monitored and analysed.

1. Ambient Air Quality
2. Noise Quality
3. Water Quality
4. Soil Quality

### 3.2 AMBIENT AIR QUALITY MONITORING

#### 3.2.1 Ambient Air Quality Monitoring Stations

Ambient air quality monitoring has been carried out at 6 locations as mentioned below. This will enable to have a comparative analytical understanding about air quality and the changes in the air environment in the study area with respect to the condition prevailing. 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 Code	Location Name
1.	AAQ-1	Near Mine Site
2.	AAQ-2	100 mtr from mine site
3.	AAQ-3	Village- Jainpur
4.	AAQ-4	Village- Sultanpur Hatana
5.	AAQ-5	Loading Area
6.	AAQ-6	Haul Road

#### **AAQ-1: Near Mine Site**

The sampler was placed near office was free from any obstructions. Surroundings of the sampling site represent Industrial environmental setting.

#### **AAQ-2: 100 mtr from mine site**

The sampler was placed 100 mtr. from mine site and was free from any obstructions. Surroundings of the sampling site represent Industrial environmental setting.

#### **AAQ-3: Village-Jaipur**

The sampler was placed at Village-Jainpur, was free from any obstructions. Surroundings of the sampling site represent residential environmental setting.

**AAQ-4: Village-Sultanpur Hatana**

The sampler was placed at Village-Sultanpur Hatana, was free from any obstructions. Surroundings of the sampling site represent residential environmental setting.

**AAQ-5: Loading Area**

The sampler was placed at loading area to estimate the pollution level due to loading activity.

**AAQ-6: Haul Road**

The sampler was placed haul road, for estimate the pollution level due to movement of vehicles.

**3.2.2 Ambient Air Quality Monitoring Methodology**

Monitoring was conducted in respect of the following parameters:

- Particulate Matter 2.5 (PM 2.5)
- Particulate Matter 10 (PM 10)
- Sulphur Dioxide (SO<sub>2</sub>)
- Nitrogen Dioxide (NO<sub>2</sub>)

The duration of sampling of PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>2</sub> were 24 hourly continuous sampling per day. The monitoring was conducted for one day at each location. This is to allow a comparison with the National Ambient Air Quality Standards.

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<sub>2.5</sub> i.e. <2.5 microns), and Respirable Dust Sampler was used for sampling Respirable fraction (<10 microns), gaseous pollutants like SO<sub>2</sub>, and NO<sub>x</sub>.

**Table 3.2 Techniques used for Ambient Air Quality Monitoring**

S. No.	Parameter	Technique	Technical Protocol
1	Particulate Matter 2.5 (PM <sub>2.5</sub> )	Fine Particulate Sampler, Gravimetric Method	#SOP No. VEL/SOP/01, Section No. SP 63
2	Particulate Matter 10 (PM <sub>10</sub> )	Respirable Dust Sampler, with cyclone separator, Gravimetric Method	IS-5182 (Part-23)
3	Sulphur dioxide (SO <sub>2</sub> )	Modified West and Gaeke	IS-5182 (Part- II)
4	Nitrogen Dioxide (NO <sub>2</sub> )	Jacob &Hochheiser	IS-5182 (Part-VI)

#SOP-As per Laboratory Standard Operating Procedure.

### 3.2.3 Ambient Air Quality Monitoring Results

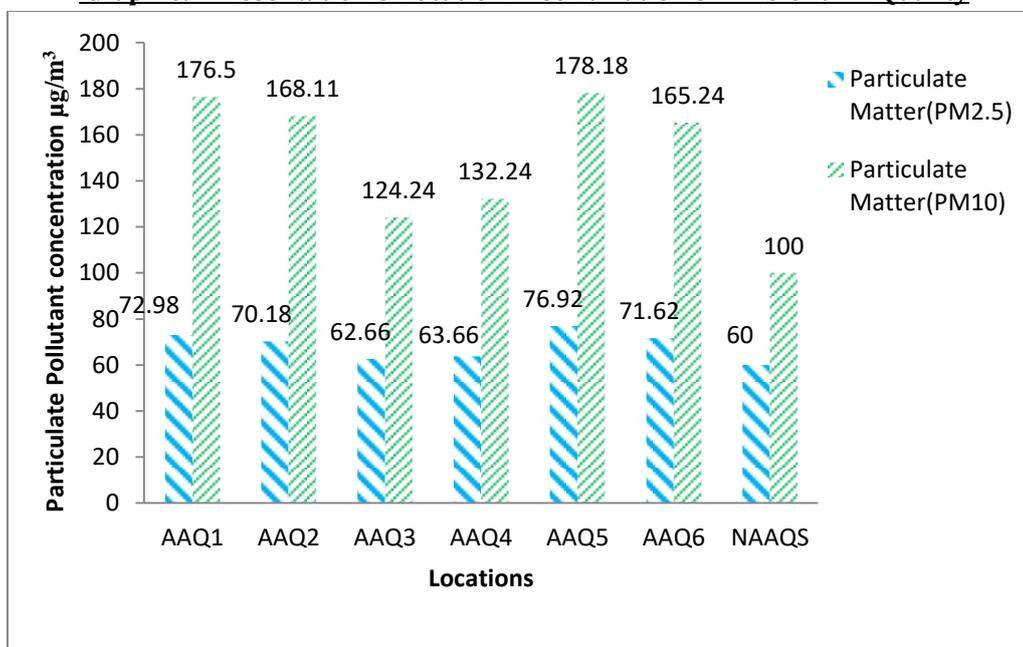
The detailed on-site monitoring results of PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub> are presented as **Table 3.3**

**Table 3.3 Ambient Air Quality Monitoring Results**  
(All results are expressed in µg/m<sup>3</sup>)

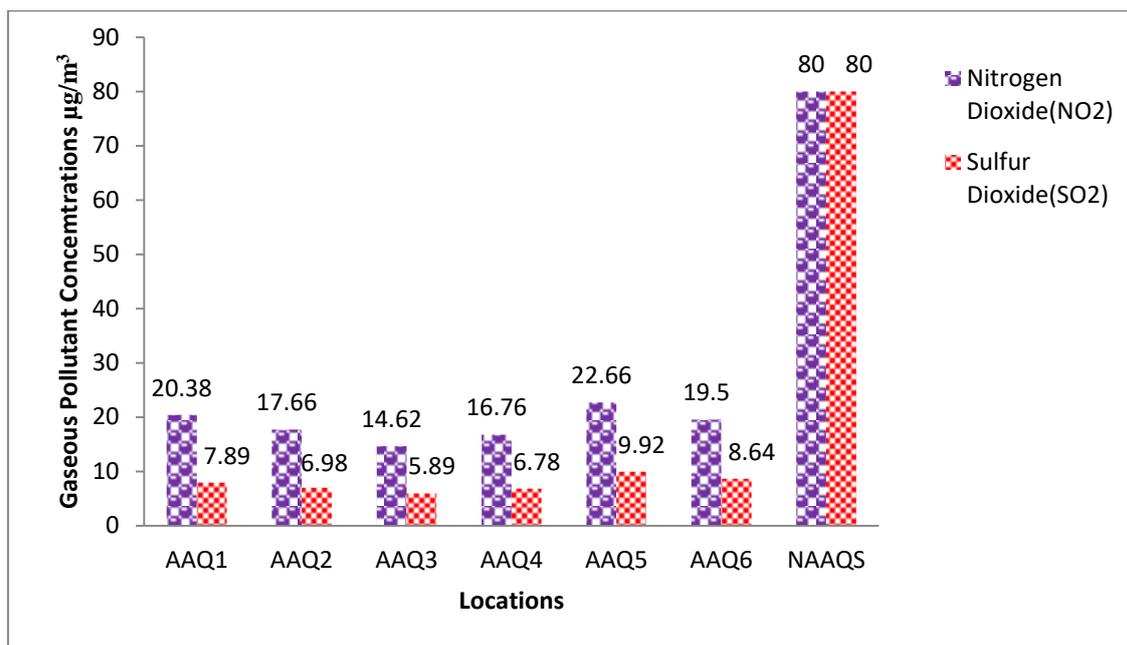
S. No.	Parameter	Test Result						NAAQS*
		AAQ1	AAQ2	AAQ3	AAQ4	AAQ5	AAQ6	
1.	Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>	72.98	70.18	62.66	63.66	76.92	71.62	60
2.	Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	176.50	168.11	124.24	132.24	178.18	165.24	100
3.	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	20.38	17.66	14.62	16.76	22.66	19.50	80
4.	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	7.89	06.98	5.89	6.78	9.92	8.64	80

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

**Graphical Presentation of location wise variation of Ambient Air Quality**



**Fig. 3.1 Graphical representation of particulate pollutant**



**Fig.3.2 Graphical representation of gaseous pollutant**

#### 3.2.4 Discussion on Ambient Air Quality in the Study Area

The level of PM<sub>2.5</sub> and PM<sub>10</sub> at all locations was found to be in range of 62.66 to 76.92 µg/m<sup>3</sup> and 124.24 to 178.18 µg/m<sup>3</sup> respectively. The level of NO<sub>2</sub> and SO<sub>2</sub> at all locations was found to be in range of 14.62 to 22.66 µg/m<sup>3</sup> and 5.89 to 9.92 µg/m<sup>3</sup> respectively. All the results were found to be well within the prescribed NAAQS limits.

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### 3.3 AMBIENT NOISE MONITORING

#### 3.3.1 Ambient Noise Monitoring Locations

The main objective of noise monitoring in the study area is to assess the present ambient noise levels due to various mining allied 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 6 locations near the mining area as given in **Table 3.4**.

**Table 3.4 Details of Ambient Noise Monitoring Stations**

S. No.	Location Code	Location Name
1	N1	Near Mine Site
2	N2	100 mtr from mine site
3	N3	Village- Jainpur
4	N4	Village- Sultanpur Hatana
5	N5	Loading Area
6	N6	Haul Road

#### 3.3.2 Methodology of Noise Monitoring

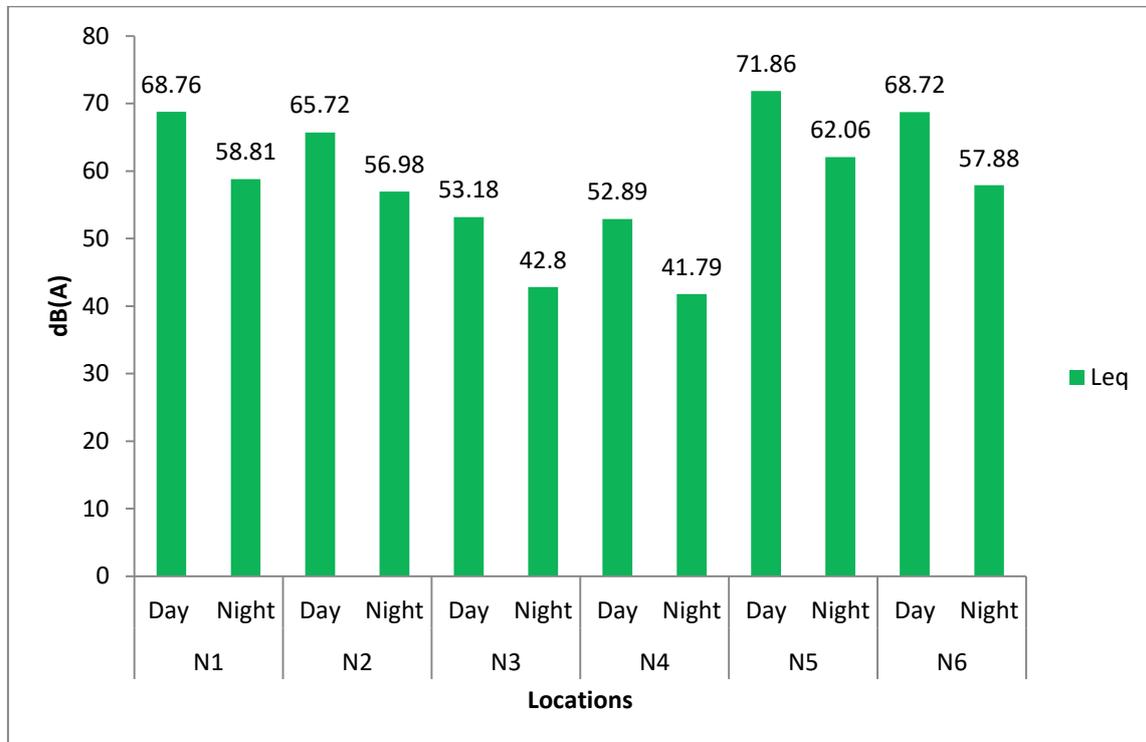
Noise levels were measured using sound level meter. Noise level monitoring was carried out continuously for 24-hours. The noise levels were monitored on working days only. During each hour Leq were directly computed by the instrument based on the sound pressure levels. Monitoring was carried out at 'A' response and fast mode.

