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SPEED POST

Ref : HZL/RA/ENV/MoEF/2018-19/ November 22, 2018

To,

The Director
Govt. of India
Ministry of Environment, Forest and Climate Change
Regional Office, Kendriya Bhawan ,
5th floor, Sector- H, Ali ganj
LUCKNOW (UP)

Sub: six monthly environmental compliance reports from April 2018 to October -18.

Ref : Env clearance vide No. : J-11015/267/2008-IA.II (M) Dtd 11.12.2009
Amendment dated : 05.03.2012 and 22.08.2014

Dear Sir / Madam,

Please find enclosed herewith the compliance status report of above referred Environmental Clearance granted by the Ministry of Environment, Forest and Climate Change for the period of **April 2018 to September -18** along with soft copy in a CD.

Hope you find this in order.

Thanking you,

Your faithfully

22/11/2018.

(Rajendra Dashora)
Site President (RA Mine)

Cc to:

1. In-Charge (Zonal office)
   Central Pollution Control Board
   Zonal Office (Central)
   3rd Floor, Sahkar Bhawan,
   North T.T. Nagar,
   Bhopal – 462 003 (MP)

2. Member Secretary
   Rajasthan Pollution Control Board
   4 Institutional Area, Jhalana doogri
   Jaipur (Raj)

3. The Regional officer
   Rajasthan Pollution Control Board
   18, Azad Nagar, Pannadhay Circle
   Mining Engineer Office Road
   (Near Telephone Exchange) Bhilwara

Hindustan Zinc Limited
Rampura Agucha Mines, P.O. Agucha, Dist. Bhilwara (Rajasthan) - 311 022
M +91-9001294956-57, F +91-1483 229012 www.hzlindia.com

Registered Office : Yashad Bhawan, Udaipur (Rajasthan) 313 004
CIN No. L27204RJ1966PLC001208

HINDUSTAN ZINC LIMITED
RAMPURA AGUCHA MINE

MoEF Environmental Clearance for Expansion of Rampura Agucha Lead and Zinc Opencast and Underground Mining Project (from 5.00 to 6.15 mTPA) and Beneficiation Capacity of Beneficiation Plant (from 5.00 to 6.50mTPA)
Env Clearance Vide No. J-11015/267/2008-IA.II (M) Dtd 11.12.2009

SNo	Condition	Status
i	The project proponent shall obtain Consent to Establish and Consent to Operate from the Rajasthan State Pollution Control Board and effectively implement all the conditions stipulated therein	Consent to establish obtained from RSPCB. Consent to Operate granted by RSPCB vide File No. F(Mines)/ Bhilwara (Hurda) /12(1)/2015-2016/2555-2559 and order No 2015-2016/ Mines/ 6781 dated 24/09/2015, and the conditions stipulated are implemented. Renewal Application submitted on 31 Oct 2017.
ii	The environmental clearance is subject to approval of the State Landuse Department, Government of Rajasthan for diversion of agricultural land for non-agricultural use.	Land purchased within Mine Lease area and converted in name of HZL for mining
iii	The project proponent shall ensure that no natural watercourse and/or water resources shall be obstructed due to any mining operations.	No natural watercourse or water resources are obstructed due to mining operations.
iv	The top soil shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation.	Top soil utilized on waste dump for its stabilization and plantation.
v	The over burden generated during the mining operation shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time and its phase-wise stabilization shall be carried out. The maximum height of the dump should not exceed 100m having 5 terraces as recommended by the Central Institute of Mining and Fuel Research, Dhanbad. The recommendations made by the Central Institute of Mining and Fuel Research, Dhanbad shall be effectively implemented. The over burden dump 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 &	Amendment in this condition was granted in EC vide letter No J-11015/267/ 2008-I-A.II (M) dated 22nd August, 2014. The maximum height of the dump shall not exceed 140 m (in two lifts of 20m each).Compliance report enclosed. As annexure VIII. Waste dump vegetated fase manner. Waste dump are covered by applicable of geotextiles.

	Forests and its Regional Office located at Lucknow on six monthly basis	
vi	The void left unfilled in an area of 25 ha shall be converted into water body. The higher benches of excavated void/mining pit shall be terraced and plantation done to stabilize the slopes. The slope of higher benches shall be made gentler. Peripheral fencing shall be carried out along the excavated area.	Will be complied during the mine closure.
vii	Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from mine working and over burden dump. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted particularly after monsoon and maintained properly. Garland drain (size, gradient and length) shall be constructed for both mine pit and over burden dump and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and desilted at regular intervals.	Garland drain of adequate size is constructed along the waste dump toe & mining pit, along with siltation pond that provides adequate retention time for settling of silts and rain water collection lined sump of about 15000 Cum volume. The water collected is utilized for watering the mine area, roads, green belt development etc Annexure –IX
viii	Dimension of the retaining wall at the toe of dump and OB benches within the mine to check run-off and siltation should be based on the rain fall data.	The retaining wall at the toe of the OB dump is constructed along with garland drain.
ix	Regular monitoring of subsidence movement on the surface over working area and impact on water bodies/vegetation/ structures/ surrounding shall be continued till movement ceases completely. In case of observation of any high rate of subsidence movement, appropriate measures shall be taken to avoid loss of life and material. Cracks shall be effectively plugged with ballast and clayey soil/suitable material.	A comprehensive assessment and monitoring of subsidence movement on the surface over working area is done by a dedicated team comprising of Rock mechanic engineers. There has been no subsidence or movement observed.
x	All the mine entries shall be above the highest flood level to avoid any anticipated flooding of mine from the surface water during the rainy season	The underground mine opening is at 392 mRL against highest flood level at Agucha reservoir of 391 mRL. Further, A peripheral bund is constructed around the mine pit for protection of the mine from flooding due to rain water.

xi	In areas where subsidence is anticipated in shallow mineral occurrence, such areas be identified and provided with garland drains to ensure draining of water and avoid ingress of the same in to the underground mine.	No subsidence is anticipated in the proposed area. Garland drain is already constructed as a safety measure to avoid ingress of water into underground mining.
xii	The project authorities shall check the possibility of existence of fault(s) before deciding about the thickness of safe barrier required to be maintained between the working face and the water bodies, if any, in consultation with the Director General Mines & Safety (DGMS). De-pillaring should also be carried out after taking prior approval of the DGMS.	Mining activities are carried out as per Mine plan as approved by IBM. De-pillaring, if required shall be carried out after prior approval of the DGMS.
xiii	The project proponent shall carry out conditioning of the ore with water to mitigate fugitive dust emission, without affecting flow of ore in the ore processing and handling areas.	Water sprinklers are installed on conveyer belts, transfer points, and conditioning of ore is done during crushing to mitigate fugitive dust.
xiv	The effluent from the ore beneficiation plant shall be treated to conform to the prescribed standards and the tailings slurry shall be transported through a closed pipeline to the tailing dam.	Tailings are being disposed through closed pipe line to the earmarked Tailing dam after necessary treatment.
xv	The decanted water from the tailing dam shall be re-circulated and there should be zero discharge from the tailing dam. Acid mine water, if any, shall be neutralized and reused within the plant.	Tailing dam water is completely reused in process plant and zero discharge is maintained. There is no acid mine drainage occurring in the mine.
xvi	Plantation shall be raised in an area of 670.7ha including a green belt of adequate width by planting the native species around ML area, OB dump, around tailing dam, around beneficiation plant, roads etc. in consultation with the local DFO / Agriculture Department. In addition, the township area shall also be adequately planted. The density of the trees should be around 1500 plants per ha. Green belt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.	Green belt developed all along the acquired mine lease area. Progressive plantation is being carried out on waste dump benches every year as per plan submitted. Till date 277.20 Ha land is under plantation. Plantation in remaining area will be completed by closure of mine. Additional plantation has been done in 37.70 ha in the township and along road sides. Annexure - X

xvii	Regular water sprinkling should be carried out in critical areas prone to air pollution and having high levels of SPM and RPM such as haul road, loading, unloading and transfer points and other vulnerable areas. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	Water sprinkling is carried out by 4 Nos. of 40 KL water sprinkler on Haul roads to mitigate air pollution in mine area. Dust extraction system and Water sprinkling nozzles are installed at the crusher, transfer points and coarse stock piles for dust suppression. The parameters of Ambient Air quality monitored are within the prescribed norm of CPCB. Annexure-XI
xviii	The project authority should implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.	Till date 3 Nos. of anicuts have been constructed for groundwater augmentation in consultation with the CGWB. Annexure -XII
xix	Regular monitoring of ground water level and quality shall be carried out in and around the project area (mine lease, beneficiation plant and tailing dam) by establishing a network of existing wells and installing new piezometers during the operation. The periodic monitoring [(at least four times in a year- pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season)] shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office Lucknow, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity; necessary corrective measures shall be carried out.	Regular groundwater monitoring is being done by piezometers and wells outside and inside the lease area. Report enclosed as Annexure -I Six monthly reports are submitted to MoEF & CPCB. Quarterly report being sent to RSPCB, CGWA and CGWB.
xx	The project proponent shall ensure that no additional water is drawn for the expansion project. The additional requirement of water will be met out of the water saved by adopting water conservation measures.	No additional water is drawn. The additional requirement of water if any in future will be met out by water conservation measures.

