

HIL/SBM/696/2021

To.

25.11.2021

The Addl. Principal Chief Conservator of Forest (Central), Ministry of Env., Forest and Climate Change, Regional Office (WCZ)

Ground Floor, East Wing, New Secretariat Building, Civil Line, Nagpur-440001 (MS)

Sub:- Status of compliance of EC condition (Half yearly status of compliance report) in respect of Samri Bauxite Mine (Lease area- 2146.746 Ha.) of M/s Hindalco Industries Limited of Chhattisgarh state for the period from April - 2021 to September - 2021.

Ref No:- Environment Clearance Letter No-J-11015/353/2007-IA. II (M) dated July 27, 2007

Dear Sir.

We do herewith submit half yearly status of EC compliance report in respect of Samri Bauxite Mine, Lease area - 2146.746 Ha, of M/s Hindalco Industries Limited P.O- Kusmi, Dist- Balrampur- Ramanujganj, Chhattisgarh state, PIN-497224 for the period from April -2021 to September -2021. The lease details is as below:-

| Lease area | Production Capacity | Lease Period |
|--------------|---------------------|--|
| 2146.746 Ha. | 500000 Tonnes | 24.06.1998 to 23.06.2048 (50 years) |

We are also sending you the soft copy of the report to your good on E mail - moef.ddn@gmail.com for your ready reference.

We trust that the measures taken towards environment safeguard comply with the stipulated environmental conditions.

We assure that we comply all the conditions laid down in the consent letter and also abide to follow all the Rules and Regulations.

Thanking you,

Yours's faithfully

For Hindalco Industries Limited

(VKS Chauhangent of Mines

Agent of Mines Samn Mines Division
E-Mail - chauhannes Wolffer adityabirla.com

Encl:-

- 1. Half yearly status of compliance of Environment condition as annexure-I.
- 2. Environment Status Report from April -2021 to September -2021, enclosed as annexure-II.
- 3. Renewal copy of Consent to Operate from CECB enclosed as annexure -III.
- 4. Production report from April-2021 to September -2021 enclosed as annexure-IV.
- 5. Status report of mined out, reclaimed and afforestated land as annexure-V.
- 6. Actual expenditure incurred in protection of Env. from April -2021 to September -2021 as annexure-VI.
- Ground Water NOC enclosed as Annexure VII.
- Soft copy of documents by CD.

C.C.- The Regional Officer, CECB, Ambikapur

HINDALCO INDUSTRIES LIMITED

Samri Mines Division, Baba Chowk At & Post - Kusmi, PIN: 497 224, Distt. - Bairampur-Ramanujganj (CG), INDIA Telephone + 91 7778 274326-27, Ahura Center, 1st Floor, B-Wing Mahakali Caves Road, Andheri (East) Mumbai 400 093, INDIA Telephone +91 22 6662 6666

Webste : www.hindalco.com
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Corporate Identity No-L27020MH1958PLC011238.

EC COMPLIANCE REPORT (April -2021-September -2021)

Of

Samri Bauxite Mine

(Mine Lease Area of 2146.746 Ha) Capacity -5.00 LTPA

Located in

Village -Samri, Amtahi, Kutku, Dumerkholi, Datram, Rajendrapur, Gopatu, Charhatkala Tehsil - Kusmi, District - Balrampur-Ramanujganj, State - Chhattisgarh

M/s Hindalco Industries Limited

(Samri Mines Division)
Balrampur-Ramanujganj District (C.G.)

