

OCM/ENV/ 1608 /2023

DATE: 10.05.2023

To

The Joint Director(s),  
Ministry of Environment, Forest & Climate Change,  
Eastern Regional Office,  
Bhubaneswar , Odisha

Sub: Submission of six monthly compliance report to the conditions stipulated in the grant order of Environment Clearance (EC) pertaining to Ostapal Chromite Mines of M/s Ferro Alloys Corporation Limited.

Ref: Environment Clearance (Identification No:EC22B001OR12081) dated 04.04.2022 of Ostapal Chromite Mines of M/s Ferro Alloys Corporation Limited.

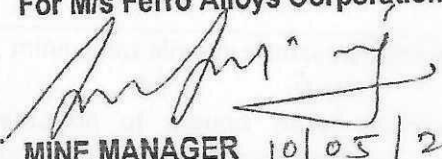
Respected Sir,

With reference to the captioned subject & cited reference, we are herewith submitting six monthly compliance report pertaining to Ostapal Chromite mines of M/s. Ferro Alloys Corporation Limited for the period October'2022 to March 2023 for your kind perusal.

This is for your kind information & necessary action.

Thanking You,

Yours Faithfully  
For M/s Ferro Alloys Corporation Limited

  
MINE MANAGER 10/05/2023  
OSTAPAL CHROMITE MINE

Encl: As above

CC: (1) The Member Secretary, SEIAA, ODISHA  
(2) The Member Secretary, State Pollution Control Board, ODISHA  
(3) The Member Secretary, Central Pollution Control Board, ODISHA




M/s. Ferro Alloys Corporation Ltd. (A subsidiary of Vedanta Ltd.)

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Website: [www.facorgroup.in](http://www.facorgroup.in), CIN: U45201OR1955PLC008400.

<b>A.SPECIFIC CONDITIONS:</b>		
1	<p>The mine shall explore implementation of membrane-based technology for removing hexavalent chromium from tailing pond, Surface run off &amp; mine drainage water as proposed</p>	<p><b>Complied.</b> In this connection, NIT, Rourkela has been engaged since Dt 18.12.2021, &amp; they have provided the final report.</p>
2	<p>The mine shall submit copy of the letter to NIT. Rourkela and their response thereof engaging them for the purpose of reduction of hexavalent chromium from tailing pond, surface run off, and mine drainage to SEIAA within one month time period</p>	<p><b>Complied.</b> Engagement order to NIT Rourkela &amp; their response is already submitted to SEIAA . It is enclosed as <b>Annexure -1</b></p>
3	<p>The mine shall submit copy of study report conducted by NIT, Rourkela for the purpose of reduction of hexavalent chromium iron tailing pond, Source run off &amp; mine drainage water once study is Over and implement the recommendations of the study. The project proponent shall submit implementation &amp; action plan report to SEIAA</p>	<p><b>Complied.</b> Copy of the final report &amp; its implementation status is enclosed for reference as <b>Annexure- 2</b>. As per the final report all the precautions/recommendations are implemented. All the suggested precautions are being implemented and maintained as follows: -</p> <ul style="list-style-type: none"> <li>• Discharge of tailing in separate pond</li> <li>• Impervious layer is laid at the bottom of the tailing pond to prevent the mixing of tailing water to the ground water.</li> <li>• Proper SOP of tailing management is maintained.</li> </ul>  <p>Further, Implementation of the recommendation report submitted to SEIAA vide letter No. OCM/ENV/1488/2023, dated 29.03.2023 (<b>Annexure -2A</b>)</p>
4	<p>Since, mining has already intersected the ground water table; the steps proposed augmentation of ground water resources are not adequate. The project proponent shall put adequate number of recharge pits beyond the zone of influence based on a detailed hydro-geological study. The project proponent shall submit the measures to be undertaken for augmentation of ground water resources along with action plan to SEIAA within one month time period.</p>	<p><b>Complied.</b> we have conducted a Hydrogeological study and based upon the comprehensive report on ground water condition we have augmented and implemented the recommendations. As per the study the rain-water harvesting structures are as follows:</p> <ul style="list-style-type: none"> <li>• Check-Dams</li> <li>• Garland Drains</li> <li>• Settling Pit</li> <li>• Roof Top Rainwater Harvesting</li> </ul> <p>The measures of the ground water augmentation report already submitted to SEIAA vide ref. No – OCM/ENV/897/2022 dated – 30.04.2022 <b>Annexure - 3</b></p>
5	<p>The mine shall take adequate measures to minimize</p>	<p><b>Complied.</b></p>