#### 3.3.3 Ambient Noise Monitoring Results

The location wise ambient noise monitoring results is summarized in **Table 3.5**. Graphical presentation of location wise variation of ambient noise level is shown in **Figure 3.2**

**Table 3.5 Location Wise variation of ambient Noise Level**

Parameter	Location Code											
	N1		N2		N3		N4		N5		N6	
	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
Lmax	74.8	63.5	72.9	60.7	60.5	56.7	61.8	56.9	78.2	67.9	74.9	64.6
Lmin	47.9	38.9	44.8	38.4	43.9	36.0	43.6	35.2	49.6	40.7	46.1	37.4
Leq	68.76	58.81	65.72	56.98	53.18	42.80	52.89	41.79	71.86	62.06	68.72	57.88
CPCB Limits in dB(A) Leq	75.0	70.0	75.0	70.0	55.0	45.0	55.0	45.0	75.0	70.0	75.0	70.0



**Figure 3.3 Graphical Presentation of Ambient Noise Level**

### 3.3.4 Discussion on Ambient Noise Levels in the Study Area

The Equivalent noise levels for day and night was found to be in range of 52.89 to 71.86 dB (A) and 41.79 to 62.06 dB (A) respectively. The noise levels were well within the permissible limits of NAAQS w.r.t Noise.

### 3.4 Water Quality Monitoring

#### 3.4.1 Ground Water Quality Monitoring Locations

Keeping in view the importance of water as important source to the local population, sample of ground water was collected from the project site for the assessment of impacts of the project on the water quality.

Water sample was collected from the project site. The samples were analyzed for various parameters to compare with the standards for water as per IS: 10500- 2012. The details of water sampling locations are given in **Table 3.6**.

**Table-3.6 Details of Ground Water Quality Monitoring Station**

S. No.	Location Code	Location Name/ Description
1.	GW1	Near Project Site (in November 2021 and January 2022)
2.	GW2	Village- Jainpur (in November 2021 and January 2022)

#### 3.4.2 Methodology of Ground Water Quality Monitoring

Sampling of ground water was carried out on **November 2021 and January 2022**. Samples were collected as grab sample and sampling forms are filled in as per the sampling plan. The preservative sample 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. Samples collected for metal content were acidified to <2 pH with 1 ml HNO<sub>3</sub>. Samples for bacteriological analysis were collected in sterilized glass bottles.

Soon after the completion of sampling, chain of custody sheets for the samples are filled in and then they were transported by road 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 American Public Health Association (APHA) and CPCB. The analytical techniques and the test methods adopted for testing of water are given in **Table 3.7, 3.8, 3.9 & 3.10**.

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### 3.4.3 Ground Water Quality Monitoring Results

The detailed ground water quality monitoring results are presented in Table 3.7, 3.8 and 3.9, 3.10.

**Table 3.7 Ground Water Quality Monitoring Results (Post Monsoon November 2021) Near Mine site**

S. No.	Parameter	Unit	Result	Limits of IS:10500 -2012	
				Requirement (Acceptable Limits)	Permissible limit in the Absence of Alternate Source
1.	pH (at 25 °C)	--	7.58	6.5 to 8.5	No Relaxation
2.	Colour	Hazen	*BDL (**DL 1.0 Hazen)	5	15
3.	Turbidity	NTU	*BDL (**DL 0. 1 NTU)	1	5
4.	Odour	--	Agreeable	Agreeable	Agreeable
5.	Taste	--	Agreeable	Agreeable	Agreeable
6.	Total Hardness as CaCO <sub>3</sub>	mg/l	242.00	200	600
7.	Calcium as Ca	mg/l	52.60	75	200
8.	Total Alkalinity as CaCO <sub>3</sub>	mg/l	204.71	200	600
9.	Chloride as Cl	mg/l	72.94	250	1000
10.	Cyanide as CN	mg/l	*BDL(**DL 0.02 mg/l)	0.05	No Relaxation
11.	Magnesium as Mg	mg/l	26.92	30	100
12.	Total Dissolved Solids	mg/l	386.00	500	2000
13.	Sulphate as SO <sub>4</sub>	mg/l	34.91	200	400
14.	Fluoride as F	mg/l	0.39	1.0	1.5
15.	Nitrate as NO <sub>3</sub>	mg/l	15.40	45	No Relaxation
16.	Iron as Fe	mg/l	0.18	0.3	No relaxation
17.	Aluminium as Al	mg/l	*BDL(**DL 0.002 mg/l)	0.03	0.2
18.	Boron	mg/l	*BDL(**DL 0.01 mg/l)	0.5	1
19.	Chromium as Cr	mg/l	*BDL(**DL 0.002 mg/l)	0.05	No Relaxation
20.	Phenolic Compounds	mg/l	*BDL(**DL 0.0004 mg/l)	0.001	0.002
21.	Mineral Oil	mg/l	*BDL(**DL 0.05mg/l)	0.5	No Relaxation
22.	Anionic Detergents as MBAS	mg/l	*BDL(**DL 0.05 mg/l)	0.2	1.0
23.	Zinc as Zn	mg/l	1.22	5	15
24.	Copper as Cu	mg/l	0.12	0.05	1.5
25.	Manganese as Mn	mg/l	*BDL(**DL 0.01 mg/l)	0.1	0.3
26.	Cadmium as Cd	mg/l	*BDL(**DL 0.002 mg/l)	0.003	No Relaxation
27.	Lead as Pb	mg/l	*BDL(**DL 0.002 mg/l)	0.01	No Relaxation
28.	Selenium as Se	mg/l	*BDL(**DL 0.001 mg/l)	0.01	No Relaxation
29.	Arsenic as As	mg/l	*BDL(**DL 0.002 mg/l)	0.01	0.05
30.	Mercury as Hg	mg/l	*BDL (**DL 0.0005 mg/l)	0.001	No Relaxation
31.	Total Coliform	MPN/100ml	Absent	Shall not be Detectable in 100ml Sample	
32.	E. Coli	MPN/100ml	Absent	Shall not be Detectable in 100ml Sample	

Note:- \*BDL-Below Detection Limit, \*DL- Detection Limit  
#These parameter are not covered in our NABL scope.

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**Table 3.8 Ground Water Quality Monitoring Results (Post Monsoon November 2021) Village- Jainpur**

S. No.	Parameter	Unit	Result	Limits of IS:10500 -2012	
				Requirement (Acceptable Limits)	Permissible limit in the Absence of Alternate Source
1.	pH (at 25 °C)	--	7.50	6.5 to 8.5	No Relaxation
2.	Colour	Hazen	*BDL (**DL 1.0 Hazen)	5	15
3.	Turbidity	NTU	*BDL (**DL 1.0 NTU)	1	5
4.	Odour	--	Agreeable	Agreeable	Agreeable
5.	Taste	--	Agreeable	Agreeable	Agreeable
6.	Total Hardness as CaCO <sub>3</sub>	mg/l	231.70	200	600
7.	Calcium as Ca	mg/l	42.58	75	200
8.	Total Alkalinity as CaCO <sub>3</sub>	mg/l	160.21	200	600
9.	Chloride as Cl	mg/l	53.41	250	1000
10.	Cyanide as CN	mg/l	*BDL(**DL 0.02 mg/l)	0.05	No Relaxation
11.	Magnesium as Mg	mg/l	30.49	30	100
12.	Total Dissolved Solids	mg/l	320.00	500	2000
13.	Sulphate as SO <sub>4</sub>	mg/l	31.72	200	400
14.	Fluoride as F	mg/l	0.34	1.0	1.5
15.	Nitrate as NO <sub>3</sub>	mg/l	10.64	45	No Relaxation
16.	Iron as Fe	mg/l	0.10	0.3	No relaxation
17.	Aluminium as Al	mg/l	*BDL(**DL 0.002 mg/l)	0.03	0.2
18.	Boron	mg/l	*BDL(**DL 0.01 mg/l)	0.5	1
19.	Chromium as Cr	mg/l	*BDL(**DL 0.002 mg/l)	0.05	No Relaxation
20.	Phenolic Compounds	mg/l	*BDL(**DL 0.0004 mg/l)	0.001	0.002
21.	Mineral Oil	mg/l	*BDL(**DL 0.05mg/l)	0.5	No Relaxation
22.	Anionic Detergents as MBAS	mg/l	*BDL(**DL 0.05 mg/l)	0.2	1.0
23.	Zinc as Zn	mg/l	1.16	5	15
24.	Copper as Cu	mg/l	0.08	0.05	1.5
25.	Manganese as Mn	mg/l	*BDL(**DL 0.01 mg/l)	0.1	0.3
26.	Cadmium as Cd	mg/l	*BDL(**DL 0.002 mg/l)	0.003	No Relaxation
27.	Lead as Pb	mg/l	*BDL(**DL 0.002 mg/l)	0.01	No Relaxation
28.	Selenium as Se	mg/l	*BDL(**DL 0.001 mg/l)	0.01	No Relaxation
29.	Arsenic as As	mg/l	*BDL(**DL 0.002 mg/l)	0.01	0.05
30.	Mercury as Hg	mg/l	*BDL (**DL 0.0005 mg/l)	0.001	No Relaxation
31.	Total Coliform	MPN/100ml	Absent	Shall not be Detectable in 100ml Sample	
32.	E. Coli	MPN/100ml	Absent	Shall not be Detectable in 100ml Sample	

Note:- \*BDL-Below Detection Limit, \*DL- Detection Limit  
 #These parameter are not covered in our NABL scope.

**M/s Yodha Mines and Minerals, Project: Environmental Clearance for Proposed Mining of Sand (Minor Mineral) with proposed production capacity of 16 Lakhs TPA Sand (Minor Mineral) By M/S Yodha Mines and Minerals Located at Village – Jainpur, Tehsil and District- Sonapat Haryana J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016**

**Table 3.9 Ground Water Quality Monitoring Results January (Winter 2021) Near Mine site**

S. No.	Parameter	Unit	Result	Limits of IS:10500 -2012	
				Requirement (Acceptable Limits)	Permissible limit in the Absence of Alternate Source
1.	pH (at 25 °C)	--	7.65	6.5 to 8.5	No Relaxation
2.	Colour	Hazen	*BDL (**DL 1.0 Hazen)	5	15
3.	Turbidity	NTU	*BDL (**DL 1.0 NTU)	1	5
4.	Odour	--	Agreeable	Agreeable	Agreeable
5.	Taste	--	Agreeable	Agreeable	Agreeable
6.	Total Hardness as CaCO <sub>3</sub>	mg/l	272.50	200	600
7.	Calcium as Ca	mg/l	54.81	75	200
8.	Total Alkalinity as CaCO <sub>3</sub>	mg/l	227.06	200	600
9.	Chloride as Cl	mg/l	78.10	250	1000
10.	Cyanide as CN	mg/l	*BDL (**DL 0.02 mg/l)	0.05	No Relaxation
11.	Magnesium as Mg	mg/l	32.99	30	100
12.	Total Dissolved Solids	mg/l	428.00	500	2000
13.	Sulphate as SO <sub>4</sub>	mg/l	30.19	200	400
14.	Fluoride as F	mg/l	0.49	1.0	1.5
15.	Nitrate as NO <sub>3</sub>	mg/l	15.40	45	No Relaxation
16.	Iron as Fe	mg/l	0.18	0.3	No relaxation
17.	Aluminium as Al	mg/l	*BDL (**DL 0.002 mg/l)	0.03	0.2
18.	Boron	mg/l	*BDL (**DL 0.01 mg/l)	0.5	1
19.	Chromium as Cr	mg/l	*BDL (**DL 0.002 mg/l)	0.05	No Relaxation
20.	Phenolic Compounds	mg/l	*BDL (**DL 0.0004 mg/l)	0.001	0.002
21.	Mineral Oil	mg/l	*BDL (**DL 0.05 mg/l)	0.5	No Relaxation
22.	Anionic Detergents as MBAS	mg/l	*BDL (**DL 0.05 mg/l)	0.2	1.0
23.	Zinc as Zn	mg/l	1.20	5	15
24.	Copper as Cu	mg/l	0.08	0.05	1.5
25.	Manganese as Mn	mg/l	*BDL (**DL 0.01 mg/l)	0.1	0.3
26.	Cadmium as Cd	mg/l	*BDL (**DL 0.002 mg/l)	0.003	No Relaxation
27.	Lead as Pb	mg/l	*BDL (**DL 0.002 mg/l)	0.01	No Relaxation
28.	Selenium as Se	mg/l	*BDL (**DL 0.001 mg/l)	0.01	No Relaxation
29.	Arsenic as As	mg/l	*BDL (**DL 0.002 mg/l)	0.01	0.05
30.	Mercury as Hg	mg/l	*BDL (**DL 0.0005 mg/l)	0.001	No Relaxation
31.	Total Coliform	MPN/100ml	Absent	Shall not be Detectable in 100ml Sample	
32.	E. Coli	MPN/100ml	Absent	Shall not be Detectable in 100ml Sample	

Note:- \*BDL-Below Detection Limit, \*DL- Detection Limit  
#These parameter are not covered in our NABL scope.