25.11.2021

Status of Compliance from April -2021 to September -2021 of Environmental Condition laid down by MOEF

Samri Bauxite Mine

The status of compliance of the conditions with reference to environment clearance letter no. J-11015/353/2007 - IA.(IIM) dated 27.07.2007 of Ministry of Environment & Forest, New Delhi, for Samri Bauxite Mine is as under:-

COMPLIANCE STATUS

| S.N. | Conditions | Action |
|------|---|---|
| A. | Specific Conditions | |
| i. | Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority. | has been engagement plan |
| ii. | Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ petition (Civil) No. 460 of 2004 as may be applicable to this project. | Noted. |
| iii. | Conservation plan for schedule I fauna shall be prepared in consultation with Wildlife Department and submitted to the ministry for record. | The Conservation plan for schedule I fauna have been prepared and approved by competent authority & Submitted to ministry (Annexure -B). |
| v. | A comprehensive report on the details of land oustees, their socio- economic profile and action plan for their rehabilitation including formation of self-help group who can facilitate promotion of economic opportunity to local indigenous people shall be submitted to the Ministry for record. | A copy of report has been submitted to ministry. As a part of CSR activities, company has formed SHG group to facilitate promotion of economic opportunity to local indigenous people. In total there are 21 no. of SHGs and 212 Beneficiaries who are directly engaged in income generation activities. Detailed CSR report is enclosed (Annexure -C). |
| | proper slope with adequate safeguards and shall be backfilled (wherever applicable) for reclamation and rehabilitation of mined out area. | Top soil generated during mining operation is being concurrently spread on backfilled area to restore its original forms immediately. However, if required it will be stacked properly with proper slope and adequate safeguards. |

| S.N. | Conditions | Action |
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| vi. | Over burden (OB) shall be stacked at earmarked dump site (s) only and shall not be kept active for long period. The maximum height of the dump shall not exceed 30m, each stage shall preferably be of 10m and over all slope of the dump shall not exceed 28°. The OB dump shall be backfilled. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The OB dumps shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests on six monthly basis. | As such there is no any active OB dump at present. As per approved Mining Plan, OB generated during mine operation is being utilized for concurrently back filling of the mined out area for reclamation purpose. Small old inactive OB dump has been stabilized by vegetation with suitable native species to prevent erosion and surface run off. Photo attached as Annexure-D. |
| vii. | Garland drains shall be constructed to arrest silt and sediment flows from soil and mineral dump. The water so collected shall be utilized for watering the mine area, roads, greens belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly. Garland drain size, gradient and length shall be constructed for both mine pit and for waste dump and sump capacity shall 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 shall also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garlands drains and desilted at regular intervals. | Old inactive OB dump has been stabilized by vegetation. Garland drain is provided to arrest silt and sediments flows from above mentioned OB dump. At present there is no any active OB dump. Entire waste generated during mining operation is being simultaneously backfilled in the mined out pit. Garland drains of appropriate size, gradient and length (200m length, Gradient - Gentle, Depth - 0.5m) have been made around the active mining pits coupled with arrester to arrest silt from soil and drains are being maintained. The drains are regularly desilted before the monsoon. The Water so collected are being used for green belt development and in Sprinkling of the Haul Road. Sump of adequate capacity is also developed. |
| viii. | Slope of the mining bench and ultimate pit limit shall be as per the mining scheme approved by Indian Bureau of Mines. | The slope of Mining bench and ultimate pit is being maintained as per provision of approved mining scheme. |
| ix. | Drilling and blasting (if any) shall be conducted by using dust extractors/wet drilling. | Wet drilling technique are being used in drilling operations. |

| Plantation shall be raised in 53.87 ha of the ML area, haul roads, OB dump sites etc. Green belt development shall be carried out considering CPCB guidelines including selection of plant spacies and in consultation with the local DFO/Agriculture Department. Herbs and shrubs shall also form a part of afforestation programme beside tree plantation. The density of the trees shall be around 2500 plants per ha. The company shall involve local people with the help of self-help group for plantation. | S.N. | Conditions |
|---|------|---|
| | | Plantation shall be raised in 53.87 ha of the ML area, haul roads, OB dump sites etc. Green belt development shall be carried out considering CPCB guidelines including selection of plant spacies and in consultation with the local DFO/Agriculture Department. Herbs and shrubs shall also form a part of afforestation programme beside tree plantation. The density of the trees shall be around 2500 plants per ha. The company shall involve local people with the help of self- |
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Action