**Six Monthly Compliance Report to EC of Ostapal Mines, M/s FACOR LTD**

**For The Period Oct'2022 to Mar'2023**

**EC Identification No.: EC22B001OR120821, Dated: 04.04.2022**

	<p>the discharge of waste water to Damsala nallah.</p>	<p>Afforestation are being done more than the proposal, for which treated waste water is being used, as a result discharge to Damsala Nallah is minimized. Apart from this, the treated water is used for dust suppression &amp; industrial purposes.</p> <p>So, that discharge to Damasala nallah will be minimize</p> <p>The detailed are mentioned in <b>Annexure - 4</b></p>
6	<p>All the compliances submitted/ committed by PP shall be strictly adhered to by them.</p>	<p><b>Complied.</b> It is agreed &amp; strictly followed.</p>
7	<p>Waste should be dumped on the earmarked sites within the mining lease area and no waste should be dumped outside the lease area</p>	<p><b>Complied.</b> All the generated waste are being dumped within the Mining lease as per approved Mining Plan. The details are enclosed in <b>Annexure - 5</b></p>
8	<p>The Project Proponent shall start the plantation and cover at least 50% of the proposed area under plantation in the next 5 years. The density of the plantation should not be less than 2500 saplings/Ha. The species to be selected for the plantation should be in consultation with local forest department or any other expert agency engaged for the same. The Project Proponent shall keep the record of saplings planted survival rate area covered under plantation location etc In addition to this gap filling needs to be done to as and when require for maintaining the density of plantation. The PP shall submit the drone images of area before and after the plantation. PP shall carry out pilot study for phyto remediation of hexavalent chromium through IMMT CSIR. Bhubaneswar.</p> <p>The budget earmarked for the plantation shall be kept in separate bank account and audited annually. <b>PP shall submit the detail such as photographs (before &amp; after with geo-location, date &amp;time), details of expert agency engaged details of species planted</b>, number of species planted survival rate density of plantation and outcome of the pilot study etc. to the Regional Office of MoEF &amp; CC Bhubaneswar and SEIAA Odisha before 1s July &amp; 1 December of every year for the activities carried out during previous year</p>	<p><b>Complied.</b> It is an existing project. Density of the plantation is more than 2500/Ha. and already 50% of the proposed area under plantation in the 5 years plan period. Species are provided by local Forest Department. All the data of sapling planted &amp; survival rate is being recorded. Before &amp; after plantation done photographs are enclosed as <b>Annexure No.-6</b>. And IIMT CSIR , Bhubaneswar has been engaged to carry out the Phyto remediation of hexavalent Chromium. Work is started for which interim report is provided by IIMT, BBSR. Engagement order (PO) &amp; Interim report is enclosed as <b>Annexure No.-7</b> Project will be completed By Mar'2024.</p>  <p>Plantation work by IIMT Bhubaneswar</p> <p>All the budgeted amount &amp; expenses done for plantation is being maintained in a separate ledger account &amp; separate Cost Centre. Audit is being done quarterly as well as Annually.</p>
9	<p>Approval/permission of CGWA/SCWMA shall be obtained before drawing ground water for the project activities. State pollution control board (SPCB)</p>	<p><b>Complied</b> NOC for the CGWA is applied for renewal on 22.07.2022 it is approved by CGWA in Online.</p>

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	concerned shall not issue Consent to Operate (CTO) till the project Proponent obtains such permission.	Hard copy is yet to be received. NOC & Renewal application acknowledgement is enclosed for Ref. as <b>Annexure No.- 8</b>
10	The amount proposed under Corporate Environment Responsibility (CER) head should be kept in a separate bank account and should be audited annually. The PP should annually submit the audited statement and details of implementation of CER activities along with proof of activities viz. photographs (before & after with geo-location date & time), purchase documents, photographs & Geo-location of the infrastructure facilities developed, etc. to the Regional Office of MoEF & CC Bhubaneswar and SEIAA, Odisha before 1st July & 1 December of every year for the activities carried out during previous year.	<b>Complied.</b> Separate General Ledger Account & separate Cost center for this fund has been maintained & which is also audited annually. Details of the activities with supporting evidences like photographs & purchase documents have been enclosed as <b>Annexure No.- 9</b>
11	The amount (except occupational health) proposed under Environmental Management Plan (EMP) head should be kept in a separate bank account and should be audited annually. The PP should annually submit the audited statement and detailed environment monitoring report along with proof of activities viz photographs (before & after with geo-location date & time), purchase documents, sampling reports, photographs& Geo-location of the infrastructures/facilities developed, details of persons engaged in Environment Management Cell etc. to the Regional Office of MoEF & CC, Bhubaneswar and SEIAA, Odisha before 1 <sup>st</sup> July of every year for the activities carried out during previous year.	<b>Complied.</b> Separate General Ledger Account & separate Cost center for this fund has been maintained & which is also audited annually. Audit report along with all activities with supporting documents are submitted herewith annually. Details of expenses done FY 2022-23 towards EMP is enclosed as <b>Annexure No-10</b> Details of the Person engaged for Environment Management Cell details is already submitted to the Member secretary SEIAA vide letter No.: OCM/ENV/865/2022, dated 16.4.2022, is enclosed as <b>Annexure No.-11</b>
12	The amount proposed under Occupational Health plan head should be kept in a separate bank account and should be audited annually. The PP should annually submit the audited statement and detailed environment monitoring report along with proof of activities viz. photographs (before & after with geo-location date & time), purchase documents, sampling reports, photographs& Geo-location of the infrastructures/facilities developed. details of persons engaged in Environment Management Cell etc. to the Regional Office of MoEF & CC, Bhubaneswar and SEIAA Odisha before 1st July of every year for the activities carried out during previous year	<b>Complied.</b> Separate General Ledger Account & separate Cost center for this fund has been maintained & which is also audited annually. Audit report along with all activities with supporting documents will be submitted annually. Details of the Expenses towards Occupational Health is enclosed as <b>Annexure No.-12</b> done towards  Details of the Person engaged for Environment Management Cell details is already submitted to the Member secretary SEIAA vide letter No.: OCM/ENV/865/2022, dated 16.4.2022, is enclosed as Annexure No.-11

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13	The Project Proponent shall set up an Environmental Management Cell comprises of persons having qualification and experience in the field of environment along with supporting staff. The details of the same needs to be submitted to the SEIAA Odisha within 3 months of the grant of EC	<b>It is complied.</b> Details of the Person engaged for Environment Management Cell details is already submitted to the Member secretary SEIAA vide letter No.: OCM/ENV/865/2022, dated 16.4.2022, is enclosed as <b>Annexure No.-11</b>
14	The Sub-Committee of SEAC will visit the site within 6 months from the date of issue of Environmental Clearance to ensure implementation of agreed measures However either during the visit of the SEAC Sub-committee and/or at any time if it noticed that stipulated conditions on which EC is granted is not in place or found otherwise, steps will be taken for revocation of EC granted	<b>Complied.</b> All the conditions are strictly complied & being maintained.
15	The Project Proponent shall implement the short term and long-term measures proposed to be taken in order to get rid from the adversity of Cr (VI) contamination needs to be implemented and status report of the same along with benefit occurred needs to be submitted to Regional Office of MoEF & CO Bhubaneswar and SEIAA Odisha annually.	<b>Complied.</b> NIT, Rourkela & IIMT, CSIR, -Bhubaneswar have been engaged to carry out the study & to suggest the measure to be taken for reduction of contamination. All the measures suggested by NIT Rourkela have been implemented. IIMT, CSIR study is under process, after getting the suggestion, measures will be implemented. Intimation on benefit of implementation of recommendations suggested by NIT, Rourkela has been submitted to Regional Office of MoEF & CC, Bhubaneswar and SEIAA Odisha, as <b>Annexure No.-13</b>
16	The Project Proponent shall keep a record of each blasting viz. location, number of holes, delay assigned of each hole, explosive quantity of each hole, blasting pattern etc.	<b>Complied.</b> The record is being kept and maintained. The details are enclosed in <b>Annexure – 14</b>
17	This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.	<b>Complied</b>
18	The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August,2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Or before commencing the mining operations, if applicable to the Project.	<b>Complied.</b> Letter submitted to Member secretary , Vide letter No.: FACOR/Bhadrak/Legal/109/2022, Dated: 25.4.2022. The details are enclosed in <b>Annexure – 15</b>
19	The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation, levied, if any, for illegal mining paid by the Project Proponent through their respective	<b>Complied.</b> Letter submitted to Member secretary, Vide letter No.: FACOR/Bhadrak/Legal/109/2022, Dated: 25.4.2022