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**M/s Yodha Mines and Minerals, Project: Environmental Clearance for Proposed Mining of Sand (Minor Mineral) with proposed production capacity of 16 Lakhs TPA Sand (Minor Mineral) By M/S Yodha Mines and Minerals Located at Village – Jainpur, Tehsil and District- Sonipat Haryana J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016**

**Table 3.10 Ground Water Quality Monitoring Results January (Winter 2021) Village- Jainpur**

S. No.	Parameter	Unit	Result	Limits of IS:10500 -2012	
				Requirement (Acceptable Limits)	Permissible limit in the Absence of Alternate Source
1.	pH (at 25 °C)	--	7.48	6.5 to 8.5	No Relaxation
2.	Colour	Hazen	*BDL (**DL 1.0 Hazen)	5	15
3.	Turbidity	NTU	*BDL (**DL 1.0 NTU)	1	5
4.	Odour	--	Agreeable	Agreeable	Agreeable
5.	Taste	--	Agreeable	Agreeable	Agreeable
6.	Total Hardness as CaCO <sub>3</sub>	mg/l	216.40	200	600
7.	Calcium as Ca	mg/l	52.70	75	200
8.	Total Alkalinity as CaCO <sub>3</sub>	mg/l	178.30	200	600
9.	Chloride as Cl	mg/l	60.85	250	1000
10.	Cyanide as CN	mg/l	*BDL (**DL 0.02 mg/l)	0.05	No Relaxation
11.	Magnesium as Mg	mg/l	20.63	30	100
12.	Total Dissolved Solids	mg/l	362.00	500	2000
13.	Sulphate as SO <sub>4</sub>	mg/l	34.51	200	400
14.	Fluoride as F	mg/l	0.38	1.0	1.5
15.	Nitrate as NO <sub>3</sub>	mg/l	10.43	45	No Relaxation
16.	Iron as Fe	mg/l	0.09	0.3	No relaxation
17.	Aluminium as Al	mg/l	*BDL (**DL 0.002 mg/l)	0.03	0.2
18.	Boron	mg/l	*BDL (**DL 0.01 mg/l)	0.5	1
19.	Chromium as Cr	mg/l	*BDL (**DL 0.002 mg/l)	0.05	No Relaxation
20.	Phenolic Compounds	mg/l	*BDL (**DL 0.0004 mg/l)	0.001	0.002
21.	Mineral Oil	mg/l	*BDL (**DL 0.05 mg/l)	0.5	No Relaxation
22.	Anionic Detergents as MBAS	mg/l	*BDL (**DL 0.05 mg/l)	0.2	1.0
23.	Zinc as Zn	mg/l	1.09	5	15
24.	Copper as Cu	mg/l	0.11	0.05	1.5
25.	Manganese as Mn	mg/l	*BDL (**DL 0.01 mg/l)	0.1	0.3
26.	Cadmium as Cd	mg/l	*BDL (**DL 0.002 mg/l)	0.003	No Relaxation
27.	Lead as Pb	mg/l	*BDL (**DL 0.002 mg/l)	0.01	No Relaxation
28.	Selenium as Se	mg/l	*BDL (**DL 0.001 mg/l)	0.01	No Relaxation
29.	Arsenic as As	mg/l	*BDL (**DL 0.002 mg/l)	0.01	0.05
30.	Mercury as Hg	mg/l	*BDL (**DL 0.0005 mg/l)	0.001	No Relaxation
31.	Total Coliform	MPN/100ml	Absent	Shall not be Detectable in 100ml Sample	
32.	E. Coli	MPN/100ml	Absent	Shall not be Detectable in 100ml Sample	

Note:- \*BDL-Below Detection Limit, \*DL- Detection Limit  
 #These parameter are not covered in our NABL scope.

#### 3.4.4 Discussion on Ground Water Quality in the Study Area

The Ground water quality of all location were observed to be slightly alkaline in nature with total alkalinity reaching up to 160.21 and 227.06 mg/L respectively in water samples against the prescribed limit of 200 mg/L (600 Permissible limit). Total Hardness in the water is 216.40 mg/L and 272.50 mg/L against prescribed limit of 200 mg/L but it is within the permissible limit of 600mg/L. However, remaining parameters are within the CPCB prescribed limits.

#### 3.4.5 Ground Water Level in and around the mine site

Ground water level was monitored villages and locations located approx. 5 Km in and around mine area. Water level of the water sources was measured manually in post monsoon (month of November) and during Winter (month of January). The data is given below in table 3.11. This shows significant recharging in monsoon season and no impact of mining activities undertaken in the area on ground water.

**Table 3.11 Ground Water level in and around the mine site**

Sample Number	Village Name	Location	Pre monsoon (May, 2021)	Monsoon (August, 2021)	Post monsoon (November 2021)	Winter (Jan 2022)
W1	Mine site	29° 03'56"N 77°09'36.00"E	16.5	15.30	14.67	14.82
W2	Rajpur Khampur	29° 03'32.94"N 77°11'20.03"E	15.10	14.25	13.90	14.02
W3	Jainpur	29°04'03.79"N 77°07'38.52"E	14.89	13.82	13.50	13.62
W4	Luhari	29°04'27.52"N 77°11'27.70"E	11.60	10.45	10.12	10.25
W5	Khera Hatana	29° 02'36.14"N 77°11'07.54"E	12.05	10.12	9.85	9.92

### 3.5 SOIL MONITORING

#### 3.5.1 Soil Monitoring Locations

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

To assess 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. Single sample of soil was collected from the project site for studying soil characteristics, the location of which is listed in Table 3.12

**Table 3.12 Details of Soil Quality Monitoring Location**

S. No.	Location Code	Location Name/ Description
1.	S1	Near Mine Site
2.	S2	Village- Kheribora

#### 3.5.2 Methodology of Soil Monitoring

The sampling has been done in line with IS: 2720 & Methods of Soil Analysis, Part-1, 2nd edition, 1986 of American Society for Agronomy and Soil Science Society of America. The homogenized samples were analyzed for physical and chemical characteristics (physical, chemical and heavy metal concentrations). The soil samples were collected in the month of September 2021.

The samples have been analyzed as per the established scientific methods for physico-chemical parameters. The heavy metals have been analyzed by using Atomic Absorption Spectrophotometer.

#### 3.5.3 Soil Monitoring Results

Single sample of soil is collected from the project 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 3.13, 3.14**.

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**Table 3.13 Physico-Chemical Characteristics of Soil in the Study Area (Near Project Site)**

S. No.	Parameter	Test-Method	Unit	Result
1.	pH (at 25 °C)	IS : 2720 (P-26) by pH Meter	--	7.72
2.	Conductivity	IS:14767 by Conductivity meter	mS/cm	0.281
3.	Soil Texture	IS : 2720 (P-22, RA2003)	--	Sandy Loam
4.	Color	SOP , SP-78,Issue No.-01& Issue Date-14/02/2013	--	Brown
5.	Water holding capacity	SOP , SP-81,Issue No.-01& Issue Date-14/02/2013	%	32.75
6.	Bulk density	SOP , SP-80,Issue No.-01& Issue Date-14/02/2013	gm/cc	1.49
7.	Chloride as Cl	SOP , SP-85,Issue No.-01& Issue Date-14/02/2013	mg/100g	36.18
8.	Calcium as Ca	SOP , SP-82,Issue No.-01& Issue Date-14/02/2013	mg/100g	18.60
9.	Sodium as Na	SOP , SP-84,Issue No.-01& Issue Date-14/02/2013	mg/kg	44.29
10.	Potassium as K	SOP , SP-84,Issue No.-01& Issue Date-14/02/2013	kg/hect.	126.41
11.	Organic Matter	IS:2720 (P-22) Titrimetric Method	%	0.34
12.	Magnesium as Mg	SOP , SP-83,Issue No.-01& Issue Date-14/02/2013	mg/100g	8.76
13.	Available Nitrogen as N	IS:14684 Distillation Method	kg./hect.	147.05
14.	Available Phosphorus	SOP , SP-86,Issue No.-01& Issue Date-14/02/2013	kg./hect.	22.68
15.	Zinc (as Zn)	USEPA 3050B	mg/kg	2.10
16.	Manganese (as Mn )	USEPA 3050B	mg/kg	4.53
17.	Lead (as Pb)	USEPA 3050B	mg/kg	0.48
18.	Cadmium (as Cd )	USEPA 3050B	mg/kg	0.52
19.	Chromium (as Cr)	USEPA 3050B	mg/kg	0.24
20.	Copper (as Cu )	USEPA 3050B	mg/kg	0.93

SOP -Laboratory standard operating procedure

**M/s Yodha Mines and Minerals, Project: Environmental Clearance for Proposed Mining of Sand (Minor Mineral) with proposed production capacity of 16 Lakhs TPA Sand (Minor Mineral) By M/S Yodha Mines and Minerals Located at Village – Jainpur, Tehsil and District- Sonapat Haryana J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016**

**Table 3.14 Physico-Chemical Characteristics of Soil in the Study Area (Village- Jainpur)**

S. No.	Parameter	Test-Method	Unit	Result
1.	pH (at 25 °C)	IS : 2720 (P-26) by pH Meter	--	7.69
2.	Conductivity	IS:14767 by Conductivity meter	mS/cm	0.275
3.	Soil Texture	IS : 2720 (P-22, RA2003)	--	Sandy Loam
4.	Color	SOP , SP-78, Issue No.-01 & Issue Date-14/02/2013	--	Brownish
5.	Water holding capacity	SOP , SP-81, Issue No.-01 & Issue Date-14/02/2013	%	34.66
6.	Bulk density	SOP , SP-80, Issue No.-01 & Issue Date-14/02/2013	gm/cc	1.43
7.	Chloride as Cl	SOP , SP-85, Issue No.-01 & Issue Date-14/02/2013	mg/100g	37.60
8.	Calcium as Ca	SOP , SP-82, Issue No.-01 & Issue Date-14/02/2013	mg/100g	16.92
9.	Sodium as Na	SOP , SP-84, Issue No.-01 & Issue Date-14/02/2013	mg/kg	42.83
10.	Potassium as K	SOP , SP-84, Issue No.-01 & Issue Date-14/02/2013	kg/hect.	127.16
11.	Organic Matter	IS:2720 (P-22) Titrimetric Method	%	0.42
12.	Magnesium as Mg	SOP , SP-83, Issue No.-01 & Issue Date-14/02/2013	mg/100g	7.96
13.	Available Nitrogen as N	IS:14684 Distillation Method	kg./hect.	158.26
14.	Available Phosphorus	SOP , SP-86, Issue No.-01 & Issue Date-14/02/2013	kg./hect.	26.11
15.	Zinc (as Zn)	USEPA 3050B	mg/kg	4.29
16.	Manganese (as Mn )	USEPA 3050B	mg/kg	8.96
17.	Lead (as Pb)	USEPA 3050B	mg/kg	0.28
18.	Cadmium (as Cd )	USEPA 3050B	mg/kg	0.64
19.	Chromium (as Cr)	USEPA 3050B	mg/kg	0.19
20.	Copper (as Cu )	USEPA 3050B	mg/kg	0.98

SOP -Laboratory standard operating procedure.

### 3.5.4 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 Mining activities.

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**M/s Yodha Mines and Minerals, Project: Environmental Clearance for Proposed Mining of Sand (Minor Mineral) with proposed production capacity of 16 Lakhs TPA Sand (Minor Mineral) By M/S Yodha Mines and Minerals Located at Village – Jainpur, Tehsil and District- Sonapat Haryana J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016**

### 3.6 SITE PHOTOGRAPHS



**Ambient Air Monitoring**



**Noise Monitoring**

M/s Yodha Mines and Minerals, Project: Environmental Clearance for Proposed Mining of Sand (Minor Mineral) with proposed production capacity of 16 Lakhs TPA Sand (Minor Mineral) By M/S Yodha Mines and Minerals Located at Village – Jainpur, Tehsil and District- Sonapat Haryana J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016



**Ambient Air Monitoring**



**Soil Sampling**

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M/s Yodha Mines and Minerals, Project: Environmental Clearance for Proposed Mining of Sand (Minor Mineral) with proposed production capacity of 16 Lakhs TPA Sand (Minor Mineral) By M/S Yodha Mines and Minerals Located at Village – Jainpur, Tehsil and District- Sonapat Haryana J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016



**Loading Point**



**Worker with PPE Kit**

M/s Yodha Mines and Minerals, Project: Environmental Clearance for Proposed Mining of Sand (Minor Mineral) with proposed production capacity of 16 Lakhs TPA Sand (Minor Mineral) By M/S Yodha Mines and Minerals Located at Village – Jainpur, Tehsil and District- Sonapat Haryana J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016



Labours Colony



First Aid Kit

M/s Yodha Mines and Minerals, Project: Environmental Clearance for Proposed Mining of Sand (Minor Mineral) with proposed production capacity of 16 Lakhs TPA Sand (Minor Mineral) By M/S Yodha Mines and Minerals Located at Village – Jainpur, Tehsil and District- Sonapat Haryana J-11015/112/2015-IA.II (M) dated 28<sup>th</sup> January 2016



**First Aid Room**



**Water Sprinkling**



Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051 (Haryana)  
Branch Off: Plot No. 24 & 25, Narayan Vihar, Block-B, Jaipur - 302035 (Rajasthan)  
ISO 9001 | ISO 14001 | ISO 45001

## Test Report

<b>Sample Number:</b>	VEL/YMAM/A/01	<b>Report No.:</b>	VEL/A/2203/31/001
<b>Issued To:</b>	M/s Yodha Mines and Minerals 19-P, Sector-8 Jind Haryana	<b>Format No.:</b>	7.8 F-01
<b>Name &amp; address of Project :</b>	M/s Yodha Mines and Minerals "Jainpur-2 Sand Unit" Vill.-Jainpur, Tehsil and District-Sonapat, Haryana	<b>Party Reference No.:</b>	NIL
		<b>Reporting Date:</b>	05/04/2022
		<b>Period of Analysis:</b>	31/03/2022 to 05/04/2022
		<b>Receipt Date:</b>	31/03/2022
<b>Sample Description :</b>	Ambient Air Quality Monitoring		