xxi	Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with the Regional Director, Central Ground Water Board.	Various rainwater harvesting measures are implemented including the construction of rainwater collection pond of about 1.3 Lakh cum in the township, 65,000 and 15,000 cum storm water ponds in the mine lease area. Annexure XIII
xxii	Regular monitoring of groundwater quality around the tailing dam shall be carried out in consultation with Central Ground Water Authority and records maintained. It shall be ensured that the groundwater quality is not adversely affected due to the project	Groundwater quality is regularly monitored around the tailing dam through piezometers within ML area and wells inside as well as outside the lease area. The groundwater quality report is being submitted to MoEF, CPCB RSPCB, CGWA and CGWB on regular basis.
xxiii	Groundwater and surface water in and around the mine shall be regularly monitored at strategic locations for heavy metals such as Ni, Co, Cu, Zn and Cd. The monitoring stations shall be established in consultation with the Regional Director, Central Ground Water Board and State Pollution Control Board	Ground and surface water is regularly monitored for heavy metals. Report enclosed as in point no xix.
xxiv	Vehicular emissions should be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The vehicles should be covered with a tarpaulin and shall not be overloaded	Periodic preventive maintenance of vehicles is part of our operations. All the trucks are covered with tarpaulin while transportation of concentrates to the smelters and no overloading is allowed. Annexure XIV
xxv	Blasting operation should be carried out only during the daytime. Controlled blasting should be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented	Blasting operation is carried out with various mitigation measures as per DGMS guidelines to ensure the fly rocks are arrested. The vibrations monitored are well within the prescribed limits by DGMS.
xxvi	Drills shall either be operated with dust extractors or equipped with water injection system	Wet drilling system is adopted.

xxvii	Digital processing of the entire lease area using remote sensing technique should be done regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment and Forests and its Regional Office, Lucknow	Noted. The land use & land cover change study carried out in 2018. Copy already submitted on 28/05/2018. Annexure-XV
xxviii	The tailing dam shall be lined by LDPE lining on the sides as the height of the dam is raised. The ultimate height of the dam shall be maintained to 51m and provided with garland drains. The disaster management plan for tailing dam shall be prepared and implemented	The sides of the tailing dam are lined with HDPE. The present height of tailing dam is 51 meter. Garland drains are constructed around the tailing pond with pumping arrangement to collect any seepage and rainwater runoff back to tailing pond. Disaster management plan for the tailing pond is prepared and implemented. Annexure XVI
xxix	The recommendations of the study report of NEERI, Nagpur on pollution vulnerability of aquifer shall be effectively implemented and action taken report submitted to the Ministry and its Regional Office, Lucknow on six monthly basis	Complied on the recommendations of NEERI i.e. network of piezometer established and report submitted on six monthly basis. Report enclosed as point no xix.
xxx	The project proponent shall regularly analyse the waste generated from the mining (at least once a year) for heavy metals such as Ni, Co, Cu, Pb, Zn and Cd and the data thus collected may be sent regularly to Ministry of Environment and Forests and its Regional Office, Lucknow. It should be ensured that the parameters conform to the prescribed norms	Being analysed and report is submitted on six monthly basis. Annexure II
xxxi	The recommendations of the study report on blood lead levels of children to monitor levels of lead in human system carried out by National Institute of Occupational Health, Ahemdabad shall be effectively implement and action taken report submitted to the Ministry and its Regional Office, Lucknow on six monthly basis	As recommended by the NIOH,regular health checkups are carried out for the mine personnel and regular health checkup organized in nearby villages to keep a track of the health status.
xxxii	Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly	Pre-placement medical examination and periodical medical examination of the employees are being carried out at regular interval as per the Mine Act.
xxxiii	Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and the wastewater generated during	Sewage treatment plant of 425 KLD capacity in colony and 300 KLD in mine area operating

	mining operation	efficiently. Oil & Grease Traps installed and water reused in process. Annexure XVII
xxxiv	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project	No construction labour housing is proposed in mining area. However, the sanitation and drinking water facility is provided to the workers, working at site.
xxxv	Acid mine water, if any, has to be treated and disposed of after conforming to the standard prescribed by the competent authority	No acid mine water generated & mine pit water is used in process plant.
xxxvi	The critical parameters such as RSPM (Particulate matter with size less than 10µm i.e., PM_{10} and with size less than 2.5µm i.e., $PM_{2.5}$), NOX in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically . Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The circular No. J-20012/1/2006-IA.II(M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance	Monitoring of Ambient air at 3 locations inside mine and 3 locations outside the mine area is regularly carried out. Monitoring report is enclosed as Annexure III. Peak Particle velocity of blast vibration is being monitored for every blast & records are maintained. No effluent, treated or untreated, is discharged outside the project area as Zero discharge is maintained at all times. Monitoring data are displayed at Main Gate. Annexure XVIII.
xxxvii	A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval	A Final Mine Closure Plan along with details of Corpus Fund will be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.
General Conditions		
i	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests	Noted
ii	No change in the calendar plan including excavation, quantum of mineral lead and zinc ore and waste should be made	Noted
iii	Conservation measures for protection of flora and fauna in the core & buffer zone should be drawn up in consultation with the	Noted, Plantation of natural species in consultation with local forest department is being

	local forest and wildlife department	implemented. No schedule –I animals present in core and buffer zone.
iv	Atleast four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10µm i.e., PM_{10} and with size less than 2.5µm i.e., $PM_{2.5}$) 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 frequency of monitoring should be undertaken in consultation with the State Pollution Control Board	Six Ambient air monitoring locations, three in core zone and buffer zone each are selected in consultation with the SPCB, considering the meteorological data and the human settlements as sensitive targets. There are no ecologically sensitive targets. AAQ monitoring is carried out every fortnightly.
v	Data on ambient air quality [(RSPM (Particulate matter with size less than 10µm i.e., PM_{10} and with size less than 2.5µm i.e., $PM_{2.5}$) SO_2 & NO_X] should be regularly submitted to the Ministry including its Regional office located at Lucknow and the State Pollution Control Board / Central Pollution Control Board once in six months	The AAQ monitoring data is submitted every six monthly to MoEF Lucknow , CPCB Bhopal and SPCB Jaipur.
vi	Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained	Same as in point xvii above.
vii	Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs	Various measures including installation of silencers, mufflers, vibration pads, noise insulation, acoustic enclosures and suitable PPE's are provided at design and operating stage for reducing the noise levels at work place below 85dB(A). Annexure IV
viii	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 should be installed before discharge of workshop effluents	Oil & Grease trap exists at workshop drain and overflow water is being used in process plant. Water Analysis is enclosed. Annexure Annexure V Oil trap photo Annexure -XIX
ix	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. Occupational health	All the personal protective equipments are provided to all the workmen, Vocational Training is mandatory for all the workmen as per the Mines Rules.

	surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed	Periodical medical examination being done regularly as per Mine Act.
x	A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization	Environment Management Cell has been set up having adequate qualified Executives and a Senior executive who reports to Location Head directly.
xi	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office located at Lucknow	Noted, Environmental funds are earmarked for environment work only. Environmental expenditure is reported on six monthly basis enclosed as Annexure VI
xii	The project authorities should inform to the Regional Office located at Lucknow regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work	Noted
xiii	The Regional Office of this Ministry located at Lucknow shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports	Noted
xiv	The project proponent shall submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environment and Forests, its Regional Office Lucknow, the respective Zonal Office of CPCB and the SPCB. The proponent shall upload the status of compliance of the EC 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 the Ministry of Environment and Forests, Lucknow, the respective Zonal Officer of CPCB and the SPCB	Being submitted regularly to MoEF Lucknow, CPCB Bhopal and SPCB Jaipur. Last report submitted on Oct 2018 The status of compliance of the EC conditions are uploaded on company's website and same is regularly updated.
xv	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations, if any,	EC letter sent to all the authorities on 01/01/2010

	were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent	
xvi	The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collector's office/ Tehsildar's Office for 30 days	Shall provide necessary support, if any.
xvii	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned 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 Regional Office of the Ministry of Environment and Forests, at Lucknow by e-mail	Noted, Last Environment Statement submitted on 22nd September 2018. The EC, Compliance status and statement are uploaded on company's website. Annexure XX
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.in and a copy of the same should be forwarded to the Regional Office of this Ministry located at Lucknow	Complied and the Copy of the advertisement was sent to MoEF, Lucknow vide letter No HZL/RAM/Env/Exp/2009 Advertised in two News paper on 03.01.2010
3	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.
4	Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986	Noted
5	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 thereunder	Noted

	and also any other orders passed by the Honorable Supreme Court of India/ High Court of Rajasthan and any other Court of Law relating to the subject matter	
	Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997	Noted

24/11/2012.

HINDUSTAN ZINC LIMITED
RAMPURA AGUCHA MINE

MoEF Environmental Clearance Compliance to amendment in EC vide letter No J-11015/267/2008-I-A.II (M) dated 5 March, 2012

Sr. No	Condition	Status
i	In the environment clearance letter dated 11th December, 2009, in para number 1, the words "The mineral will be transported through the road." will be substituted by the words "The mineral will be transported through the rail".	Amendments granted by MoEF vide letter dated 28.12.2015 "The mineral will be transported both through road and rail". Railway line commissioned but not operative.
ii (a)	All the requisite prior clearance from the concerned authorities, as may be applicable to such project shall be obtained and the conditions, if any, stipulated there under shall be effectively implemented.	All the requisite prior clearance from the concerned authorities, as may be applicable to such project shall be obtained and the conditions, if any, stipulated there under shall be effectively implemented.
ii (b)	The project affected people whose land will be acquired for laying of the railway track shall be compensated as per the National / State Policy in this regard.	Compensation given to land owners done by RIICO, GOR as per the norms.
ii (c)	The company shall submit within 3 months their policy towards Corporate Environment Responsibility which should inter alia provide for (i) Standard operating process / process to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions, (ii) Hierarchical system or administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions and (iii) System of reporting of non compliance s / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders.	Policy towards Corporate Environment Responsibility enclosed.