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	Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Write Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors as may be applicable.	The details are enclosed in <b>Annexure - 15</b>
20	This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF & CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife. if applicable to the Project	It is not applicable as our lease area do not fall under and wildlife area so NBWL clearance is not required.
21	This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act 1980, if applicable to the project	<b>Complied.</b> We have obtained FC on Dt 07.02.2006, from the Govt. of Odisha. The details are enclosed in <b>Annexure - 16</b>
22	Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish/ Consent to Operate from the concerned State Pollution Control Board	<b>Complied</b> CTE obtained on dated 31.03.2022. CTO Obtained on 28.06.2022 & valid till 31.03.2026 The details are enclosed in <b>Annexure - 17</b>
23	The PP shall adhere to the provision of the Mines Act. 1952, Mines and Mineral (Development & Regulation), Act. 2015 and rules & regulations made there under PP shall adhere to various circulars issued by Directorate General Mines Safety (DGMS) and Indian Bureau of Mines from time to time	<b>Complied.</b> All the applicable statutory provision under Mines Act '1952 and Mineral (Development & Regulation), Act. 2015 and rules, regulations made are being followed & adhered.
24	The Project Proponent shall obtain consents from all the concerned landowner before start of mining operations as per the provisions of MMDR Act 1957 and rules made there under in respect of lands which are not owned by it.	<b>Complied.</b> Consent from all concerned landowners has been obtained before starting of the mining operations. The details are enclosed in <b>Annexure - 18</b>
25	The Project Proponent shall follow the mitigation measures provided in MoEF & CC's Office Memorandum No 2-1013/57/2014-IA I (M). dated 29 October 2014 titled "Impact of mining activities on Habitations-issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or habitation and villages are surrounded by the mine lease area"	<b>Complied.</b> There are no villages within the mining lease. Moreover, EIA study has been carried out by domain expert. And as per the suggestion of EIA study report, mitigative measures have been taken to avoid the "Impact of mining activities on Habitations" & villages in the Buffer zone.
26	The copies of the environmental clearance shall be submitted by the project proponents to the heads of the local bodies, panchayats and municipal bodies in addition to the relevant offices of the government who in turn has to display the same for 30 days from the date of receipt	<b>Complied.</b> It is Submitted to The Collector & District Magistrate, Jajpur, The Sub-Collector, Jajpur, The Tahasildar, Sukinda & The Sarapanch, Kaliapani on dated 07.04.2022 for information. The details are enclosed in <b>Annexure - 19</b>
27	State Pollution Control Board shall be responsible for	NA for PP.

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	display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tahasildar's Office for 30 days.	
28	The Project Authorities should widely advertise about the grant of this EC letter by printing the same at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board and web site of the Ministry of Environment, Forest and Climate Change ( <a href="http://www.environmentclearance.nic.in">www.environmentclearance.nic.in</a> ) A copy of the advertisement may be forwarded to the concerned MoEF & CC Regional Office for compliance and record.	<p><b>Complied.</b> Advertisement have been published in two local newspapers within 7 days of issue of the clearance letter.</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="828 497 1120 705">  <p>It is hereby informed to the general public that the State Environment Impact Assessment Authority (SEIAA), Odisha of the Ministry of Environment, Forest and Climate Change, Government of India has granted Environment Clearance (EC) to Ostapal Chromite Mine of M/s Ferro Alloys Corporation Ltd. (FACOR) on dtd. 04/04/2022 for enhancement of production up to 0.240 MTPA of Chromite Ore (ROM). This EC is also available in the official portal of Ministry of Environment, Forest and Climate Change, i.e. <a href="http://environmentclearance.nic.in">http://environmentclearance.nic.in</a></p> <p align="center">Orissapost, Dt 8.4.2022</p> </div> <div data-bbox="1135 489 1407 705">  <p align="center">Pragatibadi Dt 08.04.2022</p> </div> </div> <p>Copy of the advertisement forwarded to the concerned authority is enclosed as <b>Annexure - 20</b></p>
29	The Project Proponent shall inform the MoEF & CC/SEIAA, Odisha for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time	There is no change in ownership.
<b>B</b>	<b>Statutory Condition:</b>	
<b>(i)</b>	<b>Air Quality Monitoring and preservation</b>	
30	The Project Proponent shall install a minimum of 1 (one) online Ambient Air Quality Monitoring Stations to monitor critical parameters relevant for mining operations, of air pollution viz PM10, PM25. NO2 CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/POCIH dated 18.11. 2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building canteen etc. as per the site condition to ascertain the exposure characteristics at specific places The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site	<p><b>Complied.</b> As per condition, one Online AAQMS is installed to monitor the critical parameters relevant for mining operations such as PM10, PM25. NO2 CO and SO2. It is being Monitored.. Further, AAQ Monitoring stations are installed in other places &amp; also digitally displayed board placed in front of the main gate.</p> <div style="display: flex; justify-content: space-around;">   </div>
31	Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling. metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from each sources shall be regularly controlled by installation of required	<p><b>Complied.</b> Following measures have been taken such as</p> <ul style="list-style-type: none"> <li>• Regular haul road maintenance</li> <li>• Use of Road Grader</li> <li>• Wet drilling practice adopted</li> <li>• Transporting vehicle is covered with tarpauline</li> <li>• Wheel washing system provided</li> </ul>