### General Information:-

<b>Sample collected by</b>	: Vardan EnviroLab Representative
<b>Sampling Location</b>	: Near Mine Site
<b>Instrument Used</b>	: RDS & FPS sampler with all Accessories
<b>Instrument Code</b>	: VEL/RDS/10 & VEL/FPS/10
<b>Instrument Calibration Status</b>	: Calibrated
<b>Meteorological condition during monitoring</b>	: Clear Sky
<b>Date of Monitoring</b>	: 29/03/2022 to 30/03/2022
<b>Time of Monitoring</b>	: 09:00 AM to 09:00 AM
<b>Ambient Temperature (°C)</b>	: Min. 23°C, Max. 40°C
<b>Surrounding Activity</b>	: Vehicular & Mining related Activities
<b>Scope of Monitoring</b>	: Regulatory Requirement
<b>Sampling &amp; Analysis Protocol</b>	: IS:5182 & CPCB Guideline
<b>Parameter Required</b>	: PM <sub>2.5</sub> , PM <sub>10</sub> , NO <sub>2</sub> & SO <sub>2</sub>

### TEST RESULTS

S. No.	Parameter	Protocol	Result	Unit	NAAQS* Limit
1.	Particulate Matter (PM <sub>2.5</sub> )	#SOP No. VEL/SOP/01, Section No. SP 63	72.98	µg/m <sup>3</sup>	60
2.	Particulate Matter (PM <sub>10</sub> )	IS: 5182 (P-23) Gravimetric Method	176.50	µg/m <sup>3</sup>	100
3.	Nitrogen Dioxide (NO <sub>2</sub> )	IS: 5182 (P-6) Jacob & Hochheiser	20.38	µg/m <sup>3</sup>	80
4.	Sulphur Dioxide (SO <sub>2</sub> )	IS: 5182 (P-2) Modified West and Gaeke	7.89	µg/m <sup>3</sup>	80

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

# SOP- Laboratory Standard Operating Procedure



**NOTE:** a) The results listed refer only to the tested samples & applicable parameters  
b) Total liabilities of our lab will be restricted to the invoice amount only  
c) The sample will be destroyed after retention time unless otherwise specified  
d) This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law

Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051 (Haryana)  
Branch Off: Plot No. 24 & 25, Narayan Vihar, Block-B, Jaipur - 302035 (Rajasthan)  
ISO 9001 | ISO 14001 | ISO 45001

## Test Report

**Sample Number:** VEL/YMAM/A/02  
**Issued To:** M/s Yodha Mines and Minerals  
19-P, Sector-8 Jind Haryana  
**Name & address of Project :** M/s Yodha Mines and Minerals  
"Jainpur-2 Sand Unit" Vill.-Jainpur, Tehsil and  
District-Sonapat, Haryana.  
**Sample Description :** Ambient Air Quality Monitoring

**Report No.:** VEL/A/2203/31/002  
**Format No.:** 7.8 F-01  
**Party Reference No.:** NIL  
**Reporting Date:** 05/04/2022  
**Period of Analysis:** 31/03/2022 to 05/04/2022  
**Receipt Date:** 31/03/2022

### General Information:-

**Sample collected by** : Vardan EnviroLab Representative  
**Sampling Location** : 100 mtr from Mine Site  
**Instrument Used** : RDS & FPS sampler with all Accessories  
**Instrument Code** : VEL/RDS/11 & VEL/FPS/11  
**Instrument Calibration Status** : Calibrated  
**Meteorological condition during monitoring** : Clear Sky  
**Date of Monitoring** : 29/03/2022 to 30/03/2022  
**Time of Monitoring** : 09:10 AM to 09:10 AM  
**Ambient Temperature (°C)** : Min. 23°C, Max. 40°C  
**Surrounding Activity** : Vehicular & Mining related Activities  
**Scope of Monitoring** : Regulatory Requirement  
**Sampling & Analysis Protocol** : IS:5182 & CPCB Guideline  
**Parameter Required** : PM<sub>2.5</sub>, PM<sub>10</sub>, NO<sub>2</sub> & SO<sub>2</sub>

### TEST RESULTS

S. No.	Parameter	Protocol	Result	Unit	NAAQS* Limit
1.	Particulate Matter (PM <sub>2.5</sub> )	#SOP No. VEL/SOP/01, Section No. SP 63	70.18	µg/m <sup>3</sup>	60
2.	Particulate Matter (PM <sub>10</sub> )	IS: 5182 (P-23) Gravimetric Method	168.11	µg/m <sup>3</sup>	100
3.	Nitrogen Dioxide (NO <sub>2</sub> )	IS: 5182 (P-6) Jacob & Hochheiser	17.66	µg/m <sup>3</sup>	80
4.	Sulphur Dioxide (SO <sub>2</sub> )	IS: 5182 (P-2) Modified West and Gaeke	06.98	µg/m <sup>3</sup>	80

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

# SOP- Laboratory Standard Operating Procedure



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Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051 (Haryana)  
Branch Off: Plot No. 24 & 25, Narayan Vihar, Block-B, Jaipur - 302035 (Rajasthan)  
ISO 9001 | ISO 14001 | ISO 45001

## Test Report

**Sample Number:** VEL/YMAM/A/03  
**Issued To:** M/s Yodha Mines and Minerals  
19-P, Sector-8 Jind Haryana  
**Name & address of Project :** M/s Yodha Mines and Minerals  
"Jainpur-2 Sand Unit" Vill.-Jainpur, Tehsil and  
District-Sonapat, Haryana.  
**Sample Description :** Ambient Air Quality Monitoring

**Report No.:** VEL/A/2203/31/003  
**Format No.:** 7.8 F-01  
**Party Reference No.:** NIL  
**Reporting Date:** 05/04/2022  
**Period of Analysis:** 31/03/2022 to 05/04/2022  
**Receipt Date:** 31/03/2022

### General Information:-

**Sample collected by** : Vardan EnviroLab Representative  
**Sampling Location** : Vill- Jainpur  
**Instrument Used** : RDS & FPS sampler with all Accessories  
**Instrument Code** : VEL/RDS/12 & VEL/FPS/12  
**Instrument Calibration Status** : Calibrated  
**Meteorological condition during monitoring** : Clear Sky  
**Date of Monitoring** : 29/03/2022 to 30/03/2022  
**Time of Monitoring** : 09:20 AM to 09:20 AM  
**Ambient Temperature (°C)** : Min. 23°C, Max. 40°C  
**Surrounding Activity** : Vehicular & Mining related Activities  
**Scope of Monitoring** : Regulatory Requirement  
**Sampling & Analysis Protocol** : IS:5182 & CPCB Guideline  
**Parameter Required** : PM<sub>2.5</sub>, PM<sub>10</sub>, NO<sub>2</sub> & SO<sub>2</sub>

### TEST RESULTS

S. No.	Parameter	Protocol	Result	Unit	NAAQS* Limit
1.	Particulate Matter (PM <sub>2.5</sub> )	#SOP No. VEL/SOP/01, Section No. SP 63	62.66	µg/m <sup>3</sup>	60
2.	Particulate Matter (PM <sub>10</sub> )	IS: 5182 (P-23) Gravimetric Method	124.24	µg/m <sup>3</sup>	100
3.	Nitrogen Dioxide (NO <sub>2</sub> )	IS: 5182 (P-6) Jacob & Hochheiser	14.62	µg/m <sup>3</sup>	80
4.	Sulphur Dioxide (SO <sub>2</sub> )	IS: 5182 (P-2) Modified West and Gaeke	5.89	µg/m <sup>3</sup>	80

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

# SOP- Laboratory Standard Operating Procedure



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Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051 (Haryana)  
Branch Off: Plot No. 24 & 25, Narayan Vihar, Block-B, Jaipur - 302035 (Rajasthan)  
ISO 9001 | ISO 14001 | ISO 45001

## Test Report

**Sample Number:** VEL/YMAM/A/04  
**Issued To:** M/s Yodha Mines and Minerals  
19-P, Sector-8 Jind Haryana  
**Name & address of Project :** M/s Yodha Mines and Minerals  
"Jainpur-2 Sand Unit" Vill.-Jainpur, Tehsil and  
District-Sonapat, Haryana.  
**Sample Description :** Ambient Air Quality Monitoring

**Report No.:** VEL/A/2203/31/004  
**Format No.:** 7.8 F-01  
**Party Reference No.:** NIL  
**Reporting Date:** 05/04/2022  
**Period of Analysis:** 31/03/2022 to 05/04/2022  
**Receipt Date:** 31/03/2022

### General Information:-

**Sample collected by** : Vardan EnviroLab Representative  
**Sampling Location** : Sultanpur Hatana  
**Instrument Used** : RDS & FPS sampler with all Accessories  
**Instrument Code** : VEL/RDS/11 & VEL/FPS/11  
**Instrument Calibration Status** : Calibrated  
**Meteorological condition during monitoring** : Clear Sky  
**Date of Monitoring** : 30/03/2022 to 31/03/2022  
**Time of Monitoring** : 09:30 AM to 09:30 AM  
**Ambient Temperature (°C)** : Min. 23°C, Max. 40°C  
**Surrounding Activity** : Vehicular & Mining related Activities  
**Scope of Monitoring** : Regulatory Requirement  
**Sampling & Analysis Protocol** : IS:5182 & CPCB Guideline  
**Parameter Required** : PM<sub>2.5</sub>, PM<sub>10</sub>, NO<sub>2</sub> & SO<sub>2</sub>

### TEST RESULTS

S. No.	Parameter	Protocol	Result	Unit	NAAQS* Limit
1.	Particulate Matter (PM <sub>2.5</sub> )	#SOP No. VEL/SOP/01, Section No. SP 63	63.66	µg/m <sup>3</sup>	60
2.	Particulate Matter (PM <sub>10</sub> )	IS: 5182 (P-23) Gravimetric Method	132.24	µg/m <sup>3</sup>	100
3.	Nitrogen Dioxide (NO <sub>2</sub> )	IS: 5182 (P-6) Jacob & Hochheiser	16.76	µg/m <sup>3</sup>	80
4.	Sulphur Dioxide (SO <sub>2</sub> )	IS: 5182 (P-2) Modified West and Gaeke	6.78	µg/m <sup>3</sup>	80

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 Branch Off: Plot No. 24 & 25, Narayan Vihar, Block-B, Jaipur - 302035 (Rajasthan)  
 ISO 9001 | ISO 14001 | ISO 45001

## Test Report

<b>Sample Number:</b>	VEL/YMAM/A/05	<b>Report No.:</b>	VEL/A/2203/31/005
<b>Issued To:</b>	M/s Yodha Mines and Minerals 19-P, Sector-8 Jind Haryana	<b>Format No.:</b>	7.8 F-01
<b>Name &amp; address of Project :</b>	M/s Yodha Mines and Minerals "Jainpur-2 Sand Unit" Vill.-Jainpur, Tehsil and District-Sonapat, Haryana.	<b>Party Reference No.:</b>	NIL
		<b>Reporting Date:</b>	05/04/2022
		<b>Period of Analysis:</b>	31/03/2022 to 05/04/2022
		<b>Receipt Date:</b>	31/03/2022
<b>Sample Description :</b>	Ambient Air Quality Monitoring		

### General Information:-

<b>Sample collected by</b>	: Vardan EnviroLab Representative
<b>Sampling Location</b>	: <b>Loading Point</b>
<b>Instrument Used</b>	: RDS & FPS sampler with all Accessories
<b>Instrument Code</b>	: VEL/RDS/12 & VEL/FPS/12
<b>Instrument Calibration Status</b>	: Calibrated
<b>Meteorological condition during monitoring</b>	: Clear Sky
<b>Date of Monitoring</b>	: <b>30/03/2022 to 31/03/2022</b>
<b>Time of Monitoring</b>	: 09:40 AM to 09:40 AM
<b>Ambient Temperature (°C)</b>	: Min. 23°C, Max. 40°C
<b>Surrounding Activity</b>	: Vehicular & Mining related Activities
<b>Scope of Monitoring</b>	: Regulatory Requirement
<b>Sampling &amp; Analysis Protocol</b>	: IS:5182 & CPCB Guideline
<b>Parameter Required</b>	: PM <sub>2.5</sub> , PM <sub>10</sub> , NO <sub>2</sub> & SO <sub>2</sub>

### TEST RESULTS

S. No.	Parameter	Protocol	Result	Unit	NAAQS* Limit
1.	Particulate Matter (PM <sub>2.5</sub> )	#SOP No. VEL/SOP/01, Section No. SP 63	<b>76.92</b>	µg/m <sup>3</sup>	60
2.	Particulate Matter (PM <sub>10</sub> )	IS: 5182 (P-23) Gravimetric Method	<b>178.18</b>	µg/m <sup>3</sup>	100
3.	Nitrogen Dioxide (NO <sub>2</sub> )	IS: 5182 (P-6) Jacob & Hochheiser	<b>22.66</b>	µg/m <sup>3</sup>	80
4.	Sulphur Dioxide (SO <sub>2</sub> )	IS: 5182 (P-2) Modified West and Gaeke	<b>9.92</b>	µg/m <sup>3</sup>	80

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

# SOP- Laboratory Standard Operating Procedure



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Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051 (Haryana)  
 Branch Off: Plot No. 24 & 25, Narayan Vihar, Block-B, Jaipur - 302035 (Rajasthan)  
 ISO 9001 | ISO 14001 | ISO 45001