Mechanism for addressing Environmental Issues

HZL has a Health Safety and Environment Policy, given below, signed by its CEO and forms the guidelines for the entire organization. A well laid mechanism is implemented uniformly across all units of HZL for the implementation of the policy.

All operating uints of Hindustan Zinc Limited are certified for ISO-14001 Environmental Management system (EMS). The Management Representative (MR) of the certification system is an experienced environmental officer with due authority to implement and drive a responsible EMS. The MR is duly supported by a committee constituting the operations and maintenance officers of the unit. The system has a well laid documented procedure for identification of all environmental aspect, Impacts and implementation of suitable mitigation measures.

The company has three level monitoring mechanism for addressing environmental concerns starting at unit level, HZL corporate level and Vedanta group company level. Depending on the scale and nature of the issue, the concern is escalated to different level right up to the Board of the company and also the shareholders of the company in the general body meetings.

The compliances to Environment Clearance and all environmental licenses are reviewed and monitored regularly and reports are submitted to the respective regulatory authorities at every unit, by a dedicated environmental professional, who reports directly to the unit head. The compliance is periodically reviewed and audited by Corporate Environment Department, which reports to the top management of the company. A Corporate Sustainability Committee, chaired by the CEO of the company, oversees all sustainability issues including Environment, Safety and Health and also reviewing any policy matters.

Any non-compliances/show cause/notices/complaints received from regulatory authority or any stakeholder is addressed jointly by the unit and corporate environment department. Such issues are also reported and the actions taken are reviewed by the top management every month. Further, all show cause, complaint letters and notices from any stakeholder, along with the action taken report is submitted to the Board Of Directors of the company every quarterly. All major concerns are reported to the stakeholders through the annual general body meetings of the company.

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HINDUSTAN ZINC

HINDUSTAN ZINC
Zinc of India

Health, Safety & Environment (HSE) Policy

Hindustan Zinc is committed to conduct all business activities in a responsible manner, which ensures the health and safety of our stakeholders and the environment. In order to achieve that, we shall:

- **Ensure Zero Harm to personnel and environment.**
- **Demonstrate visible HSE leadership that HSE is our core value.**
- **Comply with all HSE rules, regulations, obligations and requirements and will strive to go beyond compliance to the relevant requirements and shall continually improve our HSE management systems.**
- **Incorporate appropriate HSE Criteria[i] for all business decisions for selection of plant, technology, contractors and personnel.**
- **Identify and evaluate HSE risks for all activities[ii] and take actions to eliminate /mitigate risks and hazards.**
- **Encourage, train, equip and empower personnel, including contractors & contract employees, to adopt a healthy and safe working approach both on and off the job. The HSE performance of individual personnel shall decide his career advancement.**
- **Conserve natural resources and eliminate waste through reduction, recycling and reuse methods, which are environment-friendly and energy-efficient.**

Health, Safety & Environment (HSE) Guiding Principles:

- **Management shall demonstrate its strong commitment towards HSE at all times.**
- **All injuries, occupational illnesses and adverse environmental incidents are preventable.**
- **Reporting and investigation of all incidents is an obligation.**
- **We are responsible and accountable for preventing injuries, occupational illnesses and adverse environmental incidents.**
- **We are empowered and obligated to stop any job being carried out in an unsafe manner.**
- **HSE values shall never be compromised.**
- **Adherence to HSE management system is a condition of employment.**

We personally commit to applying the policy & principles for building positive HSE culture at Hindustan Zinc and report wherever applicable.

i - these criteria are applicable to the product distribution and logistics/entire product life cycle from extraction to product distribution and logistics

ii - the policy is not only applicable to our existing operational sites/new projects but also all the due-diligence, mergers and acquisitions and non-managed operations / licensees / third-party manufacturers / joint ventures / outsourcing partners

Sunil Duggal
Chief Executive Officer & Whole–Time Director

Date: 1st July, 2018

www.hzlindia.com

Annexure- I (1/3)

HINDUSTAN ZINC LIMITED

RAMPURA AGUCHA MINE

WELL WATER ANALYSIS REPORT-April-18 to Sep -18

S. No	1		2		3		4		5		6	
Code	GWD		HP-1		WW-16		WW-23		PRK1		KOT-1	
Month	May-18	Aug-18	May-18	Aug-18	May-18	Aug-18	May-18	Aug-18	May-18	Aug-18	May-18	Aug-18
pH	7.90	7.80	7.80	7.60	7.40	7.80	7.40	7.60	7.70	7.40	7.40	7.60
Alkalinity	379	382	241	226	371	369	324	340	405	409	298	371
Chlorides	141	161	174	164	267	270	69	78	172	161	190	180
Sulphate	159	145	152	120	169	159	79	62	189	156	177	182
CN	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Pb	0.009	0.010	0.011	0.009	0.011	0.010	0.013	0.009	0.012	0.011	0.011	0.010
Zn	0.100	0.110	0.100	0.100	0.100	0.140	0.100	0.120	0.110	0.120	0.140	0.120
Fe	0.140	0.130	0.110	0.110	0.110	0.120	0.140	0.110	0.130	0.130	0.120	0.110
Cd	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.001	0.001	0.002
Cu	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Co	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Ni	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

All figures are in mg/l except pH

HINDUSTAN ZINC LIMITED

Annexure I (2/3)

RAMPURA AGUCHA MINE

PIEZOMETER WATER ANALYSIS REPORT April-18 to Sep -18

S. No.	1		2		3		4		5	
Code	E1		G1		I1		K		A	
Months	May-18	Aug-18	May-18	Aug-18	May-18	Aug-18	May-18	Aug-18	May-18	Aug-18
pH	7.90	7.80	7.90	7.40	7.60	7.90	7.90	7.60	7.80	7.90
Alkalinity	369	374	392	329	505	546	426	429	259	246
Chlorides	246	226	169	174	174	180	189	176	260	251
Sulphate	466	416	599	578	655	619	156	146	240	244
CN	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Pb	0.011	0.010	0.013	0.010	0.012	0.010	0.012	0.010	0.010	0.011
Zn	0.140	0.120	0.110	0.140	0.130	0.120	0.130	0.110	0.140	0.012
Fe	0.100	0.130	0.140	0.120	0.100	0.110	0.140	0.120	0.130	0.100
Cd	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.001	0.001	0.002
Cu	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Co	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Ni	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
As	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Hg	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Ca	129	120	149	142	149	149	78	79	141	139
Mg	79	80	72	74	84	76	51	49	79	40

All figures are in mg/l except pH

Annexure I (3/3)

HINDUSTAN ZINC LTD
RAMPURA AGUCHA MINE
WELL WATER LEVEL MONITORING

(Below the ground level in meters)

Months	W-10	W-22	W-13	W-14	W-15	W-16	W-23	GWD	PRK-1	KOT-1
May-18	6.90	7.10	7.50	10.60	8.10	14.10	7.00	11.10	8.90	10.10
Aug-18	4.00	3.50	4.20	4.90	5.00	6.20	4.40	5.40	4.60	5.60

Annexure - II

Analysis of Waste Dump Rocks

Location : Waste Dump

Element	Range	
Pb	0.0002% -	0.0005%
Zn	0.0700% -	0.0810%
Cu	0.0005% -	0.0030%
Cd	0.0001% -	0.0005%
Ni	0.0015% -	0.0045%
Co	0.0010% -	0.0035%

HINDUSTAN ZINC LIMITED

RAMPURA AGUCHA MINE

Annexure- III

AIR MONITORING : AMBIENT AIR & STACK: April-18 to Sep -18

Location->		Mine Site						Main Gate						Mine Tower					
month/		SPM	PM_{10}	$PM_{2.5}$	SO_2	NO_x	CO	SPM	PM_{10}	$PM_{2.5}$	SO_2	NO_x	CO	SPM	PM_{10}	$PM_{2.5}$	SO_2	NO_x	CO
year	week	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)
Apr-18	Ist	327.63	86.22	37.36	11.60	12.00	400.00	309.41	82.51	28.79	11.20	12.40	480.00	310.12	83.40	33.19	11.30	12.50	417.00
	IInd	285.89	87.19	35.36	6.58	15.11	340.00	264.05	83.72	36.28	8.81	15.93	330.00	275.75	88.27	38.72	7.33	15.65	310.00
May-18	Ist	340.62	85.92	33.04	5.50	12.25	440.00	309.85	82.08	36.82	5.60	11.50	465.00	305.09	77.06	36.96	8.20	13.40	470.00
	IInd	359.97	91.53	34.82	7.85	19.36	450.00	344.37	81.40	39.86	8.06	18.44	430.00	330.79	83.64	40.52	8.89	19.08	410.00
Jun-18	Ist	304.88	79.63	33.17	5.90	11.10	410.00	290.73	76.12	33.04	6.20	8.90	410.00	300.48	80.26	37.17	7.60	12.40	435.00
	IInd	312.00	80.31	35.24	7.65	17.80	340.00	278.00	78.52	33.56	7.46	16.40	370.00	322.00	85.21	36.79	8.11	17.85	410.00
Jul-18	Ist	216.42	75.51	33.24	9.10	14.33	400.00	221.21	79.56	29.03	6.90	15.30	350.00	236.91	88.74	33.27	7.90	14.40	390.00
	IInd	150.01	57.91	7.79	7.79	11.93	290.00	160.63	61.69	26.14	7.23	13.48	240.00	150.01	57.91	21.82	5.75	11.30	260.00
Aug-18	Ist	232.17	84.54	29.15	6.60	14.33	390.00	225.83	82.87	24.77	5.80	4.40	310.00	205.69	77.88	29.01	6.50	12.10	260.00
	IInd	216.58	74.64	27.32	6.90	12.42	270.00	221.48	76.24	28.53	7.00	12.36	270.00	235.03	79.41	26.26	6.60	14.08	280.00
Sep-18	Ist	230.92	74.91	33.04	5.60	8.60	360.00	211.37	75.78	29.03	6.00	5.40	310.00	230.50	82.87	28.78	6.40	12.40	340.00
	IInd	251.29	61.70	34.78	3.45	19.89	440.00	152.68	71.78	29.96	5.41	12.66	530.00	203.25	65.24	33.99	5.70	17.95	350.00