	<p>equipment/machineries and preventive maintenance. Use of Suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system It shall be ensured that air pollution level conform to the standards prescribed by the MoEF &amp; CC/ Central Pollution Control Board</p>	<ul style="list-style-type: none"> <li>• Sufficient nos. of water Tankers are engaged for regular sprinkling of water on the as haul road, loading and unloading point for effective dust suppression.</li> <li>• Haul Road plantation</li> </ul> <div style="display: flex; flex-wrap: wrap;">      </div> <p>The details of the dust suppressing measures is enclosed as <b>Annexure - 21</b> Further, fugitive dust emission is being monitored regularly. Preventive maintenance is being carried out regularly.</p>
<p><b>II</b></p>	<p><b>Water Quality Monitoring and Preservation</b></p>	
<p>32</p>	<p>In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEF &amp; CC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.</p>	<p>NOC is obtained from CGWA. Vide Ref No.: CGWA/NOC/MIN/REN/1/2021/6481. The NOC &amp; renewal application acknowledgement copy is enclosed as <b>Annexure – 8</b></p>
<p>33</p>	<p>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 maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to</p>	<p><b>Complied.</b> Flow rate of the Perennial Nalla “ Damasallah Nallah” is being Monitored Regularly &amp; Record being maintained. Report is enclosed as <b>Annexure No.-22</b> There is no disturbance to any water bodies in around the village. Nos. of rainwater harvesting measures have been taken to augment the water table. So,</p>




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	<p>the villagers for their use. A provision for regular monitoring of water table in open dug wall located in village should be incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department/ State Pollution Control Board</p>	<p>there is no chance of water table to go below/down. There is no scarcity of water, and the water table is in proper level. Further, drinking water is provided to the nearby villages. Water level &amp; quality is being Monitored regularly by NABL accredited Laboratory and report is also being submitted the Govt. authority in quarterly. The Monitoring report is enclosed as Annexure - <b>Annexure - 23</b></p>
34	<p>Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry. CGWA and State Groundwater Department/ State Pollution Control Board</p>	<p><b>Complied.</b>  Ground water level &amp; quality being monitored regularly. And report also submitted.  The details are enclosed in <b>Annexure - 23</b></p>
35	<p>The Project Proponent shall undertake regular monitoring of natural water course water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring wrt pH and included the same in monitoring plan. The parameters to be monitored shall include their water quality vis a-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEF &amp; CC SEIAA Odisha.  The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre-monsoon (April-May), monsoon (august), post-monsoon (november) and winter (january) and the record of monitored data be sent regularly to ministry of environment, forest and climate change and its regional office, SEIAA, Odisha, Central Ground Water Board, State Pollution Control Board and central pollution control board.</p>	<p><b>Complied.</b> Flow rate of the Perennial Nalla “ Damasallah Nallha” is being Monitored Regularly &amp; Record being maintained. Report is enclosed as <b>Annexure No.-22</b> Upstream &amp; Downstream water quality are being monitored. PH &amp; other parameters as well within the limit. Report is enclosed as <b>Annexure No.-24</b>  There is no water body inside the Mine, so there is no chance of obstruction or alteration to the water body.  There is no water courses/bodies in the lease area, so trend analysis is not applicable.</p>

	Clearly showing the trend analysis on six-monthly basis.	
36	<p>Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off. acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a location near the main gate of the Company. The circular No. J-20012/1 /2006 IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.</p>	<p><b>Complied.</b> One NABL accredited Lab is engaged to ensure the quality of the water generated from the mines &amp; treated water discharging to outside the lease. And all the parameters mentioned are being monitored. Monitoring data also uploaded in the Website: <a href="https://www.facorgroup.in/esg/compliances/">https://www.facorgroup.in/esg/compliances/</a> <u>And displayed through digital display board near main gate.</u></p> <p>The Monitoring report is enclosed in <b>Annexure - 25</b></p>
37	<p>The project proponent shall construct retaining wall and settling pond within the lease area. Further. check dams shall be constructed at strategic locations in which rain water passes in rainy season. Quality of the mine drainage water shall be monitored on real-time basis&amp; also monitored through NABL Lab. Mine drainage water shall be used only after treatment through ETP for various industrial uses</p>	<p>Retaining wall is constructed along the periphery of the dump, settling pond is there in the lease also check dam is constructed at strategic locations through which rain water passes in rainy season.</p> <p><b>Settling Pond , Retaining wall &amp; Check dam</b></p>  <p>Also the mine drainage water is being treated in ETP and its quality is being monitored on real time basis and along with NABL Lab. It is used for industrial purpose only after treatment.</p> <p><b>EFFLUENT TREATMENT PLANT(ETP) FACILITY AT OSTAPAL MINE (600 KL/HR)</b></p>  <p>The NABL report is enclosed as <b>Annexure No-25</b></p>
38	<p>Detail design of the existing retaining wall and the proposed for the expansion from a chartered Civil Engineer shall be submitted within 6 months from the date of issue of Environmental Clearance to ensure that no silt after wash up &amp; treatment is escaped from the core/ buffer zone of the mines.</p>	<p><b>Complied.</b> The design of the retaining wall is certified from a chartered civil engineer.</p> <p>The details are enclosed in <b>Annexure – 26</b></p>
39	<p>Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State</p>	<p><b>Complied.</b> Report of ground water recharge quantity is submitted to the Regional Office, MoEFCC annually dated on 07.04.2023 vide letter number</p>





	Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office, MoEF & CC annually.	OCM/ENV/1508/2023 The Details are enclosed in <b>Annexure No-27</b>
40	Industrial waste water(workshop and waste water from the mine) should be properly collected and treated in an ETP as proposed so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB) .The workshop effluent shall be treated after its initial passage through Oil and grease trap.	<b>Complied.</b> All the industrial water are channelized and properly collected and treated in an ETP. Oil & Grease trap is also provided. 
41	The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF & CC and State Pollution Control Board.	<b>Complied.</b> The water balance chart is maintained and monitored. And the action plan for the reduction of water is made and submitted to the MoEF & SPCB. The details are enclosed in <b>Annexure – 28</b>
<b>iii</b>	<b>Noise and Vibration Monitoring Prevention</b>	
42	The peak particle velocity at 500m distance or within the nearest habitation whichever is closer shall be monitored periodically as per applicable DGMS guidelines.	<b>Complied.</b> Ground vibration monitoring of blasting is carried out regularly by competent person as per the DGMS guidelines. The details are enclosed in <b>Annexure - 29</b>
43	The illumination and sound at night at project sites 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. PPs 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 /night hours.	<b>Complied.</b> Noise monitoring is done by NABL Laboratory both in day and night and the noise limit falls under the prescribed standards The Noise Monitoring report is enclosed in <b>Annexure - 30</b>
44	The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment The worker engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/laborers are working without personal protective equipment.	<b>Complied.</b> Noise level is being monitored and it shows below the prescribed limits. All the workers are working in HEMM are provided with ear plugs and the workers working in dusty are provided with protective respiratory devices. The Noise Monitoring report is enclosed in <b>Annexure – 30</b>
<b>iv</b>	<b>Mining Plan</b>	
45	The Project Proponent shall adhere to the working	<b>Complied.</b>

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	parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation ie. quantum of mineral, waste over burden inter burden and top soil etc. No change in basic mining proposal like mining technology total excavation, mineral & waste production, lease area and scope of working (viz method of mining. overburden & dump management, O.B & dump mining, mineral transportation mode. ultimate depth of mining etc) shall not be carried out without prior approval of the Ministry of Environment Forest and Climate Change which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt in the form to Short Term Permit (STP), Query license or any other name.	Mining activities is being carried out as per the approved mining plan. There is no such changes, and in case of any changes, prior permission/approval will be taken from MoEF & CC.
46	The Project Proponent shall get the Final Mine Closure Plan along with Financial Assurance approved from Indian Bureau of Mines/Department of Mining & Geology as required under the Provision of the MMDR Act 1957 and Rules/Guidelines made there under. A copy of approved final mine closure plan shall be Submitted within 2 months of the approval of the same from the competent authority to the concerned Regional Office of the Ministry of Environment, Forest and Climate Change for record and verification	It is not applicable, as there is no FMCP required now.
47	The land-use of the mine lease area at various Stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-a-vis backfilling vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEF & CC and its concerned regional Office/ SEIAA, Odisha	The land use patter is being followed as per the approved mining plan by IBM  The excavation vis-a-vis backfilling in the mine lease area is followed as per mining plan.
<b>V</b>	<b>Land Reclamation</b>	
48	The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S. w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.	<b>Complied.</b> The OB generated is stacked in OB dump site with proper height, width and angle of slope as per the approved mining plan.  All the generated top soil is used for afforestation purpose.

49	The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.	<p><b>Complied.</b> The OB generated during the mining operation is stacked at the OB dump site which is having proper height, width and angle of slope as per the approved mining plan &amp; other circulars.</p>	
50	The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.	It is being followed & complying as per Approved Mining Plan cum Progressive Mine Closure Plan.	
51	The slope of dumps shall be vegetated in scientific manner with stable native species to maintain the slope stability. Prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/levelling of dump mass. In critical areas, use of geo textiles/geo-membranes / clay liners/ Bentonite etc. shall be undertaken for stabilization of the dump.	<p><b>Complied.</b> Dump slopes are planted with suitable native species for stability of the dump and along with that retaining wall provided all along the toe of the dump to prevent erosion.</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="817 773 1140 1006">  <p>Plantation on Dump slope</p> </div> <div data-bbox="1170 773 1418 1006">  <p>Retaining wall &amp; Garla drain at Toe Dump</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div data-bbox="817 1087 1140 1334">  </div> <div data-bbox="1161 1087 1418 1334"> <p>Care of the gullies on Dump slope</p> </div> </div> <p>Geo-textile &amp; Silpaulin are used to prevent erosion &amp; surface run-off. Also the Geo-textile &amp; Silpaulin helps to stabilize the dump by preventing the rain water to percolate in the OB dump.</p> <p>In long term effect these Geo-Textile decompose with the soil and makes the soil more fertile which in turns acts as a manure for the plants planted in the benches of the dump.</p> <div data-bbox="817 1662 1251 1902" style="text-align: center;">  <p><b>GEOTEXTILES USED ON DUMP TERRACES</b></p> </div>	



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		More photographs provided in <b>Annexure No-31</b>
52	The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF & CC. Govt. of India, Bhubaneswar as well as SEIAA, Odisha.	<p><b>Complied.</b></p> <p>Slope Stability study has been conducted by CIMFR, Dhanbad. And report is already submitted to the MoEF &amp; SEIAA</p> <p>The Study report has already submitted vide letter No:OCM/ENV/1144/2022, dated 08.08.2022 to MoEF &amp; CC and vide letter no.:OCM/ENV/1140/2022, dated 08.08.2022. Submitted letter copy is enclosed for reference as <b>Annexure No.-32</b></p>
53	Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and topsoil/OB /waste dumps to prevent runoff of water and flow of sediments directly into the water bodies (Nallah/ River Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/sedimentation sumps etc. shall be de silted regularly, particularly after monsoon season, and maintained properly.	<p>complied.</p> <p>We have already implemented catch drains &amp; settling ponds of appropriate size to prevent runoff of water and flow of sediments directly into the water bodies.</p> <div data-bbox="883 810 1329 1033" data-label="Image"> </div> <p align="center">Retaining wall &amp; Garland drain</p> <p>Further, all the drains &amp; settling ponds are desilted regularly.</p>
54	Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment low into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.	<p><b>Complied.</b></p> <p>Check-dams of appropriate size, gradient and length is constructed around mine pit, OB Dump &amp; garland drain, here to arrest the slime/suspended solid particles flowing through the streams.</p> <p>Considering peak rainfall, the surface run off study has been conducted by domain expert, the settling pond along with other measures are designed &amp; constructed accordingly.</p>
55	Storm water and leached water for treatment shall be led in separate pipes and where required, retaining wall, settling pond and check dam shall be constructed within the lease hold area for conservation of rainwater and prevention of soil loss.	<p><b>Complied.</b></p> <p>Storm Water drains are provided wherever required &amp; retaining wall, settling pond &amp; check dam are constructed in the lease hold area accordingly.</p> <p>Further, garland drain, retaining wall , settling pond &amp; roof top rain water harvesting system is implemented for conservation of rain water.</p>