## Test Report

<b>Sample Number:</b>	VEL/YMAM/A/06	<b>Report No.:</b>	VEL/A/2203/31/006
<b>Issued To:</b>	M/s Yodha Mines and Minerals 19-P, Sector-8 Jind Haryana	<b>Format No.:</b>	7.8 F-01
<b>Name &amp; address of Project :</b>	M/s Yodha Mines and Minerals "Jainpur-2 Sand Unit" Vill.-Jainpur, Tehsil and District-Sonapat, Haryana.	<b>Party Reference No.:</b>	NIL
		<b>Reporting Date:</b>	05/04/2022
		<b>Period of Analysis:</b>	31/03/2022 to 05/04/2022
		<b>Receipt Date:</b>	31/03/2022
<b>Sample Description :</b>	Ambient Air Quality Monitoring		

### General Information:-

Sample collected by	: Vardan EnviroLab Representative
Sampling Location	: <b>Haul Road</b>
Instrument Used	: RDS & FPS sampler with all Accessories
Instrument Code	: VEL/RDS/14 & VEL/FPS/14
Instrument Calibration Status	: Calibrated
Meteorological condition during monitoring	: Clear Sky
Date of Monitoring	: <b>30/03/2022 to 31/03/2022</b>
Time of Monitoring	: 09:50 AM to 09:50 AM
Ambient Temperature (°C)	: Min. 23°C, Max. 40°C
Surrounding Activity	: Vehicular & Mining related Activities
Scope of Monitoring	: Regulatory Requirement
Sampling & Analysis Protocol	: IS:5182 & CPCB Guideline
Parameter Required	: PM <sub>2.5</sub> , PM <sub>10</sub> , NO <sub>2</sub> & SO <sub>2</sub>

### TEST RESULTS

S. No.	Parameter	Protocol	Result	Unit	NAAQS* Limit
1.	Particulate Matter (PM <sub>2.5</sub> )	#SOP No. VEL/SOP/01, Section No. SP 63	<b>71.62</b>	µg/m <sup>3</sup>	60
2.	Particulate Matter (PM <sub>10</sub> )	IS: 5182 (P-23) Gravimetric Method	<b>165.24</b>	µg/m <sup>3</sup>	100
3.	Nitrogen Dioxide (NO <sub>2</sub> )	IS: 5182 (P-6) Jacob & Hochheiser	<b>19.50</b>	µg/m <sup>3</sup>	80
4.	Sulphur Dioxide (SO <sub>2</sub> )	IS: 5182 (P-2) Modified West and Gaeke	<b>8.64</b>	µg/m <sup>3</sup>	80

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

# SOP- Laboratory Standard Operating Procedure



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 Branch Off: Plot No. 24 & 25, Narayan Vihar, Block-B, Jaipur - 302035 (Rajasthan)  
 ISO 9001 | ISO 14001 | ISO 45001

## Test Report

<b>Sample Number:</b>	VEL/YMAM/AN/01	<b>Report No.:</b>	VEL/AN/2203/31/001
<b>Issued To:</b>	M/s Yodha Mines and Minerals 19-P, Sector-8 Jind Haryana	<b>Format No.:</b>	7.8 F-01
<b>Name &amp; Address of Project:</b>	M/s Yodha Mines and Minerals "Jainpur-2 Sand Unit" Vill.-Jainpur, Tehsil and District-Sonipat, Haryana.	<b>Party Reference No.:</b>	NIL
<b>Sample Description:</b>	AMBIENT NOISE LEVEL MONITORING	<b>Reporting Date:</b>	05/04/2022
		<b>Receipt Date:</b>	31/03/2022

### General Information:-

Sample collected by	: Vardan Enviro Lab Representative
Sampling Location	: Near Mine Site
Instrument Used	: Sound Level Meter
Instrument Calibration Status	: Calibrated
Meteorological condition during monitoring	: Clear Sky
Date of Monitoring	: 29/03/2022 to 30/03/2022
Time of Monitoring	: 06:00 AM to 06:00 AM
Surrounding Activity	: Vehicular & Mining related Activities
Scope of Monitoring	: Regulatory Requirement
Sampling & Analysis Protocol	: IS-9989
Sampling Duration	: 24 Hours
Parameter Required	: $L_{max}$ , $L_{min}$ , & $L_{eq}$

S. No.	Parameters	Protocol	Test Result dB (*A)		Unit
			Day Time (6:00 am to 10:00 pm)	Night Time (10:00 pm to 06:00 am)	
1.	$L_{max}$	IS-9989	74.8	63.5	dB(A)
2.	$L_{min}$	IS-9989	47.9	38.9	dB(A)
3.	$L_{eq}$	IS-9989	68.76	58.81	dB(A)
4.	As per #DGMS Limits in dB(*A) Leq (Mining Area)	-	75.0	70.0	dB(A)

Note- \* A "decibel" is a unit in which noise is measured. #DGMS-Directorate General of Mines & Safety



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 ISO 9001 | ISO 14001 | ISO 45001

## Test Report

<b>Sample Number:</b>	VEL/YMAM/AN/02	<b>Report No.:</b>	VEL/AN/2203/31/002
<b>Issued To:</b>	M/s Yodha Mines and Minerals 19-P, Sector-8 Jind Haryana	<b>Format No.:</b>	7.8 F-01
<b>Name &amp; Address of Project:</b>	M/s Yodha Mines and Minerals "Jainpur-2 Sand Unit" Vill.-Jainpur, Tehsil and District-Sonapat, Haryana.	<b>Party Reference No.:</b>	NIL
<b>Sample Description:</b>	AMBIENT NOISE LEVEL MONITORING	<b>Reporting Date:</b>	05/04/2022
		<b>Receipt Date:</b>	31/03/2022

### General Information:-

Sample collected by	: Vardan Enviro Lab Representative
Sampling Location	: 100 mtr from Mie Site
Instrument Used	: Sound Level Meter
Instrument Calibration Status	: Calibrated
Meteorological condition during monitoring	: Clear Sky
Date of Monitoring	: 29/03/2022 to 30/03/2022
Time of Monitoring	: 06:00 AM to 06:00 AM
Surrounding Activity	: Vehicular & Mining related Activities
Scope of Monitoring	: Regulatory Requirement
Sampling & Analysis Protocol	: IS-9989
Sampling Duration	: 24 Hours
Parameter Required	: $L_{max}$ , $L_{min}$ , & $L_{eq}$

S. No.	Parameters	Protocol	Test Result dB (*A)		Unit
			Day Time (6:00 am to 10:00 pm)	Night Time (10:00 pm to 06:00 am)	
1.	$L_{max}$	IS-9989	72.9	60.7	dB(A)
2.	$L_{min}$	IS-9989	44.8	38.4	dB(A)
3.	$L_{eq}$	IS-9989	65.72	56.98	dB(A)
4.	As per #DGMS Limits in dB(*A) Leq (Mining Area)	-	75.0	70.0	dB(A)

Note- \* A "decibel" is a unit in which noise is measured. #DGMS-Directorate General of Mines & Safety



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Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051 (Haryana)  
 Branch Off: Plot No. 24 & 25, Narayan Vihar, Block-B, Jaipur - 302035 (Rajasthan)  
 ISO 9001 | ISO 14001 | ISO 45001

## Test Report

<b>Sample Number:</b>	VEL/YMAM/AN/03	<b>Report No.:</b>	VEL/AN/2203/31/003
<b>Issued To:</b>	M/s Yodha Mines and Minerals 19-P, Sector-8 Jind Haryana	<b>Format No.:</b>	7.8 F-01
		<b>Party Reference No.:</b>	NIL
		<b>Reporting Date:</b>	05/04/2022
<b>Name &amp; Address of Project:</b>	M/s Yodha Mines and Minerals "Jainpur-2 Sand Unit" Vill.-Jainpur, Tehsil and District-Sonipat, Haryana.	<b>Receipt Date:</b>	31/03/2022
<b>Sample Description:</b>	AMBIENT NOISE LEVEL MONITORING		

### General Information:-

Sample collected by	: Vardan Enviro Lab Representative
Sampling Location	: Village- Jainpur
Instrument Used	: Sound Level Meter
Instrument Calibration Status	: Calibrated
Meteorological condition during monitoring	: Clear Sky
Date of Monitoring	: 29/03/2022 to 30/03/2022
Time of Monitoring	: 06:00 AM to 06:00 AM
Surrounding Activity	: Human & Vehicular Activities
Scope of Monitoring	: Regulatory Requirement
Sampling & Analysis Protocol	: IS-9989
Sampling Duration	: 24 Hours
Parameter Required	: $L_{max}$ , $L_{min}$ , & $L_{eq}$

S. No.	Parameters	Protocol	Test Result dB (*A)		Unit
			Day Time (6:00 am to 10:00 pm)	Night Time (10:00 pm to 06:00 am)	
1.	$L_{max}$	IS-9989	60.5	56.7	dB(A)
2.	$L_{min}$	IS-9989	43.9	36.0	dB(A)
3.	$L_{eq}$	IS-9989	53.18	42.80	dB(A)
4.	CPCB Limits in dB(*A) Leq ( Residential Area)	-	55.0	45.0	dB(A)

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



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Branch Off: Plot No. 24 & 25, Narayan Vihar, Block-B, Jaipur - 302035 (Rajasthan)  
ISO 9001 | ISO 14001 | ISO 45001

## Test Report

<b>Sample Number:</b>	VEL/YMAM/AN/04	<b>Report No.:</b>	VEL/AN/2203/31/004
<b>Issued To:</b>	M/s Yodha Mines and Minerals 19-P, Sector-8 Jind Haryana	<b>Format No.:</b>	7.8 F-01
		<b>Party Reference No.:</b>	NIL
		<b>Reporting Date:</b>	05/04/2022
<b>Name &amp; Address of Project:</b>	M/s Yodha Mines and Minerals "Jainpur-2 Sand Unit" Vill.-Jainpur, Tehsil and District-Sonipat, Haryana.	<b>Receipt Date:</b>	31/03/2022
<b>Sample Description:</b>	AMBIENT NOISE LEVEL MONITORING		

### General Information:-

Sample collected by	: Vardan Enviro Lab Representative
Sampling Location	: Sultanpur Hatana
Instrument Used	: Sound Level Meter
Instrument Calibration Status	: Calibrated
Meteorological condition during monitoring	: Clear Sky
Date of Monitoring	: 30/03/2022 to 31/03/2022
Time of Monitoring	: 06:00 AM to 06:00 AM
Surrounding Activity	: Human & Vehicular Activities
Scope of Monitoring	: Regulatory Requirement
Sampling & Analysis Protocol	: IS-9989
Sampling Duration	: 24 Hours
Parameter Required	: $L_{max}$ , $L_{min}$ , & $L_{eq}$

S. No.	Parameters	Protocol	Test Result dB (*A)		Unit
			Day Time (6:00 am to 10:00 pm)	Night Time (10:00 pm to 06:00 am)	
1.	$L_{max}$	IS-9989	61.8	56.9	dB(A)
2.	$L_{min}$	IS-9989	43.6	35.2	dB(A)
3.	$L_{eq}$	IS-9989	52.89	41.79	dB(A)
4.	CPCB Limits in dB(*A) Leq ( Residential Area)	-	55.0	45.0	dB(A)

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



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ISO 9001 | ISO 14001 | ISO 45001

## Test Report

<b>Sample Number:</b>	VEL/YMAM/AN/05	<b>Report No.:</b>	VEL/AN/2203/31/005
<b>Issued To:</b>	M/s Yodha Mines and Minerals 19-P, Sector-8 Jind Haryana	<b>Format No.:</b>	7.8 F-01
<b>Name &amp; Address of Project:</b>	M/s Yodha Mines and Minerals "Jainpur-2 Sand Unit" Vill.-Jainpur, Tehsil and District-Sonipat, Haryana.	<b>Party Reference No.:</b>	NIL
<b>Sample Description:</b>	AMBIENT NOISE LEVEL MONITORING	<b>Reporting Date:</b>	05/04/2022
		<b>Receipt Date:</b>	31/03/2022

### General Information:-

<b>Sample collected by</b>	: Vardan Enviro Lab Representative
<b>Sampling Location</b>	: <b>Loading Point</b>
<b>Instrument Used</b>	: Sound Level Meter
<b>Instrument Calibration Status</b>	: Calibrated
<b>Meteorological condition during monitoring</b>	: Clear Sky
<b>Date of Monitoring</b>	: <b>30/03/2022 to 31/03/2022</b>
<b>Time of Monitoring</b>	: 06:00 AM to 06:00AM
<b>Surrounding Activity</b>	: Vehicular & Mining related Activities
<b>Scope of Monitoring</b>	: Regulatory Requirement
<b>Sampling &amp; Analysis Protocol</b>	: IS-9989
<b>Sampling Duration</b>	: 24 Hours
<b>Parameter Required</b>	: $L_{max}$ , $L_{min}$ , & $L_{eq}$

S. No.	Parameters	Protocol	Test Result dB (*A)		Unit
			Day Time (6:00 am to 10:00 pm)	Night Time (10:00 pm to 06:00 am)	
1.	$L_{max}$	IS-9989	78.2	67.9	dB(A)
2.	$L_{min}$	IS-9989	49.6	40.7	dB(A)
3.	$L_{eq}$	IS-9989	71.86	62.06	dB(A)
4.	As per #DGMS Limits in dB(*A) Leq ( Mining Area)	-	75.0	70.0	dB(A)

Note- \* A "decibel" is a unit in which noise is measured. #DGMS-Directorate General of Mines & Safety



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Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051 (Haryana)  
Branch Off: Plot No. 24 & 25, Narayan Vihar, Block-B, Jaipur - 302035 (Rajasthan)  
ISO 9001 | ISO 14001 | ISO 45001