Location->		Agucha village						Kothiyan village						Bherukhera village					
month/		SPM	PM_{10}	$PM_{2.5}$	SO_2	NO_x	CO	SPM	PM_{10}	$PM_{2.5}$	SO_2	NO_x	CO	SPM	PM_{10}	$PM_{2.5}$	SO_2	NO_x	CO
year	week	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)
Apr-18	Ist	211.00	76.52	24.85	7.40	8.20	290.00	214.74	71.78	20.46	6.60	8.90	310.00	210.69	72.75	24.77	7.00	8.10	320.00
	IInd	214.58	73.53	25.08	5.29	11.95	250.00	230.98	64.40	20.56	5.09	11.85	230.00	245.35	66.82	24.56	5.75	13.38	240.00
May-18	Ist	203.82	62.16	29.15	7.40	8.40	340.00	207.87	67.57	24.87	7.00	8.40	340.00	190.67	62.30	29.00	6.60	8.00	280.00
	IInd	211.85	68.23	27.78	7.59	12.75	210.00	209.27	69.88	26.83	7.67	11.80	220.00	240.13	66.41	30.15	6.45	13.74	240.00
Jun-18	Ist	211.00	63.17	20.82	5.50	7.40	260.00	188.76	60.38	24.79	5.20	7.60	230.00	196.49	59.50	28.80	5.40	8.40	230.00
	IInd	212.00	65.42	28.92	6.31	13.55	230.00	176.00	61.25	25.72	5.68	10.53	170.00	182.00	63.95	26.12	5.60	11.36	180.00
Jul-18	Ist	136.34	57.82	28.97	7.21	8.79	218.00	187.71	79.44	28.68	10.70	14.10	260.00	169.58	64.15	33.32	10.90	14.00	200.00
	IInd	130.53	50.20	24.62	6.16	9.85	140.00	114.58	54.51	23.48	4.33	11.31	150.00	134.21	49.69	27.01	4.13	10.11	160.00
Aug-18	Ist	167.42	57.33	24.86	6.50	7.40	360.00	175.60	73.68	20.64	6.80	14.10	360.00	171.12	67.02	24.55	6.60	10.10	340.00
	IInd	170.13	53.71	22.39	4.88	12.88	210.00	109.83	61.21	11.94	3.05	12.27	190.00	180.16	65.23	25.17	4.99	11.74	180.00
Sep-18	Ist	185.09	64.70	20.46	6.10	9.40	240.00	186.16	63.06	24.73	6.10	9.40	240.00	188.84	63.03	20.73	6.10	6.40	210.00
	IInd	231.27	69.99	29.41	3.65	19.93	290.00	253.83	72.17	33.06	4.64	16.90	360.00	242.43	63.89	32.97	5.82	18.52	280.00

STACK MONITORING SPM

Month-Yr	Forthnig	Pr Crusher (SPM)	S. Crusher (SPM)	New Pr Crusher (SPM)
Apr-18	Ist	17.32	28.63	26.85
	IInd	23.05	29.17	25.00
May-18	Ist	37.14	43.43	27.62
	IInd	31.29	26.41	32.00
Jun-18	Ist	32.00	23.21	21.90
	IInd	29.52	28.30	23.47
Jul-18	Ist	32.42	38.98	26.48
	IInd	17.66	31.84	33.33
Aug-18	Ist	21.36	23.05	19.86
	IInd	23.70	24.81	18.18
Sep-18	Ist	25.81	34.79	25.14
	IInd	26.06	32.67	22.41

Annexure-IV

S. No.	Area of Monitoring	NOISE LEVEL AT WORK ENVIRONMENT IN dB(A)						Equipment Condition
		Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	
1.	**BENEFICIATION PLANT**							
	a. Mill Ambient	76.7/73.1	74.8/69.1	77.4/70.4	76.1/72.4	74.7/69.9	74.2/70.1	Plant is in running condition.
	b. Mill- Grinding Area	80.4	84.6	82.9	82.0	84.4	80.1	--do--
	c. Operators cabin mill area	79.4	79.7	76.1	78.9	78.6	74.2	--do--
	d. Flotation cell area	81.4	81.1	82.1	81.4	82.7	81.0	--do--
	e. AFM's cabin cell area	76.0	73.1	77.4	73.1	75.1	74.2	--do--
	f. Shift engineer's room	77.1	76.7	76.4	74.1	76.5	76.0	--do--
	g. Control room	74.5	73.0	75.1	73.1	71.9	76.1	--do--
	h.Work Shop	76.9	74.5	73.4	76.8	74.5	75.2	--do--
2	**PRIMARY CRUSHER**							
	a. Primary Crusher I Control Room	65.9/61.4	66.5/63.1	66.40/62.10	66.1/62.8	66.2/63.2	67.4/64.1	Crusher in running condition
	b. Primary Crusher II Control Room	66.4/61.9	66.2/63.1	68.10/62.00	66.9/62.5	66.8/62.9	68.2/65.1	Crusher in running condition
3	**SEC./TERT. CRUSHER**							
	a. Shift Room Sec. Crusher	75.6/72.4	74.2/73.6	76.40/71.10	77.1/73.0	74.4/73.3	73.2/71.2	Crusher in running condition
	b.Secondary crusher control room	73.40	73.60	73.40	74.40	73.40	73.20	--do--
	Ambient Mine Pit	76.7/73.1	74.8/69.1	77.4/70.4	76.1/72.4	74.7/69.9	74.2/70.1	During day time

Annexure - V

Env. SUMP WATER ANALYSIS (April-18 to Sep -18)

	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
pH	7.30	7.90	7.60	7.50	7.40	7.60
Oil & Grease	4.10	4.75	4.35	4.10	4.20	4.30
Alkalinity	229	224	302	265	361	306
Chlorides	554	590	661	576	480	604
Hardness	760	790	806	668	680	744
TDS	1054	1241	1420	1320	1249	1164
Pb	0.02	0.01	0.02	0.01	0.01	0.02
Zn	2.4	2.8	3.5	3.2	3.4	3.1
Fe	0.19	0.21	0.26	0.22	0.19	0.25
Cd	0.01	0.01	0.02	0.02	0.02	0.01

All value are in mg/l except pH

Remarks : Collected Water is pumped to reclaim reservoir and recycled back to plant for reuse. Zero discharge is maintained.

Annexure -VI

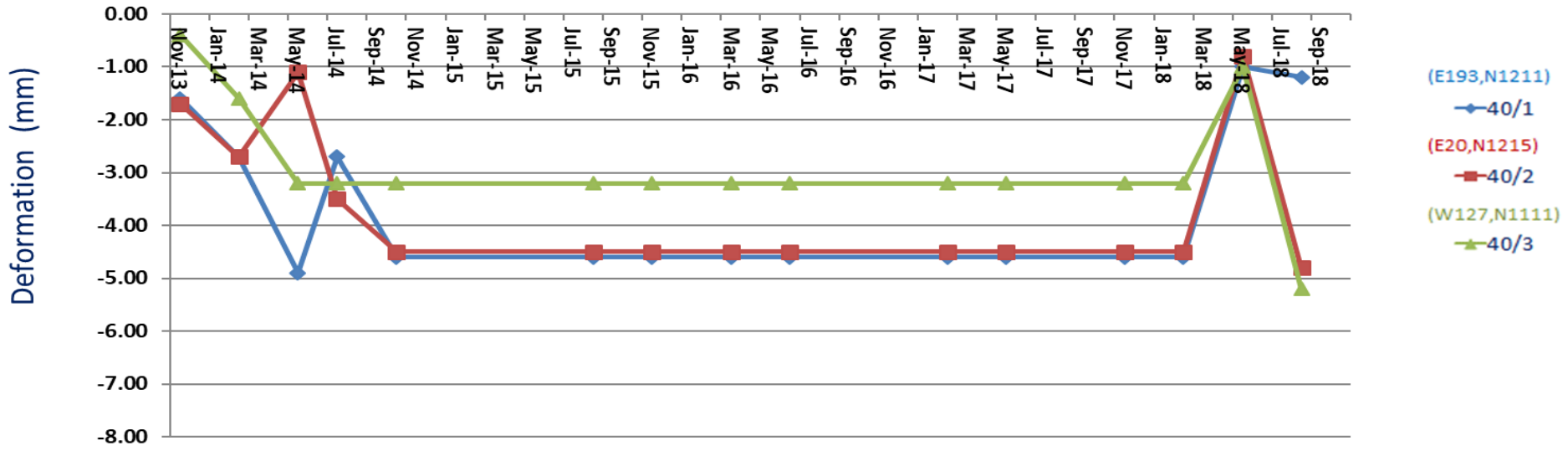
ENVIRONMENTAL EXPENDITURE DETAILS

Partiulars	2018-19 April-18 to Sep-18
Capital Expenditure	**36.00**
TOTAL Rs (Lacs)	**36.00**