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		<p align="center">Roof Top Rainwater Harvesting</p>	<p align="center">Rainwater harvesting Pit</p>	
				
		<p align="center">Garland drain</p>	<p align="center">Check Dam</p>	
<p>56</p>	<p>The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose</p>	<p><b>Complied.</b></p> <p>There is no generation of topsoil during the period Oct'22 to Mar'23. All the earlier generated topsoil already had been utilized for afforestation purpose.</p>		
<p>57</p>	<p>The mining lease holder shall, after ceasing mining operations undertake regressing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.</p>	<p>It is Not Applicable .</p> <p>It shall be taken care as per after cession of Mining activities in consultation with competent authority.</p>		
<p>58</p>	<p>Slope study by an expert of repute of water dumps to be done and submitted within six months from the date of issue of EC to SEAC/SEIAA</p>	<p><b>Complied.</b></p> <p>Slope Stability Study is conducted, and the report already submitted SEIAA. Submission reference copy is attached as <b>Annexure No.-32</b></p>		
<p><b>vi</b></p>	<p><b>TRANSPORTATION</b></p>			
<p>59</p>	<p>No Transportation of the minerals shall be allowed in case of roads passing through transportation of the minerals leaving an adequate gap (say at least 200 meters) .so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads</p>	<p><b>Complied</b></p> <p>Transportation is carried out on the same road as used before the expansion i.e TOMKA-MANGALPUR Highway. Road connecting to TOMKA-MANGALPUR highway, is being always maintained to avoid dust generation. Further, water sprinkling is carried out to mitigate the dust generation. an amount of 180 Crore is already sanction for the same road to widen &amp; strengthen it, from DMF.</p>		


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	<p>is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly .Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers</p>	 <p>And also, another bridge connecting to Mines transportation road is already under construction.</p>   <p>Bridge work connection to Mine transporting road is under p</p> <p>All the vehicle used for mines &amp; vehicle carrying mineral having valid PUC Certificates which are ensured regularly.</p>
60	<p>The Main haulage road within the mine lease should be provided with a permanent water arrangement for dust suppression. Other roads within the mine lease should be wetted regular with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipment like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.</p>	<p><b>Complied</b></p> <p>For dust suppression system, one fixed water pipe line is provided along with two dedicated permanent water tanker which sprinkles out the water in the haul roads regularly in a scheduled way. Other than that we have 4 offline AAQMS and one online AAQMS located at different locations of the mine which monitors the quality of the ambient air.</p> <p>There is water provision of water sprinkling at crusher whenever required</p> <p>There is no transportation being carried out through belt conveyor. So, it is not applicable.</p> <p>The photographs of the water sprinkling &amp; AAQMS is enclosed in <b>Annexure No-33</b></p>
61	<p>The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution under Control (PUC) certificate for all the vehicles from authorized pollution testing centers.</p>	<p><b>Complied.</b></p> <p>It is done effectively and in a controlled manner. Also water sprinkling is done regularly. All vehicles have also obtained PUC certificate is obtained from authorized pollution testing centers.</p>
62	<p>Haulage road shall be developed and maintained</p>	<p><b>Complied.</b></p>


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	perennially and perpetually by the proponent in construction with the concerned authority of the Govt. and to this effect, the proponent shall submit an undertaking in form of a legal affidavit.	The haulage road is developed and maintained regularly. Legal affidavit is attached.  The Undertaking is submitted to the Concerned Authority enclosed as Annexure <b>No-34</b>
63	Traffic Density study if not done by domain expert, then the expert to be ratified/ authenticated by domain expert and submitted within a month time.	<b>Complied.</b> Traffic density study has been conducted by domain expert & submitted along with final EIA.  The reference copy of Traffic study report is enclosed as <b>Annexure – 35</b>
<b>VII</b>	<b>Green Belt</b>	
64	The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan	<b>Complied.</b> Green belt (Plantation) has been developed all along the mining lease boundary. As per forest act all along the forest boundary line 7.5 m safety 
65	The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body. Along the roadsides, in Community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare Adequate budgetary provision shall be made for protection and care of trees.	<b>Complied.</b> There is no backfilled area inside the mining lease. Further community plantation program are being carried out with consultation of Forest Department & Gram Panchayat. Adequate funds provision is there to take care of the plantation.  Plantation carried out in consultation with Forest department & within safety zone is enclosed as <b>Annexure No- 36</b>
66	The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease The development of such grazing land shall be done in consultation with the State Government. In this regard, Project proponent should essentially implement the directions of the Hon'ble Supreme Court with regards to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/protected against felling and plantation of such trees should be	It is not applicable as there is no grazing land within the lease area.



	promoted.	
67	The Project Proponent shall undertake all precautionary measures for conservation and protection of endangered flora and fauna and Schedule-I species during mining operation. A Wildlife Conservation Plan shall be prepared for the same clearly delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wildlife Warden of the State Govt. and implemented in consultation with the State Forest and Wildlife Department. A copy of Wildlife Conservation Plan and its implementation status (annual) shall be submitted to the Regional Office of the Ministry.	<p><b>Complied</b></p> <p>Wildlife Conservation plan has been prepared by accredited Consultant and It is approved from the office of the principle chief conservation of forest.</p> <p>Approval Ref Vide No.: 10183/CWLW-FDWC-FD-0033-2022, dated 11.11.2022.</p> <p>A copy of approved wildlife Management plan is submitted Vide letter No.: OCM/ENV/1571/2023, dated 28.04.2023</p> <p>The copy of the approval along with implementation status is enclosed &amp; as <b>Annexure - 30</b></p>
VIII	<b>Public Hearing and human health issues</b>	
68	The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which are having ailments like BP, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial preventive measures be taken. A status report on the same may be sent to MoEF & CC Regional Office and DGMS on half-yearly basis.	<p><b>Complied</b></p> <p>One Occupational Health special is appointed as per DGMS guideline. Check-ups are undertaken once in six month &amp; necessary preventive measures are taken. Status report is sent to MoEF &amp; DGMS on half-yearly basis.</p> <p>The details of the Medical Check up given in <b>Annexure No.-37</b></p> <p>Status report is submitted &amp; copy is enclosed as <b>Annexure No.- 38</b></p>
69	A commitment in form of an undertaking for periodical occupational health check-up of the employee and the local people shall be done through an occupational health expert.	<p><b>Complied</b></p> <p>All the employees &amp; local people are being undertaken for periodical health check up through an occupational health expert. Undertaking is enclosed as <b>Annexure No.-39</b></p> 
70	The Project Proponent must demonstrate commitment to work towards Zero Harm from their	<p><b>Complied</b></p> <p>Mine management is committed to work for zero</p>