tal 142.881 Ha. has been forested with native species till The plantation claimed area is carried out as r plan and being carried out suggested by local vernment authority. The nsity is being maintained out 2500 plant per hectare th the species like Karanj, ango, babul, Pears, Jamun, nla & guava, etc. Kaju has en planted as a pilot plant. part from this, Tea plantation oject has been started in mri with a focus on Local conomic Development. We ve planted 16,000 plings on 2Ha. of reclaimed nd. Moreover we are focused commercial farming of pears samri operational area and in is year we have carried out ars plantation on 3.22 Ha. th 9517 saplings during this ar & cumulative antation over 29,519 Ha. area th 23004 saplings. Social restry is also couraged among the local lagers. . Year wise plantation enclosed as Annexure-E.

addition to it, we have veloped "Aditya Udyan" on 6 Ha. of reclaimed land and anted a variety of Fruit aring Plants. Also, we have arted integrated fish farming thin the boundary of Aditya dyan with 25000 fish spawns. e main objective of this is the versification of Income surces of the SHG involved in is project. Eventually we will iff the fish spawns after 4-5 onths on large ponds with a cus on commercial fish rming. In this year, we have anned for the plantation of edicinal Herbs, development Kitchen and butterfly garden in next year inside Aditya Photographs Commercial Fish Farming is attached as Annexure-F.

| S.N. | Conditions | Action |
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| xi. | The project authority shall implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board. | The ground water table does not intersect our mining operation because of shallow depth of mining. However, Rain water harvesting structure (Ponds and Wells) of area 2.18 Ha., 1.52 Ha. and 5Ft.X10Ft. have been constructed as conservation measures in mined out area for the conservation/augmentation of ground water resources. This further adds to Water Credit of the lease area. Photograph of recharge well and other rainwater harvesting structure/Pond is enclosed as Annexure -F. |
| xii. | Regular monitoring of ground water level and quality shall be carried out 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 MOEF, Central Ground Water Authority and Regional Director Central Ground Water Board. | The depth of our mining operation varies from 15-20 Mts. The ground water table is below the depth of our mining operation. Piezometers has been installed at strategic location in the Lease area for monitoring the ground water level on a regular basis, the average depth of which is between 25 to 30 Mts. Hence there is no intersection of groundwater level during course of mining operation. Regular monitoring of ground water quality is being carried out. The analysis reports are being submitted to Regional Office, CECB, Ambikapur and Raipur. Regular monitoring of ground water level is being carried out by piezometer installed in the lease area and is found below the level of mining operation. The ground water Quality report is attached in Annexure – II. |
| xiii. | Prior permission from the competent authority shall be obtained for drawl of ground water, if any. | Ground water NOC has been obtained from the competent authority for domestic purpose. Also, digital water meters with telemetric system have been installed in the lease area for monitoring water consumption. |

| S.N. | Conditions | Action |
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| xiv. | Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation ores and others shall have valid permissions as prescribed under Central Motor Vehicle Rules, 1989 and its amendments. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The vehicles transporting ores shall be covered with a tarpaulin or other suitable enclosures so that no dust particles/ fine matters escape during the course of transportation. No overloading of ores for transportation shall be committed. | Regular and periodic maintenance of HEMM is being carried out for control of vehicular emission in mines area. The bauxite ore are transported in trucks with tarpaulin cover up to EUP/Railway siding. Vehicle used for transportation are having valid permit. No overloading of ores for transportation is allowed to prevent spillage of material. |
| XV. | A Final Mine Closure Plan, along with details of Corpus Fund, shall be submitted to the Ministry of Environment & Forests, 5 years in advance of final mine closure for approval. | We accept the condition. A progressive mine closure plan approved by IBM is in place. IBM is competent authority to approve the final mine closure plan. Based on the present resource estimate, and peak rated production capacity, the tentative balance life of mine is around 13.56 years. However, after completion of further detailed exploration programme and geological investigation, the balance life of mine is subject to change with respect to EC Capacity and cut -off grade of mineral at that particular time. Final Mine closure plan along with details of Corpus fund will be submitted within prescribed timelines in accordance with |
| B. | General Conditions | law to competent authority. |
| i. | No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment & Forests. | Noted. |
| ïi. | No change in the calendar plan including excavation, quantum of mineral bauxite ore shall be made. | Calendar plan (IBM Approved Mining Plan/scheme) prepared for the mine is being followed. |