## Test Report

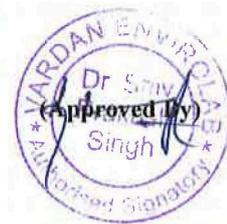
<b>Sample Number:</b>	VEL/YMAM/AN/06	<b>Report No.:</b>	VEL/AN/2203/31/006
<b>Issued To:</b>	M/s Yodha Mines and Minerals 19-P, Sector-8 Jind Haryana	<b>Format No.:</b>	7.8 F-01
		<b>Party Reference No.:</b>	NIL
		<b>Reporting Date:</b>	05/04/2022
<b>Name &amp; Address of Project:</b>	M/s Yodha Mines and Minerals "Jainpur-2 Sand Unit" Vill.-Jainpur, Tehsil and District-Sonipat, Haryana.	<b>Receipt Date:</b>	31/03/2022
<b>Sample Description:</b>	AMBIENT NOISE LEVEL MONITORING		

### General Information:-

Sample collected by	: Vardan Enviro Lab Representative
Sampling Location	: Haul Road
Instrument Used	: Sound Level Meter
Instrument Calibration Status	: Calibrated
Meteorological condition during monitoring	: Clear Sky
Date of Monitoring	: 30/03/2022 to 31/03/2022
Time of Monitoring	: 06:00 AM to 06:00AM
Surrounding Activity	: Vehicular & Mining related Activities
Scope of Monitoring	: Regulatory Requirement
Sampling & Analysis Protocol	: IS-9989
Sampling Duration	: 24 Hours
Parameter Required	: $L_{max}$ , $L_{min}$ , & $L_{eq}$

S. No.	Parameters	Protocol	Test Result dB (*A)		Unit
			Day Time (6:00 am to 10:00 pm)	Night Time (10:00 pm to 06:00 am)	
1.	$L_{max}$	IS-9989	74.9	64.6	dB(A)
2.	$L_{min}$	IS-9989	46.1	37.4	dB(A)
3.	$L_{eq}$	IS-9989	68.72	57.88	dB(A)
4.	As per #DGMS Limits in dB(*A) Leq ( Mining Area)	-	75.0	70.0	dB(A)

Note- \* A "decibel" is a unit in which noise is measured. #DGMS-Directorate General of Mines & Safety



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Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051 (Haryana)  
 Branch Off: Plot No. 24 & 25, Narayan Vihar, Block-B, Jaipur - 302035 (Rajasthan)  
**ISO 9001 | ISO 14001 | ISO 45001**

## Test Report

Sample Number:	<b>VEL/YMAM/W/01</b>	Report No.:	<b>VEL/W/2111/11/001</b>
Issue To :	<b>M/s Yodha Mines and Minerals 19-P, Sector-8 Jind Haryana</b>	Format No.:	<b>7.80 F-01</b>
Name & address of the Project:	<b>M/s Yodha Mines and Minerals "Jainpur-2 Sand Unit" Vill.-Jainpur, Tehsil and District-Sonipat, Haryana.</b>	Party Reference No.:	<b>NIL</b>
Sample Description:	<b>Ground Water Sample</b>	Reporting Date:	<b>16/11/2021</b>
Sampling Location :	<b>Near Mine Site</b>	Period of Analysis:	<b>11/11/2021 to 16/11/2021</b>
Sample Collected by:	<b>Vardan EnviroLab Representative</b>	Sampling Date:	<b>10/11/2021</b>
Sampling & Analysis Protocol:	<b>APHA, 23<sup>rd</sup> Edition 2017</b>	Receipt Date:	<b>11/11/2021</b>
		Preservation:	<b>Icebox</b>
		Sampling Quantity:	<b>2.0 Ltr. + 250ml</b>
		Parameter Required:	<b>As per work order</b>

S. No.	Parameter	Test-Method	Result	Unit	Limits of IS:10500 -2012	
					Requirement (Acceptable Limit)	Permissible limit in the Absence of Alternate Source
1.	pH (at 25 °C)	APHA ,4500-H <sup>+</sup> B Electrometric Method	7.58	--	6.5 to 8.5	No Relaxation
2.	Colour	APHA ,2120 B, Visual Comparison Method	*BDL (**DL 1.0 Hazen)	Hazen	5	15
3.	Turbidity	APHA, 2130 B, Nephelometric Method	*BDL (**DL 0. 1 NTU)	NTU	1	5
4.	Odour	APHA, 2150 B , Threshold Test Method	Agreeable	--	Agreeable	Agreeable
5.	Taste	APHA , 2160 B, Threshold Test Method	Agreeable	--	Agreeable	Agreeable
6.	Total Hardness as CaCO <sub>3</sub>	APHA , 2340 C, EDTA Titrimetric Method	242.00	mg/l	200	600
7.	Calcium as Ca	APHA, 3500 Ca B, EDTA Titrimetric Method	52.60	mg/l	75	200
8.	Alkalinity as CaCO <sub>3</sub>	APHA , 2320 B, Titrimetric Method	204.71	mg/l	200	600
9.	Chloride as Cl	APHA, 4500-Cl <sup>-</sup> B, Argentometric Method	72.94	mg/l	250	1000
10.	Cyanide as CN	APHA , 4500 CN <sup>-</sup> D	*BDL(**DL 0.02 mg/l)	mg/l	0.05	No Relaxation
11.	Magnesium as Mg	APHA , 3500 Mg B, Calculation Method	26.92	mg/l	30	100
12.	Total Dissolved Solids	APHA , 2540 C, Gravimetric Method	386.00	mg/l	500	2000
13.	Sulphate as SO <sub>4</sub>	APHA , 4500 E, Turbidimetric Method	34.91	mg/l	200	400
14.	Fluoride as F	APHA , 4500-F D, SPADNS Method	0.39	mg/l	1.0	1.5
15.	Nitrate as NO <sub>3</sub>	IS 3025 (P-34) ,Chromotropic Method	15.40	mg/l	45	No Relaxation
16.	Iron as Fe	IS 3025 (P-65):2014(RA:2019)	0.18	mg/l	1.0	No relaxation
17.	Aluminum as Al	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.002 mg/l)	mg/l	0.03	0.2
18.	Boron	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.01 mg/l)	mg/l	0.5	2.4
19.	Total Chromium as Cr	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.002 mg/l)	mg/l	0.05	No Relaxation



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Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051 (Haryana)  
 Branch Off: Plot No. 24 & 25, Narayan Vihar, Block-B, Jaipur - 302035 (Rajasthan)  
 ISO 9001 | ISO 14001 | ISO 45001

## Test Report

Sample No.: VEL/YMAM/W/01				Report No: VEL/W/2111/11/001		
S. No	Parameter	Test-Method	Result	Unit	Limits of IS:10500-2012	
					Requirement (Acceptable Limit)	Permissible limit in the Absence of Alternate Source
20.	Phenolic Compounds	APHA, 5530 C Chloroform Extraction Method	*BDL(**DL 0.0004 mg/l)	mg/l	0.001	0.002
21.	Mineral Oil	Clause 6 of IS:3025(Part 39)	*BDL(**DL 0.05mg/l)	mg/l	1.0	No Relaxation
22.	Anionic Detergents as MBAS	Annex K of IS 13428, IS 3025 (P-68)	*BDL(**DL 0.05 mg/l)	mg/l	0.2	1.0
23.	Zinc as Zn	IS 3025 (P-65):2014(RA:2019)	1.22	mg/l	5	15
24.	Copper as Cu	IS 3025 (P-65):2014(RA:2019)	0.12	mg/l	0.05	1.5
25.	Manganese as Mn	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.01 mg/l)	mg/l	0.1	0.3
26.	Cadmium as Cd	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.002 mg/l)	mg/l	0.003	No Relaxation
27.	Lead as Pb	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.002 mg/l)	mg/l	0.01	No Relaxation
28.	Selenium as Se	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.001 mg/l)	mg/l	0.01	No Relaxation
29.	Arsenic as As	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.002 mg/l)	mg/l	0.01	No Relaxation
30.	Mercury as Hg	IS 3025 (P-65):2014(RA:2019)	*BDL (**DL 0.0005 mg/l)	mg/l	0.001	No Relaxation
31.	Total Coliform	IS 15185:2002(RA- 2016)	Absent	/100ml	Shall not be detectable in any 100 ml sample	
32.	E. Coli	IS 15185:2002(RA- 2016)	Absent	/100ml	Shall not be detectable in any 100 ml sample	

Note: - \*BDL-Below Detection Limit, \*\*DL- Detection Limit



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 Branch Off: Plot No. 24 & 25, Narayan Vihar, Block-B, Jaipur - 302035 (Rajasthan)  
**ISO 9001 | ISO 14001 | ISO 45001**

## Test Report

Sample Number:	<b>VEL/YMAM/W/02</b>	Report No.:	<b>VEL/W/2111/11/002</b>
Issue To :	<b>M/s Yodha Mines and Minerals 19-P, Sector-8 Jind Haryana</b>	Format No.:	<b>7.80 F-01</b>
Name & address of the Project:	<b>M/s Yodha Mines and Minerals "Jainpur-2 Sand Unit" Vill.-Jainpur, Tehsil and District-Sonipat, Haryana.</b>	Party Reference No.:	<b>NIL</b>
Sample Description:	<b>Ground Water Sample</b>	Reporting Date:	<b>16/11/2021</b>
Sampling Location :	<b>Village- Jainpur</b>	Period of Analysis:	<b>11/11/2021 to 16/11/2021</b>
Sample Collected by:	<b>Vardan EnviroLab Representative</b>	Sampling Date:	<b>10/11/2021</b>
Sampling & Analysis Protocol:	<b>APHA, 23<sup>rd</sup> Edition 2017</b>	Receipt Date:	<b>11/11/2021</b>
		Preservation:	<b>Icebox</b>
		Sampling Quantity:	<b>2.0 Ltr. + 250ml</b>
		Parameter Required:	<b>As per work order</b>

S. No.	Parameter	Test-Method	Result	Unit	Limits of IS:10500 -2012	
					Requirement (Acceptable Limit)	Permissible limit in the Absence of Alternate Source
1.	pH (at 25 <sup>0</sup> C)	APHA ,4500-H <sup>+</sup> B Electrometric Method	7.50	--	6.5 to 8.5	No Relaxation
2.	Colour	APHA ,2120 B, Visual Comparison Method	*BDL (**DL 1.0 Hazen)	Hazen	5	15
3.	Turbidity	APHA, 2130 B, Nephelometric Method	*BDL (**DL 1.0 NTU)	NTU	1	5
4.	Odour	APHA, 2150 B , Threshold Test Method	Agreeable	--	Agreeable	Agreeable
5.	Taste	APHA , 2160 B, Threshold Test Method	Agreeable	--	Agreeable	Agreeable
6.	Total Hardness as CaCO <sub>3</sub>	APHA , 2340 C, EDTA Titrimetric Method	231.70	mg/l	200	600
7.	Calcium as Ca	APHA, 3500 Ca B, EDTA Titrimetric Method	42.58	mg/l	75	200
8.	Alkalinity as CaCO <sub>3</sub>	APHA , 2320 B, Titrimetric Method	160.21	mg/l	200	600
9.	Chloride as Cl	APHA, 4500-Cl <sup>-</sup> B, Argentometric Method	53.41	mg/l	250	1000
10.	Cyanide as CN	APHA , 4500 CN <sup>-</sup> D	*BDL(**DL 0.02 mg/l)	mg/l	0.05	No Relaxation
11.	Magnesium as Mg	APHA , 3500 Mg B, Calculation Method	30.49	mg/l	30	100
12.	Total Dissolved Solids	APHA , 2540 C, Gravimetric Method	320.00	mg/l	500	2000
13.	Sulphate as SO <sub>4</sub>	APHA , 4500 E, Turbidimetric Method	31.72	mg/l	200	400
14.	Fluoride as F	APHA , 4500-F <sup>-</sup> D, SPADNS Method	0.34	mg/l	1.0	1.5
15.	Nitrate as NO <sub>3</sub>	IS 3025 (P-34) ,Chromotropic Method	10.64	mg/l	45	No Relaxation
16.	Iron as Fe	IS 3025 (P-65):2014(RA:2019)	0.10	mg/l	1.0	No relaxation
17.	Aluminum as Al	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.002 mg/l)	mg/l	0.03	0.2
18.	Boron	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.01 mg/l)	mg/l	0.5	2.4
19.	Total Chromium as Cr	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.002 mg/l)	mg/l	0.05	No Relaxation



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 Branch Off: Plot No. 24 & 25, Narayan Vihar, Block-B, Jaipur - 302035 (Rajasthan)  
 ISO 9001 | ISO 14001 | ISO 45001

