

To,
The Additional Director (South)
Ministry of Environment and Forest
Regional Office (Southern Zone)
Kendriya Sadan, IVth Floor, E & F Wings
17th Main Road, II Block, Kormangala
Bangalore – 560 034

Date: 26.05.2017

Sub: Six monthly compliance report of Mareto Sodo Iron Ore Mine (T.C. No. 06/55), Goa for the period October 2016 to March 2017.

Respected Sir,

We are herewith submitting the condition wise compliance report & corresponding annexures and CD as per the conditions laid down in the Environmental Clearance Letter No: J-11015/1241/2007-IA.II(M) dated 24/12/2009 for the period **October 2016 to March 2017**.

Thanking you,

Yours faithfully,

For Vedanta Ltd.



Mr. Sebastian Pereira
Mines Manager
Mareto Sodo Mines

Enclosures: Six monthly compliance report & corresponding annexures and CD of Mareto Sodo Iron Ore Mine for the period of **October 2016 to March 2017**

C.C – Member Secretary, Goa State Pollution Control Board
-- CGWB

VEDANTA LIMITED

Sesa Goa iron ore: Sesa Ghor, 20 EDC Complex, Patto, Panjim, Goa – 403 001, India
T +91 0832 2460600 | Website: www.sesagoaironore.com

Registered Office: Vedanta Limited, 1st Floor, 'C' wing, Unit 103, Corporate Avenue, Atul Projects, Chakala, Andheri (East), Mumbai 400093, Maharashtra, India.
CIN: L13209MH1965PLC291394

Compliance report to conditions of environmental clearance issued by

**Ministry of Environment & Forests, Govt. of India, for Mareto Sodo Iron Ore Mine
(T.C. No. 06/55)**

Letter No: J-11015/1241/2007-IA.II(M) dated 24/12/2009

**Production: 1 MTPA as per Environment clearance, and redistributed production limit to 1 MTPA in December 2016 as per capping imposed by
state govt.**

Period – October 2016 to March 2017

S. No	Condition of clearance	Status of compliance	Remarks
A.	Specific Conditions		
(I)	Environmental clearance is subject to obtaining clearance under the wildlife (Protection) Act, 1972 from the National Board for Wildlife. Further, grant of environmental clearance does not necessarily imply that wildlife clearance shall be granted to the project and the proposal shall be considered by the National Board for Wildlife on merits. The investment made in the project, if any, based on environmental clearance so granted, in anticipation of clearance from the wildlife angle shall be entirely at the cost and the risk of the company and MoEF in this regard shall not be responsible in any matter.	The provision of Wildlife (Protection) Act, 1972 is not applicable as the mine falls outside the Eco sensitive zones notified for the State of Goa.	
(ii)	Environmental Clearance is subject to final order of the Hon'ble Supreme of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) no. 460 of 2004, as may applicable to this project.	Noted.	

(iii)	The company shall comply with the conditions stipulated in the environmental clearance accorded to the project for the existing capacity.	Noted and complying.	
(iv)	Wild life Conservation Plan shall be prepared in consultation with the office of the Chief Wildlife warden and implemented within six months. The plan shall comprise of in-built monitoring mechanism with special emphasis to protection of Schedule- I species. The status of implementation shall be submitted to the Ministry	Conservation plan for wild life has been prepared in consultation with state forest department and submitted to forest department.	A detailed biodiversity management plan is being prepared in association with CEE (Center for Environment Education).
(v)	A 50 m barrier no mining zone on the side(s) of the nallahs flowing across or adjacent the lease shall be demarcated and the barrier shall be thickly vegetated with native species of trees and shrubs.	Not applicable as there is no nallah passing through the lease area.	

(vi)	<p>The company shall ensure that no silt originating due to mining activity is transported in the surface water course and nearby agricultural fields.</p>	<p>The mine run off water is channelized within the pit. The discharge water point is regularly monitored so as to keep a check on the water quality. The weak mine faces, ore stacks are covered with silpaulin to prevent overflow of silt.</p> <p>The old waste dumps are located outside mine lease. Protective measures are effectively implemented to control the silt flow. Geotextiles in the form of coir mats and jute mats are laid on the dump slopes. Glyricidia cuttings are used to staple the geotextiles to the dump surface. Seeds of stylo santhus hamata are sprayed on the geotextiles so as to form a green cover. Step dumping method is followed; each step is restricted to 10-12 m height.</p> <p>Settling ponds, check dams, filterbeds are constructed all along the toe of the dump to prevent flow of silt outside the area.</p>	
(vii)	<p>Need based assessment for the nearest two villages shall be conducted to study economic measures which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes. This</p>	<p>Baseline studies are carried out for the nearby villages in 2015. Depending on the stakeholder response, various community development works are initiated in the surrounding areas. Separate funds are earmarked for socio economic development of the villages. Company also runs a technical school which provides technical education to local youth and makes them employable. CSR expenditure for the year 2016-</p>	