| S.N. | Conditions | Action |
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| iii. | Conservation measures for protection of flora and fauna in the core and buffer zone shall be drawn up in consultation with the local forest and wildlife department. | Rs.1.6 crore to competent authority for the implementation of measures for the protection of flora and fauna under approved wild life conservation plan. The suggestions of local forest department are being implemented for conservation of flora and fauna in and around lease hold area. Important measure being implemented for conservation of flora and fauna in and fauna are as follows. |
| | | a) Company have been provided solar LED torch and florescent Jackets to Staff of forest department, Ambikapur for patrolling and monitoring the movement of wildlife encroachment, cutting poaching fire etc. |
| | | b) Veterinary camp is being conducted for immunization of cattle with the help of block veterinary staff. c) Awareness programme related to wildlife conservation |
| | | is being conducted. d) Eco-development activities like poultry, piggery, bee keeping etc. are being organized. |
| | | e) Controlled blasting is being carried out so as reduce vibration and noise. Such operation is being carried out in day time only and its use is minimized. |
| | | f) Plantation is regular activity along with the development of Green belt all around the Lease Area. Photographs of Green Belt attached as ANNEXURE – F . |

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| S.N | Conditions | Action |
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| | | g) "Aditya Udyan" has been developed on 2.6Ha. of Reclaimed land and a wide variety of fruits saplings like Mango, Guava, Litchi and pears are planted along with a centrally developed Rose garden. |
| | | h) Integrated Fish Farming has been started at Aditya Udyan, Gopatu in Samri operational area and 25000 fish spawns has been released, with an objective to help the local communities for diversification of Income Sources. This has been done in consultation with Govt. body. |
| | | i) We are also in the process of starting the construction of a Bio-Park at Samri as an initiative towards Eco-System Restoration. This initiative will also showcase the Samri Stakeholders that each and every species can grow on the reclaimed land. We have planned for the construction of Bamboo Cottage along with the development of Kitchen Garden, Medicinal Garden, Flower Garden and Panchavati Garden. Photos attached as ANNEXURE -F. |
| | | j) We have also carried out plantation of 1800 Saplings outside our lease area in various School, NGOs etc. on special occasion as an initiative to spread awareness about the importance of afforestation. |
| iv. | Four ambient air quality-monitoring stations shall be established in the core zone as well as in the buffer zone for RPM, SPM, SO ₂ , Nox monitoring. Location of the stations should be decided based on the meteorological data topographical features and environmentally and ecologically sensitive targets and | Ambient Air quality monitoring is being carried out as per guideline and is being followed. For this, We have already appointed Anacon Laboratories Pvt. Ltd. NABL accredited by |