## Test Report

Sample No.: VEL/YMAM/W/02			Report No: VEL/W/2111/11/002			
S. No	Parameter	Test-Method	Result	Unit	Limits of IS:10500-2012	
					Requirement (Acceptable) Limit	Permissible limit in the Absence of Alternate Source
20.	Phenolic Compounds	APHA, 5530 C Chloroform Extraction Method	*BDL(**DL 0.0004 mg/l)	mg/l	0.001	0.002
21.	Mineral Oil	Clause 6 of IS:3025(Part 39)	*BDL(**DL 0.05mg/l)	mg/l	1.0	No Relaxation
22.	Anionic Detergents as MBAS	Annex K of IS 13428, IS 3025 (P-68)	*BDL(**DL 0.05 mg/l)	mg/l	0.2	1.0
23.	Zinc as Zn	IS 3025 (P-65):2014(RA:2019)	1.16	mg/l	5	15
24.	Copper as Cu	IS 3025 (P-65):2014(RA:2019)	0.08	mg/l	0.05	1.5
25.	Manganese as Mn	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.01 mg/l)	mg/l	0.1	0.3
26.	Cadmium as Cd	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.002 mg/l)	mg/l	0.003	No Relaxation
27.	Lead as Pb	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.002 mg/l)	mg/l	0.01	No Relaxation
28.	Selenium as Se	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.001 mg/l)	mg/l	0.01	No Relaxation
29.	Arsenic as As	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.002 mg/l)	mg/l	0.01	No Relaxation
30.	Mercury as Hg	IS 3025 (P-65):2014(RA:2019)	*BDL (**DL 0.0005 mg/l)	mg/l	0.001	No Relaxation
31.	Total Coliform	IS 15185:2002(RA- 2016)	Absent	/100ml	Shall not be detectable in any 100 ml sample	
32.	E. Coli	IS 15185:2002(RA- 2016)	Absent	/100ml	Shall not be detectable in any 100 ml sample	

Note: - \*BDL-Below Detection Limit, \*\*DL- Detection Limit



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Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051 (Haryana)  
 Branch Off: Plot No. 24 & 25, Narayan Vihar, Block-B, Jaipur - 302035 (Rajasthan)  
 ISO 9001 | ISO 14001 | ISO 45001

## Test Report

<b>Sample Number:</b>	VEL/ YMAMI/ W/01	<b>Report No.:</b>	VEL/ W/2201/25/001
<b>Issued To:</b>	M/s Yodha Mines and Minerals 19-P, Sector-8 Jind Haryana	<b>Format No.:</b>	7.8 F-01
<b>Name &amp; Address of Project</b>	M/s Yodha Mines and Minerals "Jainpur-2 Sand Unit" Vill.-Jainpur, Tehsil and District-Sonapat, Haryana.	<b>Party Reference No.:</b>	NIL
<b>Sample Description:</b>	Ground Water Sample	<b>Reporting Date:</b>	29/01/2022
<b>Sample Location:</b>	Near Mine Site	<b>Period of Analysis:</b>	25/01/2022 to 29/01/2022
<b>Sample Collected by</b>	Vardan Enviro Lab Representative	<b>Receipt Date:</b>	25/01/2022
<b>Sampling &amp; Analysis Protocol:</b>	APHA, 23 <sup>rd</sup> Edition 2017	<b>Sampling Date:</b>	24/01/2022
		<b>Sample Quantity:</b>	2.5 Ltr. + 250ml
		<b>Sampling Type:</b>	Grab
		<b>Preservation:</b>	Icebox
		<b>Parameter Required:</b>	As Per Work Order

S. No.	Parameter	Test-Method	Result	Unit	Limits of IS:10500 -2012	
					Requirement (Acceptable Limit)	Permissible limit in the Absence of Alternate Source
1.	pH (at 25 °C)	APHA ,4500-H <sup>+</sup> B Electrometric Method	7.65	--	6.5 to 8.5	No Relaxation
2.	Colour	APHA ,2120 B, Visual Comparison Method	*BDL (**DL 1.0 Hazen)	Hazen	5	15
3.	Turbidity	APHA, 2130 B, Nephelometric Method	*BDL (**DL 1.0 NTU)	NTU	1	5
4.	Odour	APHA, 2150 B , Threshold Test Method	Agreeable	--	Agreeable	Agreeable
5.	Taste	APHA , 2160 B, Threshold Test Method	Agreeable	--	Agreeable	Agreeable
6.	Total Hardness as CaCO <sub>3</sub>	APHA , 2340 C, EDTA Titrimetric Method	272.50	mg/l	200	600
7.	Calcium as Ca	APHA, 3500 Ca B, EDTA Titrimetric Method	54.81	mg/l	75	200
8.	Alkalinity as CaCO <sub>3</sub>	APHA , 2320 B, Titrimetric Method	227.06	mg/l	200	600
9.	Chloride as Cl	APHA, 4500-Cl <sup>-</sup> B, Argentometric Method	78.10	mg/l	250	1000
10.	Cyanide as CN	APHA , 4500 CN <sup>-</sup> D	*BDL (**DL 0.02 mg/l)	mg/l	0.05	No Relaxation
11.	Magnesium as Mg	APHA , 3500 Mg B, Calculation Method	32.99	mg/l	30	100
12.	Total Dissolved Solids	APHA , 2540 C, Gravimetric Method	428.00	mg/l	500	2000
13.	Sulphate as SO <sub>4</sub>	APHA , 4500 E, Turbidimetric Method	30.19	mg/l	200	400
14.	Fluoride as F	APHA , 4500-F <sup>-</sup> D, SPADNS Method	0.49	mg/l	1.0	1.5
15.	Nitrate as NO <sub>3</sub>	IS 3025 (P-34) ,Chromotropic Method	15.40	mg/l	45	No Relaxation
16.	Iron as Fe	IS 3025 (P-65):2014(RA:2019)	0.18	mg/l	1.0	No relaxation
17.	Aluminum as Al	IS 3025 (P-65):2014(RA:2019)	*BDL (**DL 0.002 mg/l)	mg/l	0.03	0.2
18.	Boron	IS 3025 (P-65):2014(RA:2019)	*BDL (**DL 0.01 mg/l)	mg/l	0.5	2.4
19.	Total Chromium as Cr	IS 3025 (P-65):2014(RA:2019)	*BDL (**DL 0.002 mg/l)	mg/l	0.05	No Relaxation



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 Branch Off: Plot No. 24 & 25, Narayan Vihar, Block-B, Jaipur - 302035 (Rajasthan)  
**ISO 9001 | ISO 14001 | ISO 45001**

## Test Report

Sample No.: VEL/YMAM/W/01				Report No: VEL/W/2201/25/001		
S. No	Parameter	Test-Method	Result	Unit	Limits of IS:10500-2012	
					Requirement (Acceptable) Limit	Permissible limit in the Absence of Alternate Source
20.	Phenolic Compounds	APHA, 5530 C Chloroform Extraction Method	*BDL(**DL 0.0004 mg/l)	mg/l	0.001	0.002
21.	Mineral Oil	Clause 6 of IS:3025(Part 39)	*BDL(**DL 0.05 mg/l)	mg/l	1.0	No Relaxation
22.	Anionic Detergents as MBAS	Annex K of IS 13428, IS 3025 (P-68)	*BDL(**DL 0.05 mg/l)	mg/l	0.2	1.0
23.	Zinc as Zn	IS 3025 (P-65):2014(RA:2019)	1.20	mg/l	5	15
24.	Copper as Cu	IS 3025 (P-65):2014(RA:2019)	0.08	mg/l	0.05	1.5
25.	Manganese as Mn	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.01 mg/l)	mg/l	0.1	0.3
26.	Cadmium as Cd	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.002 mg/l)	mg/l	0.003	No Relaxation
27.	Lead as Pb	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.002 mg/l)	mg/l	0.01	No Relaxation
28.	Selenium as Se	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.001 mg/l)	mg/l	0.01	No Relaxation
29.	Arsenic as As	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.002 mg/l)	mg/l	0.01	No Relaxation
30.	Mercury as Hg	IS 3025 (P-65):2014(RA:2019)	*BDL (**DL 0.0005 mg/l)	mg/l	0.001	No Relaxation
31.	Total Coliform	IS 15185:2002(RA- 2016)	Absent	/100ml	Shall not be detectable in any 100 ml sample	
32.	E. Coli	IS 15185:2002(RA- 2016)	Absent	/100ml	Shall not be detectable in any 100 ml sample	

**Note:** - \*BDL-Below Detection Limit, \*\*DL- Detection Limit



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 Branch Off: Plot No. 24 & 25, Narayan Vihar, Block-B, Jaipur - 302035 (Rajasthan)  
**ISO 9001 | ISO 14001 | ISO 45001**

## Test Report

Sample Number:	<b>VEL/YMAM/W/02</b>	Report No.:	<b>VEL/W/2201/25/002</b>
Issue To :	<b>M/s Yodha Mines and Minerals 19-P, Sector-8 Jind Haryana</b>	Format No.:	<b>7.8 F-01</b>
Name & address of the Project	<b>M/s Yodha Mines and Minerals "Jainpur-2 Sand Unit" Vill.-Jainpur, Tehsil and District-Sonapat, Haryana.</b>	Party Reference No.:	<b>NIL</b>
Sample Description:	<b>Ground Water Sample</b>	Reporting Date:	<b>29/01/2022</b>
Sampling Location :	<b>Village - Tikola</b>	Period of Analysis:	<b>25/01/2022 to 29/01/2022</b>
Sample Collected by:	<b>Vardan EnviroLab Representative</b>	Sampling Date:	<b>25/01/2022</b>
Sampling & Analysis Protocol:	<b>APHA, 23<sup>rd</sup> Edition 2017</b>	Receipt Date:	<b>24/01/2022</b>
		Preservation:	<b>Icebox</b>
		Sampling Quantity:	<b>2.5 Ltr. + 250ml</b>
		Parameter Required:	<b>As per work order</b>

S. No.	Parameter	Test-Method	Result	Unit	Limits of IS:10500 -2012	
					Requirement (Acceptable Limit)	Permissible limit in the Absence of Alternate Source
1.	pH (at 25 °C)	APHA ,4500-H <sup>+</sup> B Electrometric Method	7.48	--	6.5 to 8.5	No Relaxation
2.	Colour	APHA ,2120 B, Visual Comparison Method	*BDL (**DL 1.0 Hazen)	Hazen	5	15
3.	Turbidity	APHA, 2130 B, Nephelometric Method	*BDL (**DL 1.0 NTU)	NTU	1	5
4.	Odour	APHA, 2150 B , Threshold Test Method	Agreeable	--	Agreeable	Agreeable
5.	Taste	APHA , 2160 B, Threshold Test Method	Agreeable	--	Agreeable	Agreeable
6.	Total Hardness as CaCO <sub>3</sub>	APHA , 2340 C, EDTA Titrimetric Method	216.40	mg/l	200	600
7.	Calcium as Ca	APHA, 3500 Ca B, EDTA Titrimetric Method	52.70	mg/l	75	200
8.	Alkalinity as CaCO <sub>3</sub>	APHA , 2320 B, Titrimetric Method	178.30	mg/l	200	600
9.	Chloride as Cl	APHA, 4500-Cl <sup>-</sup> B, Argentometric Method	60.85	mg/l	250	1000
10.	Cyanide as CN	APHA , 4500 CN <sup>-</sup> D	*BDL(**DL 0.02 mg/l)	mg/l	0.05	No Relaxation
11.	Magnesium as Mg	APHA , 3500 Mg B, Calculation Method	20.63	mg/l	30	100
12.	Total Dissolved Solids	APHA , 2540 C, Gravimetric Method	362.00	mg/l	500	2000
13.	Sulphate as SO <sub>4</sub>	APHA , 4500 E, Turbidimetric Method	34.51	mg/l	200	400
14.	Fluoride as F	APHA , 4500-F <sup>-</sup> D, SPADNS Method	0.38	mg/l	1.0	1.5
15.	Nitrate as NO <sub>3</sub>	IS 3025 (P-34) ,Chromotropic Method	10.43	mg/l	45	No Relaxation
16.	Iron as Fe	IS 3025 (P-65):2014(RA:2019)	0.09	mg/l	1.0	No relaxation
17.	Aluminum as Al	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.002 mg/l)	mg/l	0.03	0.2
18.	Boron	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.01 mg/l)	mg/l	0.5	2.4
19.	Total Chromium as Cr	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.002 mg/l)	mg/l	0.05	No Relaxation



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Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051 (Haryana)  
 Branch Off: Plot No. 24 & 25, Narayan Vihar, Block-B, Jaipur - 302035 (Rajasthan)  
 ISO 9001 | ISO 14001 | ISO 45001

## Test Report

S. No	Parameter	Test-Method	Result	Unit	Limits of IS:10500-2012	
					Requirement (Acceptable) Limit	Permissible limit in the Absence of Alternate Source
20.	Phenolic Compounds	APHA, 5530 C Chloroform Extraction Method	*BDL(**DL 0.0004 mg/l)	mg/l	0.001	0.002
21.	Mineral Oil	Clause 6 of IS:3025(Part 39)	*BDL(**DL 0.05 mg/l)	mg/l	1.0	No Relaxation
22.	Anionic Detergents as MBAS	Annex K of IS 13428, IS 3025 (P-68)	*BDL(**DL 0.05 mg/l)	mg/l	0.2	1.0
23.	Zinc as Zn	IS 3025 (P-65):2014(RA:2019)	1.09	mg/l	5	15
24.	Copper as Cu	IS 3025 (P-65):2014(RA:2019)	0.11	mg/l	0.05	1.5
25.	Manganese as Mn	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.01 mg/l)	mg/l	0.1	0.3
26.	Cadmium as Cd	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.002 mg/l)	mg/l	0.003	No Relaxation
27.	Lead as Pb	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.002 mg/l)	mg/l	0.01	No Relaxation
28.	Selenium as Se	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.001 mg/l)	mg/l	0.01	No Relaxation
29.	Arsenic as As	IS 3025 (P-65):2014(RA:2019)	*BDL(**DL 0.002 mg/l)	mg/l	0.01	No Relaxation
30.	Mercury as Hg	IS 3025 (P-65):2014(RA:2019)	*BDL (**DL 0.0005 mg/l)	mg/l	0.001	No Relaxation
31.	Total Coliform	IS 15185:2002(RA- 2016)	Absent	/100ml	Shall not be detectable in any 100 ml sample	
32.	E. Coli	IS 15185:2002(RA- 2016)	Absent	/100ml	Shall not be detectable in any 100 ml sample	