<p>mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measure to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood must focus on Public Health Problems like Malaria Tuberculosis. HIV, Anaemia, Diarrhoea in children under five respiratory infections due to bio-mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation Personal Hygiene, Hand washing not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carryout base line HRA for all the category of workers and thereafter every five years.</p>	<p>harm from the mining activities and carrying out appropriate measures for Risk assessment and identification of workplace hazards and assess the potential risks for health and taking appropriate control measures to protect the health of workers and the nearby community. Mine management is conducting HRA among the neighborhoods to focus on malaria, Dengue, Tuberculosis, HIV, Anaemia, Diarrhoea and ARIs in children and adults. Regular awareness program is being conducted in the nearby villages for sanitization, personal hygiene, hand washing, not to defecate in open places, women health, hazards of smoking tobacco, drinking alcohol. Awareness program are being taken for control of malaria and Dengue and Tuberculosis. HRA have prepared and enclosed as <b>Annexure No.-40</b> and awareness programme have been conducted, enclosed as <b>Annexure -40A</b></p> <div data-bbox="843 875 1366 1574" data-label="Image"> </div>
<p>71 The Proponent shall carry out Occupational health surveillance which be a part of RA and include Biological Monitoring where practical and feasible and the tests and investigations relevant to the exposure (e g for Dust a XRay chest,For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologlo Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) estimation in Blood; For Inorganic</p>	<p><b>Complied</b></p> <p>Steps have been taken to carry out occupational health surveillance for works engaged in mines activities like audiometric tests for blasters, full ophthalmolocal tests for welders, for inorganic chromium exposure, fortnightly skin inspection by medical officer. Since Ostapal Chromite mines is only producing</p>

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	<p>Chromium-Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminium, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x14 inches and of good quality)</p>	<p>chromite ore all other mineral such as Asbestos, Silica, Gold, Kaolin, Aluminium, Iron, Manganese, Lead, Uranium is not applicable Record is maintained and kept properly.</p> <p><b>Annexure No.-40B</b> is enclosed for ready reference.</p>
72	<p>The Proponent shall maintained a record of performance indicators for workers which includes</p> <p>(a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5-24.9</p> <p>(b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities</p> <p>(c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1),Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age,</p> <p>(d)their hearing should not be affected. As a proof an Audiogram (first and last need to be presented),</p> <p>(e) they should not have developed any Persistent Back Pain Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement,</p> <p>(f) they should not have suffered loss of any body part.</p> <p>The record of the same should be submitted to the Regional Office, MoEF &amp; CC annually along with details of the relief and compensation paid to workers having above indications</p>	<p>Performance Indicator for workers &amp; employees are being maintained.</p> <p>a) There is no significant decline in their Body Mass Index and it is between 18.5-24.9</p> <p>(b) the Final Chest X-Ray compared with the base line X-Ray does not show any capacities</p> <p>(c) At the end of leaving job there is be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1),Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age,</p> <p>(d)Their hearing is not affected. As a proof an Audiogram is presented),</p> <p>(e) they have not developed any Persistent Back Pain Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement,</p> <p>(f) they have not suffered loss of any body part.</p> <p>Status of the same are given for reference. And the record is also being maintained. Report is also herewith submitted for MoEF &amp; CC, as <b>Annexure No.-41.</b></p>

<p>73</p>	<p>The Project Proponent shall ensure that 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</p>	<p><b>Complied.</b> Person working in dusty area wears protective respiratory devices during work. Further, all the vehicle engaged in operation are closed door vehicle ( Having A/C facilities). Regular awareness training is provided to all employees on safety &amp; health.</p> <div style="display: flex; justify-content: space-around;">   </div> <div style="display: flex; justify-content: space-around;"> <p>Close door vehicle used</p> <p>Training on safety Health</p> </div> <p>Further, Monthly Safety Town hall is conducted for creating more awareness on safety &amp; Health.</p> <div style="border: 2px solid green; padding: 10px; text-align: center;">  <p><b>Safety Town hall on March'2023</b></p> </div>
<p>74</p>	<p>Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the Completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.</p>	<p><b>Complied</b> All most all the workers/labors are coming from local area. So, colony is not required for them. There are two STP Provided having capacity 30KLD (20 + 10 KLD) for treatment of domestic effluents.</p> <div style="display: flex; justify-content: space-around;">   </div> <div style="display: flex; justify-content: space-around;"> <p>20 KLD STP</p> <p>10 KLD</p> </div>