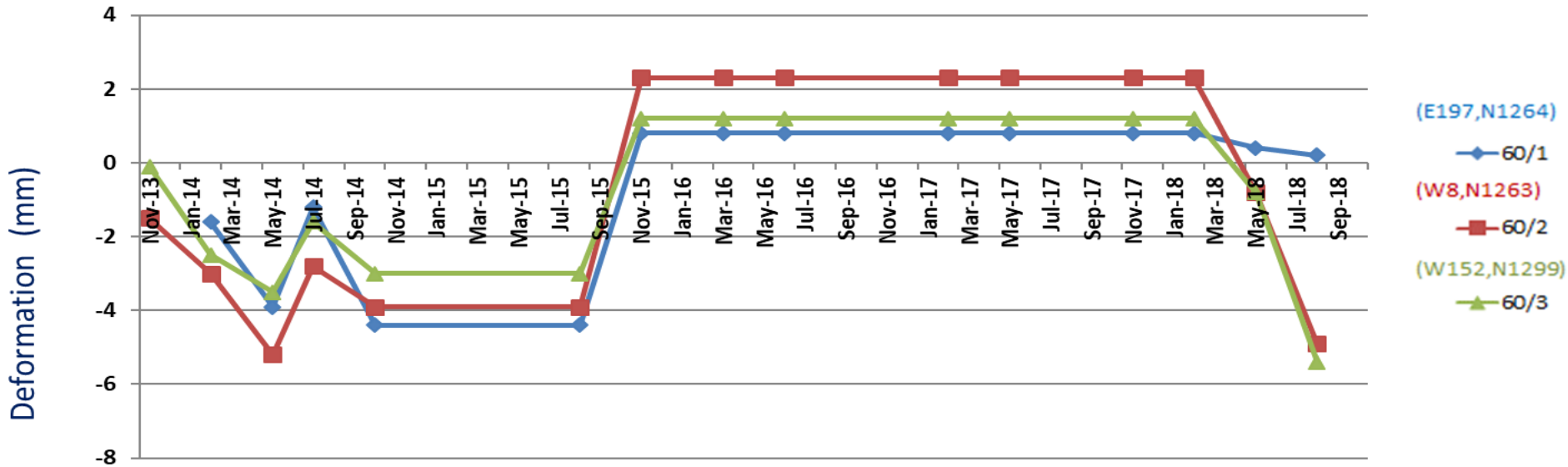
Annexure -VII

Dump Slope monitoring Data: SSR data; pillar-prism data for MOEF _ Oct2018

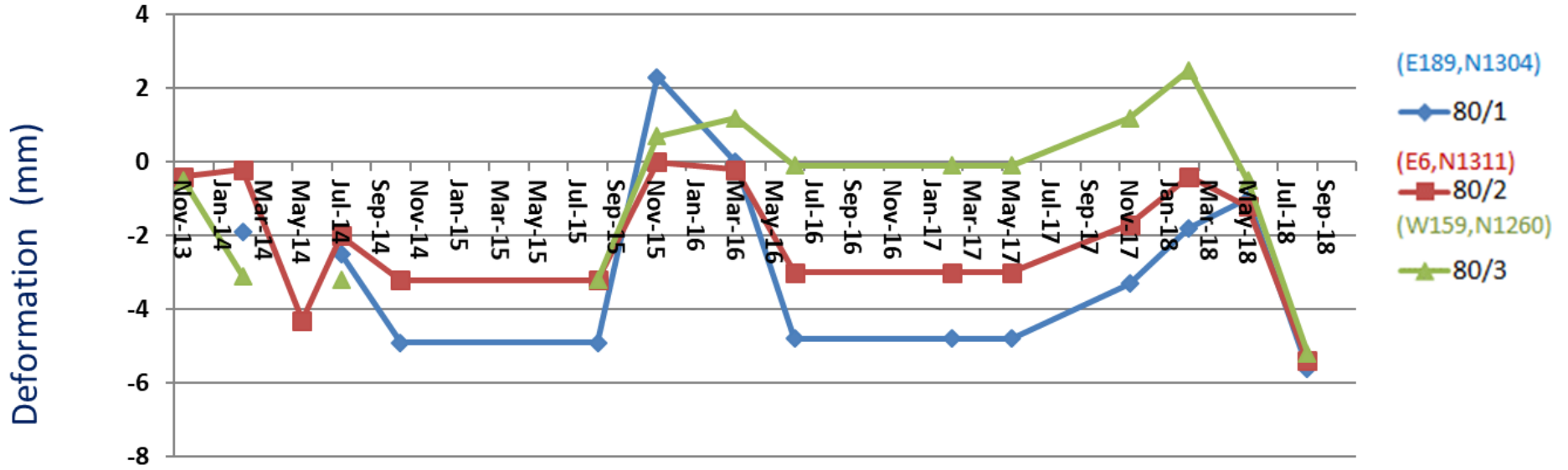
MOVEMENT : MONITORING TREND OF WASTE DUMP AT 40m LIFT BY PRISMS



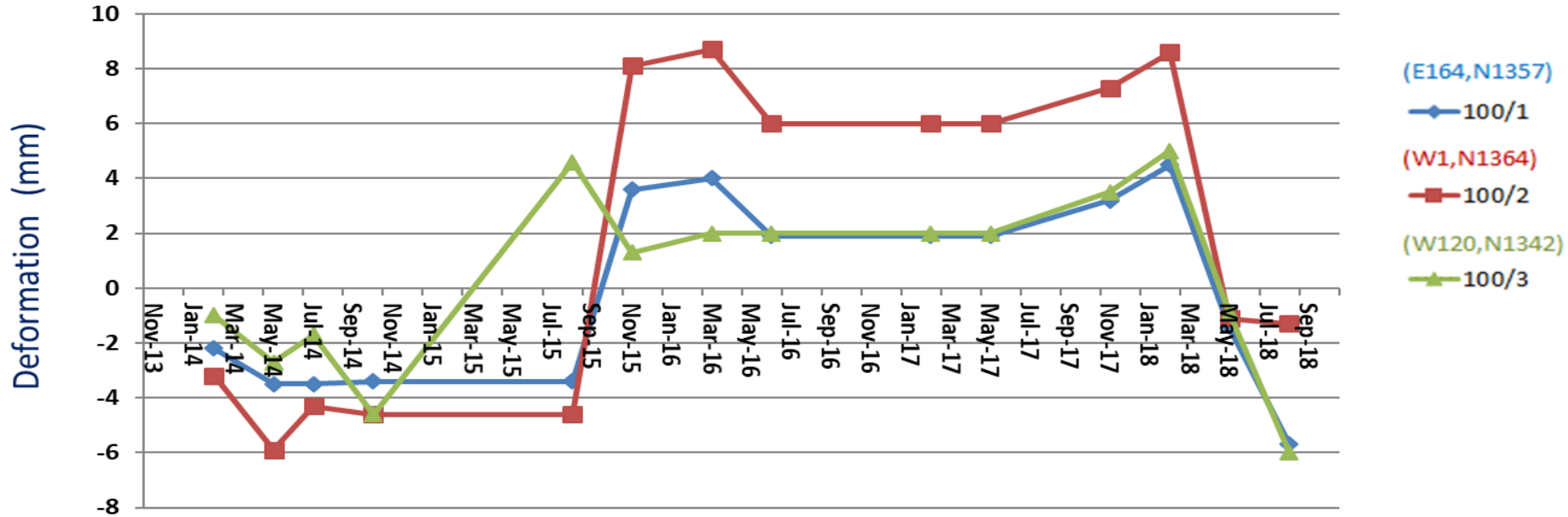
MOVEMENT: MONITORING TREND OF WASTE DUMP AT 60m LIFT BY PRISMS

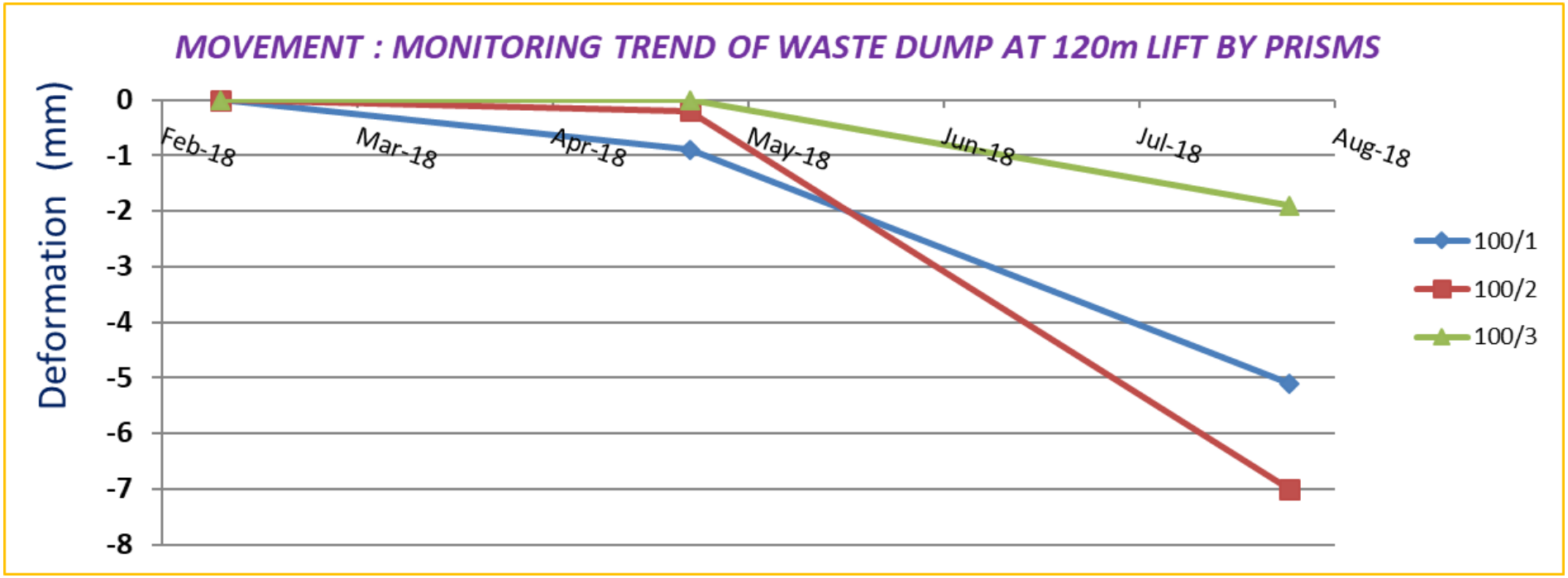


MOVEMENT: MONITORING TREND OF WASTE DUMP AT 80m LIFT BY PRISMS

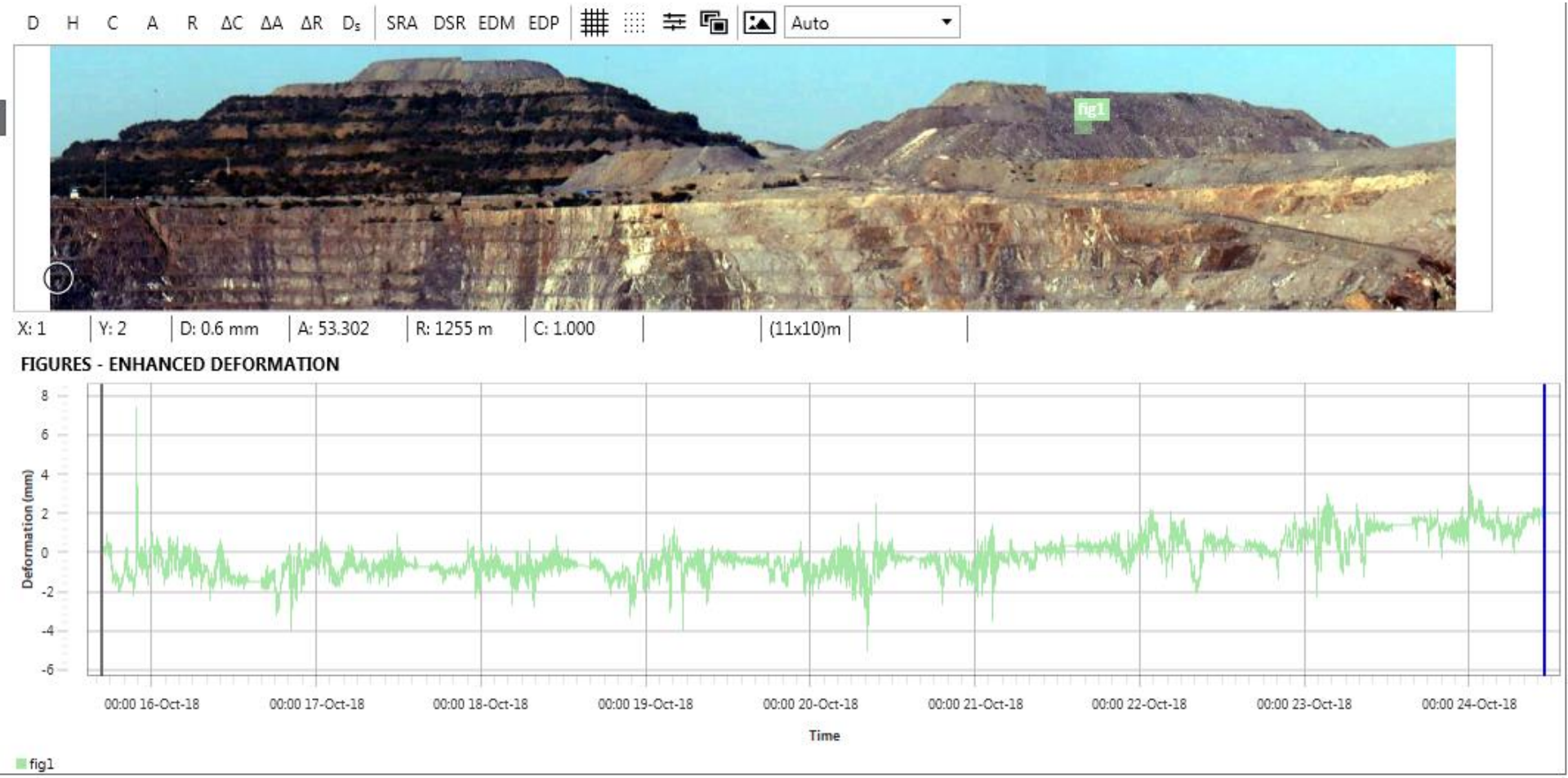