Note: - \*BDL-Below Detection Limit, \*\*DL- Detection Limit



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 ISO 9001 | ISO 14001 | ISO 45001

## Test Report

<b>Sample Number:</b>	VEL/YMAM/S/01	<b>Report No.:</b>	VEL/S/2203/31/001
<b>Issued To:</b>	M/s Yodha Mines and Minerals 19-P, Sector-8 Jind Haryana	<b>Format No.:</b>	7.8 F-01
<b>Name &amp; Address of Project:</b>	M/s Yodha Mines and Minerals "Jainpur-2 Sand Unit" Vill.-Jainpur, Tehsil and District-Sonipat, Haryana.	<b>Party Reference No.:</b>	NIL
<b>Sample Description:</b>	Soil Sample	<b>Reporting Date:</b>	05/04/2022
<b>Sampling Location:</b>	Near Mine Site	<b>Period of Analysis:</b>	31/03/2022 to 05/04/2022
<b>Sampling &amp; Analysis Protocol:</b>	IS 2720, USEPA 3050B & SOP	<b>Receipt Date:</b>	31/03/2022
		<b>Sampling Date:</b>	30/03/2022
		<b>Type of Sampling:</b>	Composite
		<b>Sample Quantity:</b>	2.0 Kg
		<b>Packing Status:</b>	Temp Sealed

S. No.	Parameter	Test-Method	Result	Unit
1.	pH (at 25 °C)	IS : 2720 (P-26) by pH Meter	7.72	--
2.	Conductivity	IS:14767, 2000, RA	0.281	mS/cm
3.	Soil Texture	SOP, SP-87, Issue No.-01	Sandy Loam	--
4.	Color	SOP, SP-78, Issue No.-01	Brown	--
5.	Water holding capacity	SOP, SP-81, Issue No.-01	32.75	%
6.	Bulk density	SOP, SP-80, Issue No.-01	1.49	gm/cc
7.	Chloride as Cl	SOP, SP-85, Issue No.-01	36.18	mg/100g
8.	Calcium as Ca	SOP, SP-82, Issue No.-01	18.60	mg/100g
9.	Sodium as Na	SOP, SP-84, Issue No.-01	44.29	mg/kg
10.	Potassium as K	SOP, SP-84, Issue No.-01	126.41	kg/hect.
11.	Organic Matter	IS:2720 (P-22) Titrimetric Method, RA	0.34	%
12.	Magnesium as Mg	SOP, SP-83, Issue No.-01	8.76	mg/100g
13.	Available Nitrogen as N	IS:14684 Distillation Method, RA	147.05	kg./hect.
14.	Available Phosphorus	SOP, SP-86, Issue No.-01	22.68	kg./hect.
15.	Zinc (as Zn)	USEPA 3050B	2.10	mg/kg
16.	Manganese (as Mn)	USEPA 3050B	4.53	mg/kg
17.	Chromium (as Cr)	USEPA 3050B	0.48	mg/kg
18.	Lead (as Pb)	USEPA 3050B	0.52	mg/kg
19.	Cadmium (as Cd)	USEPA 3050B	0.24	mg/kg
20.	Copper (as Cu)	USEPA 3050B	0.93	mg/kg

\*SOP-Laboratory standard operating procedure.



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 ISO 9001 | ISO 14001 | ISO 45001

## Test Report

<b>Sample Number:</b>	VEL/YMAM/S/02	<b>Report No.:</b>	VEL/S/2203/31/002
<b>Issued To:</b>	M/s Yodha Mines and Minerals 19-P, Sector-8 Jind Haryana	<b>Format No.:</b>	7.8 F-01
<b>Name &amp; Address of Project:</b>	M/s Yodha Mines and Minerals "Jainpur-2 Sand Unit" Vill.-Jainpur, Tehsil and District-Sonipat, Haryana.	<b>Party Reference No.:</b>	NIL
<b>Sample Description:</b>	Soil Sample	<b>Reporting Date:</b>	05/04/2022
<b>Sampling Location:</b>	Village- Jainpur	<b>Period of Analysis:</b>	31/03/2022 to 05/04/2022
<b>Sampling &amp; Analysis Protocol:</b>	IS 2720, USEPA 3050B & SOP	<b>Receipt Date:</b>	31/03/2022
		<b>Sampling Date:</b>	30/03/2022
		<b>Type of Sampling:</b>	Composite
		<b>Sample Quantity:</b>	2.0 Kg
		<b>Packing Status:</b>	Temp Sealed

S. No.	Parameter	Test-Method	Result	Unit
1.	pH (at 25 °C)	IS : 2720 (P-26) by pH Meter	7.69	--
2.	Conductivity	IS:14767, 2000, RA	0.275	mS/cm
3.	Soil Texture	SOP, SP-87, Issue No.-01	Sandy Loam	--
4.	Color	SOP, SP-78, Issue No.-01	Brownish	--
5.	Water holding capacity	SOP, SP-81, Issue No.-01	34.66	%
6.	Bulk density	SOP, SP-80, Issue No.-01	1.43	gm/cc
7.	Chloride as Cl	SOP, SP-85, Issue No.-01	37.60	mg/100g
8.	Calcium as Ca	SOP, SP-82, Issue No.-01	16.92	mg/100g
9.	Sodium as Na	SOP, SP-84, Issue No.-01	42.83	mg/kg
10.	Potassium as K	SOP, SP-84, Issue No.-01	127.16	kg/hect.
11.	Organic Matter	IS:2720 (P-22) Titrimetric Method, RA	0.42	%
12.	Magnesium as Mg	SOP, SP-83, Issue No.-01	7.96	mg/100g
13.	Available Nitrogen as N	IS:14684 Distillation Method, RA	158.26	kg/hect.
14.	Available Phosphorus	SOP, SP-86, Issue No.-01	26.11	kg/hect.
15.	Zinc (as Zn)	USEPA 3050B	4.29	mg/kg
16.	Manganese (as Mn)	USEPA 3050B	8.96	mg/kg
17.	Chromium (as Cr)	USEPA 3050B	0.28	mg/kg
18.	Lead (as Pb)	USEPA 3050B	0.64	mg/kg
19.	Cadmium (as Cd)	USEPA 3050B	0.19	mg/kg
20.	Copper (as Cu)	USEPA 3050B	0.98	mg/kg

\*SOP-Laboratory standard operating procedure.



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## HARYANA STATE POLLUTION CONTROL BOARD

SPOT INSPECTION REPORT OF THE INDUSTRIES

- A. General Information of unit**
1. Name & Address of the unit : M/s Yodha Mines and Minerals  
Sand Mine at Jainpur - 2 Unit,  
Vill. Jainpur, Distt. Sonapat
2. Email id of the unit/occupier : yodhamines@gmail.com
3. Telephone No : 8199899991
4. Fax Nos. : -
5. Date & Time of Inspection : 24/01/2023
6. Category Unit : Red / Orange / Green
7. Type of Units : 17 Cat. / Seriously Polluting / others ✓
8. Size of unit based upon investment cost of Plant & Machinery : Large / Medium / Small
9. Name of the representative of the unit with Designation present at the time of the inspection : Sh. Sanjeet, Site Incharge
10. Name of the Directors/partners/Proprietor/ Manager / Occupier etc. : Sh. Sandeep Shokeen, Partner
11. Detail of products / by product manufactured (with capacity of installation & quantity per annum) : Sh. Pardeep Ahluwast, Partner  
Yamuna Sand (5333 MT/Day)
12. Detail of Raw Material used (with quantity per annum) : Yamuna Sand
13. Manufacturing Process (in brief) : Mining Activities
14. Detail of Machinery installed involving polluting Process : Mining Activities
15. Date of Commissioning of the unit : 15/02/2016
16. Status of Consent to Establish : Obtained
17. Status of Consent to Operate : Obtained upto 30/09/2023
18. Status of Authorization under HWM Rules : -
- B. Air Pollution**
1. Sources of air emissions from process of unit including: Fugitive emissions with type of Boilers/Furness, Capacity & stack height. : Mining Activities
2. Status of online monitoring System (Stacks/AAQ) : N.A.  
If applicable
3. Details about deviation in the details/ stack of Air Emission /type of fuel if any already provided to Board. : N.A.
4. Detail of Stacks / Chimneys / Vents : N.A.
5. Whether Height of all stacks / Chimneys as per norms: N.A.
6. Capacity of D.G. Sets : 35 kVA

- 148**
7. Stack height of D.G. Sets above programme and Whether as per norms : *Provided*
  8. Status of Acoustic Enclosure on D.G. Sets : *Provided*
  9. Noise results of DG Sets Monitored during inspection: *-*
  10. Type of Quantity of Fuel used (Separate for each source) : *Diesel*
  11. Status of Air Pollution Control Devices (APCD)
    - (a) Required or Not : *Required*
    - (b) Provided or Not : *Provided*
    - (c) Detail of APCD provided with detail of all Components: *Interlock Tankers*
    - (d) Whether Structurally adequate or Not : *Yes*
    - (e) Whether operating APCD Satisfactorily : *Yes*
  12. Whether provided separate flow meters in case of wet: Scrubber
  13. Whether maintained Log Book for consumption of Electricity / Chemicals / water for APCD. : *|*
  14. Detail of treatment of effluent in case of wet scrubber: & its mode of disposal. : *N.A.*
  15. Whether provided Sampling arrangements on all Stacks / Chimney including DG Sets. : *|*
  16. General Remarks :

### C Water Consumption

1. Sources of water supply : *Private Water Tankers*
2. Detail of measuring devices provided if any such as flow: Meters, V-notch etc. : *N.A.*
3. Whether measuring devices has been sealed : *N.A.*
4. Whether maintained the log book for supply of water: From all sources & consumption for various uses. : *Yes*
5. Detail of Water Consumption per day / month
  - (a) Domestic Purpose : *7.5 KL/D*
  - (b) Boiler / Cooling / *Dust suspension* : *12.0 KL/D*
  - (c) Industrial use (Easily Biodegradable) : *Nil*
  - (d) Industrial use (Non Easily Biodegradable) : *Nil*
  - (e) Other : *Nil*
6. General Remarks :

### D Water Pollution

1. Source & processes of Water Pollution including raw: Water treatment if any : *Domestic effluent only*
2. No. of outlets for discharging of effluent : Domestic: *01*  
Trade : *Nil*

3. Quantity of Effluent in KLD

149

Domestic: 7.0 KLD

Trade : Nil

4. Status of Effluent Treatment Plant (ETP)/ Sewage Treatment Plant (STP)

: STP | ETP

- (a) Required or Not :
- (b) Installed or Not :
- (c) Detail of STP/ETP Provided (if required) with Detail of all components and technology used :
- (d) Whether structurally adequate or not :
- (e) Whether operating STP / ETP Satisfactorily :
- (f) Whether provided online chemical dosing system/ pH meter :

N.A

5. Mode of Discharge of effluent Domestic : Trade :

Septic tank  
N.A

6. Name of Water recipient body if any :

7. Detail of land in case effluent is discharged for Percolation / irrigation purpose with justification for Its 100% utilization. :

8. Status of ZLD as per CPCB directions if applicable :

9. Whether provided flow meters on outlet & inlet of ETP / STP :

10. Whether provided separate electricity meter on ETP / STP :

11. Whether maintained Log Book for consumption of Electricity / Chemicals / Quantity of effluent. :

12. Status of online monitoring System, if applicable :

13. General Remarks :

**E. Hazardous Waste Management**

1. Category of Hazardous Waste generated as per rules:

2. Type & Qty. of Hazardous Waste generated : (i) incinerable  
(ii) recyclable  
(iii) disposable for landfill  
(iv) Total

N.A

3. Stock-Pile Quantity of Hazardous Waste :

4. Mode of Disposal & treatment of Haz. Waste :

5. Size of Hazardous waste storage site :

6. Display Board for Hazardous Waste at Factory Gate : Provided or not

- 7. Whether agreement made with the service provider: **150**  
for disposal of hazardous waste (if yes, give detail with validity) |
- 8. Details of Hazardous Waste transported to service provider : N.A. |

**F. Hazardous Chemicals Handling & Management and PLI Act, 1991**

- 1. List & Qty. of Hazardous chemical handled & used :  
(if any) with threshold quantity |
- 2. Whether prepared on site emergency plan and taken :  
Insurance policy under PLI Act, 1991. N.A. |
- 3. Name of insurer agency with date & validity of policy: |
- 4. Whether Hazardous chemicals handling & storage :  
Facility is adequate. |

The Unit has been inspected in reference to NGT case no. OA No. 518/2022, Vikas Kumar v/s State of Haryana. During inspection it has been found that mining activities are carried out inside river bed away from river stream where temporary bridge not required as this area is connected to main land. At present no temporary bridge has been constructed by the Unit

Signature of the representative of the unit  
Name Designation & Address

*[Handwritten Signature]*  
*[Handwritten Signature]*

24-1-2023

Signature of the Officer / Officers  
of the Board who conducted the  
inspection

*[Handwritten Signature]*  
24/01/2023  
(Ravinder Yadav, A&B)  
Name & Designation