**Six Monthly Compliance Report to EC of Ostapal Chromite Mines, M/s FACOR LTD**

**For The Period Oct'2022 to Mar'2023**

**EC Identification No.: EC22B001OR120821, Dated: 04.04.2022**

75	The proponent shall implement the mitigative measures as suggested in the Study Report on effect of chromite mines to nearest human habitation	To prevent contamination of Hexavalent chromium study has conducted by NIT , Rourkela. All the suggestions are strictly implemented. Details have been given in <b>Annexure No.-2.</b>
IX	<b>Corporate Environment Responsibility (CER)</b>	
76	As per the MoEF & CC, Govt. of India Office Memorandum dated 30.09.2020, the project proponent is enquired to prepare and implement Corporate Environment Responsibility (CER) Plan. The activities proposed under CER shall be restricted to the affected area around the project. The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villages and administration. The activities proposed for CER shall be implemented and to be completed within three years and annual report of implementation of the same along with documentary proof viz. photographs, purchase documents, latitude & longitude of infrastructure developed & road constructed needs to be submitted to Regional Office MoEF & CC annually along with audited statement and to the District Collector. It should be posted on the website of the project proponent.	<p>CER action plan has been prepared and submitted in EIA. Activities proposed under CER is restricted to only affected area. All the improvement is being undertaken by involving local community.</p>  <p>All the CER proposal will be completed within the timeline. Work is under progress, and it is a continuous process.</p> <p>Details of the CSR Expenses and evidence are enclosed in <b>Annexure No.-9</b> The report is submitted to MoEF &amp; CC and to the District Collector, Jajpur vide letter No. OCM/ENV/1554/2023, dated 20.04.2023., Ref <b>Annexure No.- 9A</b>. And the same also posted in website <a href="http://www.facorgroup.in">www.facorgroup.in</a></p>
77	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Regional Office of MoEF & CC, Bhubaneswar, SPCB Odisha along with the Six Monthly Compliance Report.	<p>EMP action plan has been prepared &amp; approved from competent authority &amp; implemented accordingly. Year wise funds earmarked is maintained in separate account provision.</p> <p>The details expenditure towards EMP is enclosed as <b>Annexure - 10</b></p>
X	<b>Miscellaneous</b>	
78	The Project Proponent shall prepare digital map (land use & land cover of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF & CC	<p>Complied. We are having a digital map for the entire lease and submitted to IBM. The details of the land use pattern is already submitted to Regional office MoEF &amp; CC , vide letter No.OCM/ENV/1142/2022, dated 08.08.2022 The submitted letter is enclosed as <b>Annexure No.-42</b></p>

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79	The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	It is NA as of now. Currently the mines is in running condition and therefore, the final closer is not required.
80	The project proponent shall establish a solar power plant with 30KVA capacity within the lease area as proposed.	<b>Complied.</b> Employees are staying outside the lease area and in that area there in solar power installed of about 40 KVA, for house hold use.
81	It shall be mandatory for the project management to submit six (06) monthly compliance reports on post environmental monitoring in respect of the stipulated terms and conditions in this Environmental Clearance to the State Environment Impact Assessment Authority (SEIAA) Odisha. SPCB& Regional Office of the Ministry of Environment & Forest. Odisha in hard and soft copies on 1 June and 1 December of each calendar year. The proponent shall also upload the Compliance report including results of monitored data as applicable in the website of the Ministry for monitoring of EC Conditions	<b>Complied.</b> The six-monthly compliance report is submitted along with all the environment monitoring report. And it is also uploaded in the website.  The last six-monthly Environment Compliance report was submitted on 30.11.2022 vide letter number OCM/ENV/1208/2022  The submitted copy of last six-monthly compliance copy is attached in <b>Annexure No-43</b>
82	The environmental statement for each Financial year ending 31 March in Form-V as mandated to be submitted by the project proponent to the Odisha State Pollution Control Board as prescribed under the Environment (Protection) Rules 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective to the MoEF & CC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.	<b>Complied.</b> Environment statement copy is submitted to Odisha State Pollution Control Board, Regional Pollution Control Board & Regional office of MoEF & CC. And It is also uploaded in the website for last FY 2021-22 in the Website link: <a href="https://www.facorgroup.in/esg/compliances/">https://www.facorgroup.in/esg/compliances/</a>  Submitted ref. letter copy of Environment Statement vide letter No.:OCM/ENV/1357/2022, dated 29.09.2022, is enclosed as <b>Annexure - 44</b>
83	The proponent shall submit/upload six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF &CC, Govt. of India, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely: SPM, RSPM, SO <sub>2</sub> , NO <sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain	<b>Complied.</b> After Submitting the six monthly compliance report for the period Oct'22 to Mar'23 ,it will be uploaded in the website & it is uploaded periodically, and same is also submitted to Regional office, MoEF & CC, Regional Office of the State Pollution Control Board. All the critical parameters are monitored and also displayed near main gate.




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		 <p align="center">Digital display Board Near Mian Gate</p>
84	The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MoEF &CC & its concerned Regional Office, SEIAA, Odisha, Central Pollution Control Board and State Pollution Control Board	<p><b>Complied.</b> Six monthly compliance report is submitted to MoEF &amp; CC &amp; Regional office of the State Pollution Control Board. The last Six Monthly Compliance report was submitted on 30.11.2022 vide letter number OCM/ENV/1208/2022</p> <p>The last Six Monthly Compliance submitted ref. copy is enclosed as <b>Annexure No.-43</b></p>
85	The SEIAA, Odisha may revoke or suspend this EC. if implementation of any of the above conditions is not satisfactory. The SEIAA, Odisha reserves the right to alter modify the above conditions or stipulate any further condition in the interest of environment protection.	<p><b>Complied.</b> All the implementations are as per the standards &amp; complied.</p>
86	The project proponent shall augment infrastructure on drinking water, health care and education in nearby villages as per time bound action plan submitted	<p><b>Complied.</b> It is implemented as per action plan.</p> <p>Details of work done in the field of Drinking water , Health &amp; Education is eclosed in <b>Annexure No.-9</b></p>
87	The project proponent shall obtain permission from DGMS under 106(2b) to carry out blasting operation within the lease area.	<p><b>Complied.</b> Permission from DGMS under regulation 106(2b) of MMR'1961 to carry out blasting operation ,obtained vide permission No.: NO: 180020 SEZ Bhubaneshwar Region Exemp 2021 8922, dated Date: 28/05/2021.Copy of permission is enclosed as <b>Annexure – 45</b></p>
88	The site will be visited by the sub-Committee of SEAC after six months to review the progress of recommendations of SEAC on specific conditions	<p>All the condition mentioned are implemented &amp; ready for review.</p>
89	The concerned Regional Office of the MoEF & CC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF & CC officer(s) by furnishing the requisite data information / monitoring reports	<p>It is ensured to extend the full support to the authority as per their requirement.</p>

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90	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 and any other Court of Law relating to the subject matter	Complied.
91	This Environmental Clearance (EC) is subject to orders/judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable	No appeal filed against this Environment Clearance in the National Green Tribunal. Hence complied.
92	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	No appeal filed against this Environment Clearance in the National Green Tribunal. Hence complied.

  
**MINES MANAGER 10/05/2023**  
**OSTAPAL CHROMITE MINES**