MOVEMENT : MONITORING TREND OF WASTE DUMP AT 100m LIFT BY PRISMS

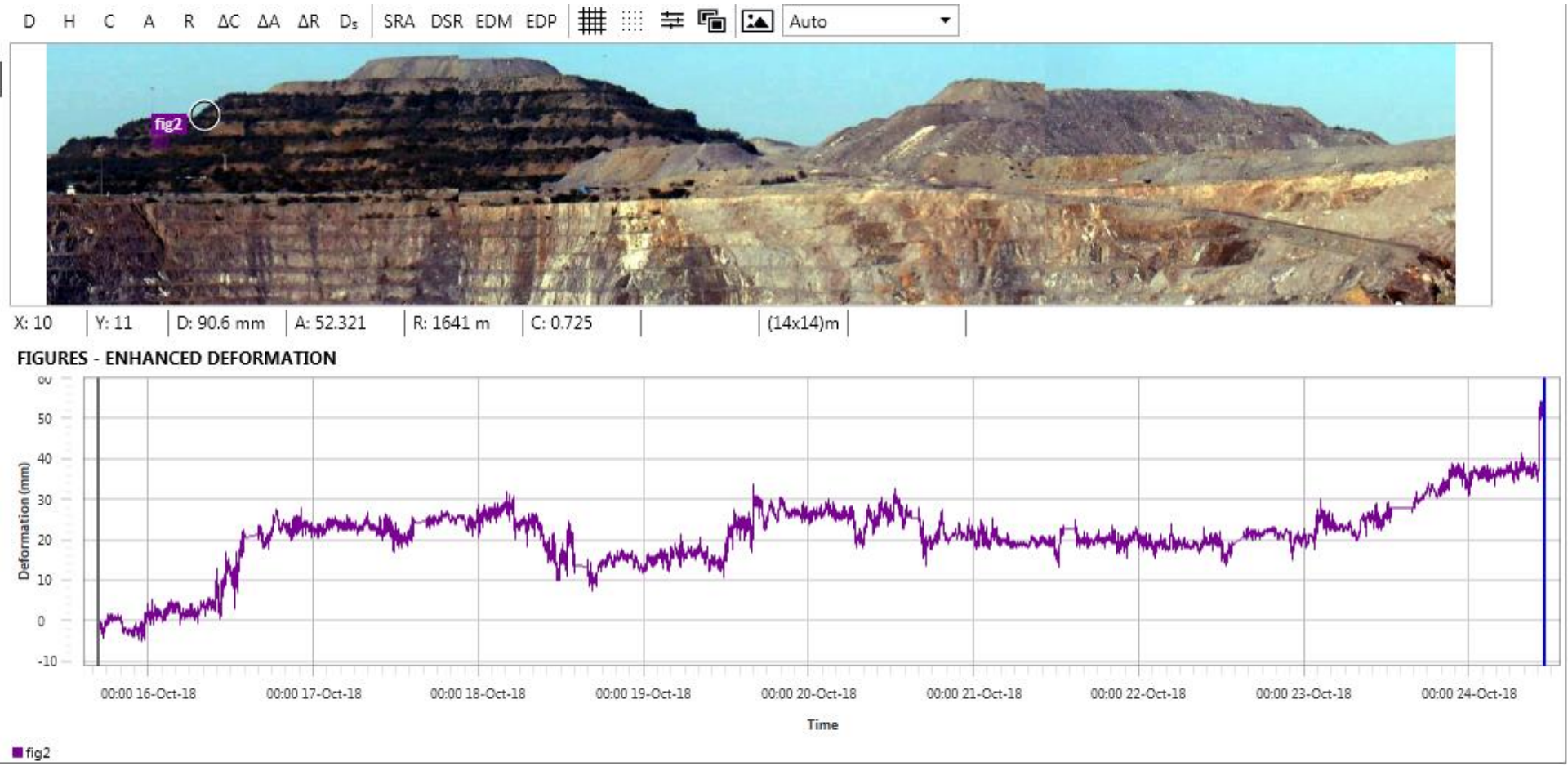



MOVEMENT : MONITORING TREND OF WASTE DUMP AT 120m LIFT BY PRISMS
Deformation (mm)
0
-1
-2
-3
-4
-5
-6
-7
-8
Feb-18
Mar-18
Apr-18
May-18
Jun-18
Jul-18
Aug-18
100/1
100/2
100/3

Slope Stability Radar monitoring Data



Slope Stability Radar monitoring Data



Annexure – VIII(A)

AGM-EMS

No. J-11015/267/2008-IA.II (M)
Government of India
Ministry of Environment & Forests

Paryavaran Bhavan,
C.G.O. Complex, Lodi Road,
New Delhi-110 003.