| S.N. | Conditions | Action |
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| | frequency of monitoring should be undertaken in consultation with the State Pollution Control Board. | regular environmental monitoring. Analysis Report (from April-21 to Sept-21) is enclosed as <i>Annexure-II</i> . |
| v. | Data on ambient air quality (RPM, SPM, SO ₂ , and NOx) should be regularly submitted to the Ministry including its Regional office located at Bhopal and the State Pollution Control Board / Central Pollution Control Board once in six months. | Data of ambient air quality (RPM, SPM, SO2, and NOx) are being submitted to CECB and are being submitted to other regulatory authorities as per guidelines. Data of ambient air quality (RPM, SPM, SO2 and NOx) from April- 21 to Sept 21 is enclosed as <i>Annexure-II</i> . |
| vi. | Fugitive dust emission from all the sources shall be controlled regularly. Water spraying arrangements on haul roads, loading and unloading and at transfer points shall be provided and properly maintained. | Fugitive dust emission from generating sources is being controlled. The dust extractor, wet drilling, regular water spraying with 12 KL portable water tanker in the mine lease hold area is being carried out regularly. Rainwater collected into the mine pit is being utilized for dust suppression purpose. Black top road has been constructed up to pit head to reduce dust problem. Photo attached as <i>Annexure-G</i> . |
| vii, | Measures shall be taken for control of noise levels below 85dBA in the work environment. Workers engaged in operations of HEMM, etc. shall be provided with ear plugs / muffs. | The noise level in working area is being maintained below the prescribed limit. As protective measures, workers engaged in operations of HEMM, etc. is being provided with ear plugs / muffs. The proper maintenance of HEMM is being carried out to control noise emission. |
| riii. | 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 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents. | For the waste water generated from workshop, oil and grease separation pit is constructed. Further no waste water is generated from our mining operation. |

| S.N. | | Action |
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| ix. | Personal working in dusty areas shall be provided with protective respiratory devices and they shall also be imparted adequate training and information on safety and health aspects. | adequate personal protective equipment to all workers and it |
| х. | Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed. | Periodical and Initial medical examination of all workers are being carried out as per provision of Mines Act. |
| xi. | A separate environmental management cell with suitable qualified personnel shall be set- up under the control of a Senior Executive, who will report directly to the Head of the Organization. | Environment cell is already in place at Samri Mines Division headed by Head (Mines) and comprises of suitable qualified persons. Constitution of Environment Management cell is enclosed in <i>Annexure-H.</i> |
| cii. | The project authorities shall inform to the Regional Office of the Ministry located at Bhopal regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work. | Financial closure plan not applicable as it is an operational mines. |
| ciii. | The funds earmarked for environmental protection measures shall be kept in separate account and should not be diverted for other purpose. Year wise expenditure shall be reported to the Ministry and its Regional Office located at Bhopal. | Adequate fund provision is already earmarked for environmental protection measures and will not be diverted to other purpose. The year wise expenditure is being submitted to concern authorities as per guidelines |
| iv. | The project authorities shall inform to the Regional Office located at Bhopal regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development. | Financial closure plan not applicable as it is an operational mines. |

| S.N. | Conditions | Action |
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| xv. | The Regional Office of this Ministry located at Bhopal 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. | extended to regulatory authorities. |
| xvi. | 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. | We have forwarded the copy of clearance letter to Panchayat /local NGO in our area. The copy of same has already been submitted to your good office. |
| xvii. | 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. | The copy has been displayed by CECB in Surguja Collectorate. |
| xviii. | 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 and Forests at http://envfor.nic and a copy of the same shall be forwarded to the Regional Office of this Ministry located Bhopal. | The information regarding environment clearance has been published in two local newspapers Hari Bhumi & Ambika Vani. The copy of same has been already submitted to your good office. News paper clip is enclosed in <i>Annexure I</i> . |
| xix. | The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection. | Noted. |
| xx. | 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 Environment (Protection) Act, 1986. | Noted. |
| xxi. | The above conditions shall be enforced interalia, 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. | Noted. |

EC Compliance for Samri Bauxite Mine (Area: 2146.746 Ha.) Balrampur, State - Chhattisgarh
M/s. Hindalco Industries Limited, Compliance Period: April -2021 - September -2021

Hope the above compliance will be found in order.

Yours truly,

(For Hindalco Industries Limited)

(Vijay Chauhancent of Mines Samn Mines Division Agent of Mines Industries Ltd

Encl.: As above