Dated the 11th December, 2009

To

M/s Hindustan Zinc Limited
Rampura Agucha Mine,
P.O. Agucha -311029,
District Bhilwara,
Rajasthan
E-mail: rrkumar@vedanta.co.in

Subject: Expansion of Rampura Agucha Lead and Zinc Opencast and Underground Mining Project (from 5.0million TPA to 6.15 million TPA) and Beneficiation Capacity of Beneficiation Plant (from 5.0million TPA to 6.50million TPA) of M/s Hindustan Zinc Limited located in Village Agucha, Tehsil Hurda, District Bhilwara, Rajasthan -environmental clearance regarding.

Sir,

This has reference to your letter No. HZL/RAM/Env/2009 dated 27.09.2009 and subsequent letters dated 10.10.2009 and 30.10.2009 on the subject mentioned above. The Ministry of Environment and Forests had earlier prescribed terms of reference (TORs) to the project on 22.12.2008 for undertaking detailed EIA study for the purpose of obtaining environmental clearance. The proposal is for grant of environment clearance for enhancement of production of lead and zinc ore from 5.0 million TPA to 6.15 million TPA and enhancement of capacity of beneficiation plant from 5.0 million TPA to 6.5 million TPA. The project was earlier accorded environmental clearance by the Ministry on 19th April, 1983 for (0.9million TPA production); 18th March, 1999 (1.35million TPA production); 1st March, 2005(3.75million TPA production) and 27.07.2007 for production of 5.0million TPA capacity of lead and zinc ore. The total mine lease area of the project is 1200ha, out of which 231.3ha is an agricultural land, 89.37ha is surface water bodies and 879.33ha is others (9.83ha is wasteland and 869.5ha is private land (mining activities). No forestland is involved. It has been reported that the existing surface rights area is 869.5ha and it is proposed to acquire surface rights for another 155ha area (149.72ha within mine lease and 5.28ha outside side the mine lease for plantation). Area proposed for excavation is 102.53ha, an area of 2ha is kept for storage of topsoil, 375.71ha for overburden dumps, 6.5ha for mineral storage, 29.23ha for infrastructure, 4ha for roads, 262ha for green belt, 178.13ha for tailings pond, 39ha for mineral beneficiation plant, 8ha for township and 181.44ha is others (0.66ha open space, 89.37ha water body and 86.13ha is agricultural land). In addition, township for company

..2/-

Annexure VIII (B)

HINDUSTAN ZINC LIMITEDRAMPURA AGUCHA MINE

MoEF Environmental Clearance Compliance to amendment in condition no (v) in EC vide letter No J-11015/267/2008-I-A.II (M) dated 22nd August, 2014

SNo	Condition	Status
i	The Open crack, whenever developed in the partially consolidated new dump mass, should be consolidated with proper filling/ leveling with the help of dozer/ compactors.	In such case, we shall consolidate with proper filling/ leveling with the help of dozer.
ii	Dump foundation preparation should be done by excavating and removing soil before dumping, to improve the frictional resistance at the base of dump. It should be filled with over burden containing stones.	Being Complied
iii	There should not be any dumping in pool water or on slushy ground.	No dumping is done in water pooled / slushy ground
iv	Discontinuous dumping should be avoided to check water accumulation between two isolated dumps.	Dumping is done at a single earmarked area.
v	During rainy season, an officer should be deputed to go in and around the dump site every morning to see the effectiveness of drain. If any blockage is observed, immediately steps should be taken to make it effective.	Mining officer is always deputed during rainy season to ensure smooth flow of runoff water.
vi	The dump should be surveyed periodically to produce up-to-date and accurate dump geometry.	Survey team survey the dump once in a month to produce up-to-date and accurate dump geometry.
vii	The slope and stability monitoring by Radar should be done and its report should be sent to MoEF and its Regional Office every six – months.	Report enclosed as Annexure VII
viii	The dump design should be reviewed by CIMFR or any other scientific agency after reaching dump height of 120m and its report sent to MoEF and its	Agreed. The dump design shall be reviewed by CIMFR after reaching dump height of

	Regional office.	120m.
ix	Waste dump has to be managed as per the guidelines of DGMS and quarterly monitoring report to be submitted to DGMS and regional office	Waste dump is being managed as per the DGMS guidelines and quarterly monitoring report shall be submitted to DGMS and regional office.
x	On stabilized dumps, more species such as Pongamia, Bombax ceiba, Tamarind, Arjun, Gravillea robusta and Amla to be planted.	Agreed. We shall plant the specified species along with the ones we are planting.
xi	The Radar monitoring system should satisfactorily sub- serve the dual objectives viz.(a) Investigative monitoring to provide an understanding of the slope behavior over time and typical response to external events (e.g. Precipitation and seasonal fluctuations) and (b). Predictive Monitoring: To provide a warning of a change in behavior, enabling the possibility of limiting or intervening to prevent hazardous sliding. The data so analyzed should be provided with reference to the above.	The analyzed data is enclosed annexure No VII
xii	Paved drains are to be provided to protect the slope surface against rain-cuts and seepage during rains to make a safe way to discharge top and surface water to the bottom of the dump. Constant vigilance on the condition of dumps with special reference to accumulation of water and development of cracks.	Paved drains shall be provided. Constant vigilance shall be given on the dump condition with special reference to water accumulation and development of cracks.
xiii	Regular Monitoring of above mentioned specific conditions shall be included in the monitoring plan and report submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office located at Lucknow on six monthly basis.	Regular monitoring of the above mention conditions conducted and report is enclosed.

22/11/2018

Annexure –IX

Garland Drain Photo

Annexure –X

Plantation Photos

Annexure-XI

40KL Water sprinkler

Annexure –XII

Anicut Photos

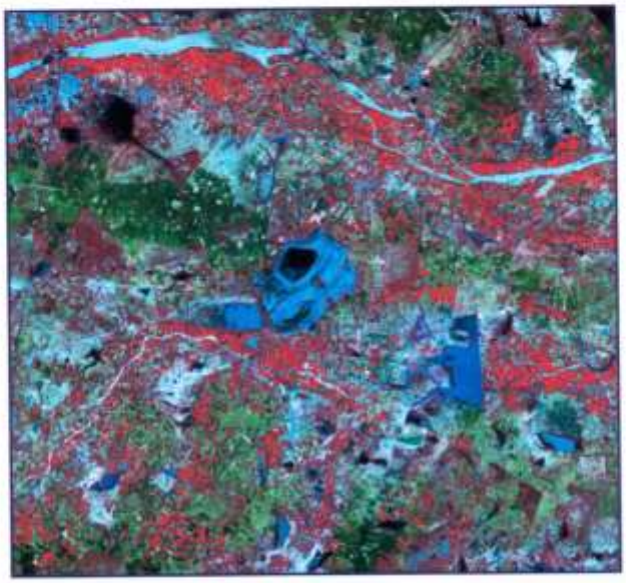
Annexure XIII

Pond Photo

Annexure XIV

Truck covered with tarpaulin

Land use mapping by digital processing of 15 km. radius of Rampura-Agucha mine, district Bhilwara using remote sensing techniques and showing the changes in land use during last three years



Sponsor: Hindustan Zinc Limited, Rampura-Agucha Mine, Bhilwara

Studied by:

Estb: 1988

Studied for:

Hydro-Geosurvey Consultants Private Limited
C-103, Shastri Nagar, Jodhpur- 342003
Phone: - 0291-2431754
Web: www.hydrogeosurvey.com, E-mail: - hydro.geosurvey@yahoo.com

March, 2018

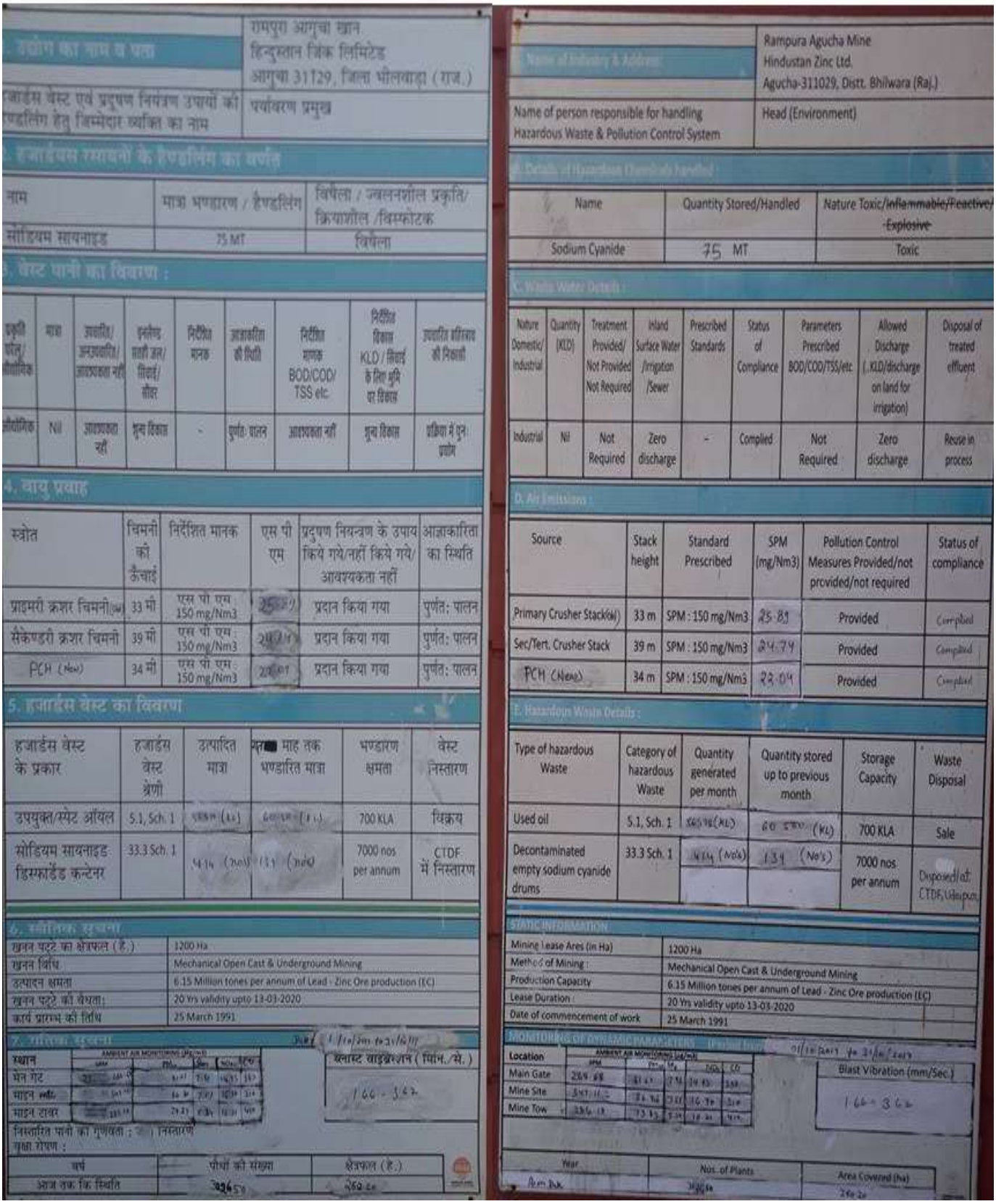
Annexure XVI

HDPE laying in tailing dam

Annexure-XVII

STP

Annexure XVIII



उद्योग का नाम व पता	रामपुरा आगूचा खान हिन्दुस्तान जिंक लिमिटेड आगूचा 311029, जिला भीलवाड़ा (राज.)
हजार्डस वेस्ट एवं प्रदूषण नियंत्रण उपायों की हैण्डलिंग हेतु जिम्मेदार व्यक्ति का नाम	पर्यावरण प्रमुख

Name of Industry & Address	Rampura Agucha Mine Hindustan Zinc Ltd. Agucha-311029, Distt. Bhilwara (Raj.)
Name of person responsible for handling Hazardous Waste & Pollution Control System	Head (Environment)

नाम	मात्रा भण्डारण / हैण्डलिंग	विषैला / ज्वलनशील प्रकृति/ क्रियाशील /विस्फोटक
सोडियम सायनाइड	75 MT	विषैला

Name	Quantity Stored/Handled	Nature Toxic/~~Inflammable/Reactive/ Explosive~~
Sodium Cyanide	75 MT	Toxic

प्रकृति घरेलू/ औद्योगिक	मात्रा	उपलब्धि/ अनुपलब्धि/ आवश्यकता नहीं	इस्तेमाल शुदा जल/ सिंचाई/ सीवर	निर्देशित मानक	आज्ञाकारिता की स्थिति	निर्देशित मानक BOD/COD/ TSS etc	निर्देशित विसर्जन KLD / सिंचाई के लिए भूमि पर विसर्जन	उपयोगित अवशिष्ट जल निस्तारण
औद्योगिक	Nil	आवश्यकता नहीं	शून्य विसर्जन	-	पूर्णतः पालन	आवश्यकता नहीं	शून्य विसर्जन	प्रक्रिया में पुनः उपयोग

Nature Domestic/ Industrial	Quantity (KLD)	Treatment Provided/ Not Provided Not Required	Inland Surface Water /Irrigation /Sewer	Prescribed Standards	Status of Compliance	Parameters Prescribed BOD/COD/TSS/etc	Allowed Discharge (KLD/discharge on land for irrigation)	Disposal of treated effluent
Industrial	Nil	Not Required	Zero discharge	-	Complied	Not Required	Zero discharge	Reuse in process

स्त्रोत	चिमनी की ऊँचाई	निर्देशित मानक	एस पी एम	प्रदूषण नियन्त्रण के उपाय किये गये/नहीं किये गये/ आवश्यकता नहीं	आज्ञाकारिता का स्थिति
प्राइमरी क्रशर चिमनी	33 मी	एस पी एम : 150 mg/Nm3	25.81	प्रदान किया गया	पूर्णतः पालन
सेकेण्डरी क्रशर चिमनी	39 मी	एस पी एम : 150 mg/Nm3	24.79	प्रदान किया गया	पूर्णतः पालन
PCH (New)	34 मी	एस पी एम : 150 mg/Nm3	22.04	प्रदान किया गया	पूर्णतः पालन

Source	Stack height	Standard Prescribed	SPM (mg/Nm3)	Pollution Control Measures Provided/not provided/not required	Status of compliance
Primary Crusher Stack(s)	33 m	SPM : 150 mg/Nm3	25.81	Provided	Complied
Sec/Tert. Crusher Stack	39 m	SPM : 150 mg/Nm3	24.79	Provided	Complied
PCH (New)	34 m	SPM : 150 mg/Nm3	22.04	Provided	Complied

हजार्डस वेस्ट के प्रकार	हजार्डस वेस्ट श्रेणी	उत्पादित मात्रा	[illegible] माह तक भण्डारित मात्रा	भण्डारण क्षमता	वेस्ट निस्तारण
उपयुक्त/स्पेंट ऑयल	5.1, Sch. 1	[illegible] (KL)	[illegible] (KL)	700 KLA	विक्रय
सोडियम सायनाइड डिस्फार्डेड कन्टेनर	33.3 Sch. 1	414 (Nos)	134 (Nos)	7000 nos per annum	CTDF में निस्तारण

Type of hazardous Waste	Category of hazardous Waste	Quantity generated per month	Quantity stored up to previous month	Storage Capacity	Waste Disposal
Used oil	5.1, Sch. 1	[illegible] (KL)	[illegible] (KL)	700 KLA	Sale
Decontaminated empty sodium cyanide drums	33.3 Sch. 1	414 (Nos)	134 (No's)	7000 nos per annum	Disposed/at CTDF, Udaipur

खनन पट्टे का क्षेत्रफल (हे.)	1200 Ha
खनन विधि	Mechanical Open Cast & Underground Mining
उत्पादन क्षमता	6.15 Million tones per annum of Lead - Zinc Ore production (EC)
खनन पट्टे की वैधता :	20 Yrs validity upto 13-03-2020
कार्य प्रारम्भ की तिथि	25 March 1991

STATIC INFORMATION	
Mining Lease Area (in Ha)	1200 Ha
Method of Mining :	Mechanical Open Cast & Underground Mining
Production Capacity	6.15 Million tones per annum of Lead - Zinc Ore production (EC)
Lease Duration :	20 Yrs validity upto 13-03-2020
Date of commencement of work	25 March 1991

स्थान	ब्लास्ट वाइब्रेशन (मिमी./से.)
मेन गेट	1.66 - 3.62
माइन साईट	
माइन टावर	

Location	Blast Vibration (mm/Sec.)
Main Gate	1.66 - 3.62
Mine Site	
Mine Tow	

निस्तारित पानी की गुणवत्ता : निस्तारण

वृक्षा रोपण :

वर्ष	पौधों की संख्या	क्षेत्रफल (हे.)
आज तक कि स्थिति	3936[illegible]	262.[illegible]

Year	Nos. of Plants	Area Covered (ha)
Apr 04	3936[illegible]	262.[illegible]

Display board at Main gate

Annexure XIX

Oil trap photo

Annexure XX

vedanta
transforming elements

HZL/RAM/Env/2018-19/1527

September 22, 2018

Member secretary
Raj. Pollution Control Board
4, Institutional Area
Jhalan Doongri
JAIPUR

Sub : Environmental Statement of Rampura Agucha Mine for year 2017-18.

Ref: CTO granted vide order No 2015-2016/Mines/6781 dated 24/09/2015

Dear Sir

Please find enclosed herewith the environmental statement for financial year ending on 31st March 2018

Thanking you

Yours truly,

25/09/2018

(R.P. Dashora)
Director (SBU) ,
RA Mine

Site President
Hindustan Zinc Limited
Rampura Agucha IBU
PO - Agucha
Dist. Bhilwara (Raj.)

cc to: **Regional Officer : for kind information please.**
Raj. State Pollution Control Board
18, Azad Nagar, Pannadhay Circle,
Mining Engineer Office Road (Near Telephone Exchange)
Bhilwara (Raj.)

The Director,
Ministry of Environment and Forests,
5th Floor, Kendriya Bhawan
Lucknow

O/C Envt

Hindustan Zinc Limited
Rampura Agucha Mines, P.O. Agucha, Dist. Bhilwara (Rajasthan) - 311 022
M +91-9001294956-57, F +91-1483 229012 www.hzlindia.com

Registered Office : Yashad Bhawan, Udaipur (Rajasthan) 313 004
CIN No. L27204RJ1966PLC001208