	will be in addition to vocational training for individuals imparted to take up self-employment and jobs.	17 for Mareto Sodo Mines: <table><tr><th>Thrust area</th><th>Activity</th><th>Exp.</th></tr><tr><td>Health</td><td>Potable water facility in Soliye on PPP mode between Sesa & Govt. of Goa</td><td>1800000</td></tr><tr><td>Education</td><td>Sesa Football Acadmy</td><td>2177111.869</td></tr><tr><td colspan="2"></td><td>3,977,111.87</td></tr></table>	Thrust area	Activity	Exp.	Health	Potable water facility in Soliye on PPP mode between Sesa & Govt. of Goa	1800000	Education	Sesa Football Acadmy	2177111.869			3,977,111.87	
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		3,977,111.87													
(viii)	Maintenance of village roads through which transportation of ores are undertaken shall be carried out by the company regularly at its own expenses. The roads shall be black topped.	Roads used for transporting iron ore are tarred and maintained by mining companies.													
(ix)	Fugitive dust generation shall be controlled. Fugitive dust emission shall be regularly monitored at locations of nearest human habitation (including schools and other public amenities located nearest to sources of dust generation as applicable) and records submitted to the Ministry.	For the control of the fugitive dust, various possible measures are adopted some of which are as below: (a) Manual cleaning followed by washing of the shoulders of the transport routes. (b) Regular water sprinkling on haul road is carried out to prevent the dust from getting air borne. The monitoring is carried out in nearest habitation areas; the same is done twice a week.	Graphical Representation of Air Monitoring Results is attached as Annexure-1.												

(x)	Transportation of ore shall be done by covering the trucks with tarpaulin or other suitable mechanism so that no spillage of ore /dust takes place. Transportation shall be done only during day time.	All trucks moving out of mining premises are well covered with tarpaulin and sufficient free board is maintained to prevent the spillage of ore/ dust on the road. The transportation of material is carried out during the day time.	
(xi)	Rain water harvesting shall be undertaken to recharge the ground water source. Status of implementation shall be submitted to the Ministry within six months.	Mining pits are utilized for harvesting the rain water .The rain water harvested in mining pit is utilized for the dust suppression.	
(xii)	Permission from the competent authority for extraction of ground water (if any) shall be obtained.	Permission from competent authority obtained.	Permission from WRD for pumping water from Mine pit is obtained for MS Mine via registration certificate No. R-11/MIN 06/16 dated 05/12/2016
(xiii)	Monitoring of ground and surface water quality shall be regularly conducted and records maintained and data submitted to the Ministry regularly. Further, monitoring points shall be located between the mine and drainage in the direction of flow of ground water and records maintained. Monitoring for Arsenic in ground water shall be undertaken.	Regular monitoring of Ground water and surface water is carried out and data is regularly submitted to GSPCB and Ministry.	Water Monitoring Results is attached as Annexure- 1

(xiv)	<p>Measures for prevention and control of soil erosion and management of silt shall be undertaken. Protection of dumps against erosion shall be carried out with geo textile matting or other suitable material, and thick plantations of native trees and shrubs shall be carried out at the dump slopes. Dumps shall be protected by retaining walls.</p>	<p>The mine run off water is channelized within the pit. The discharge water point is regularly monitored so as to keep a check on the water quality. The weak mine faces, ore stacks are covered with silpaulin to prevent overflow of silt.</p> <p>The old waste dumps are located outside mine lease. Protective measures are effectively implemented to control the silt flow. Geotextiles in the form of coir mats and jute mats are laid on the dump slopes. Glyricidia cuttings are used to staple the geotextiles to the dump surface. Seeds of stylo santhus hamata are sprayed on the geotextiles so as to form a green cover. Step dumping method is followed; each step is restricted to 10-12 m height.</p> <p>Settling ponds, check dams, filter beds are constructed all along the toe of the dump to prevent flow of silt outside the area. As a measure of erosion control, an area of 1200 m² is covered with silpaulin.</p>	<p>Plantation is done on common dump along with Gaval Sonshi Mine & Botvadeacho Dongor Mine Plantation details for the year 2016-17 are attached in the Annexure-2</p>
(xv)	<p>The design of the check dam shall be so as to Prevent downstream flow of the silt and regular de-siltation of the check dam shall be carried to prevent impact on the downstream water bodies and agricultural land.</p>	<p>Dump run off water is channelized through Garland drains and M.S.pipes into the settling ponds at the toe of the dumps. Check dam is constructed at toe of the dump. De-silting was not required to carry out as there was no silt accumulated in the settling pond.</p>	

(xvi)	Provision shall be made for the housing the laborer's within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	No workmen/ labor stays in the mine lease area. To and fro transport arrangement is made for all the people working on mines.	
(xvii)	Trenches/ garland drains shall be constructed at foot of dumps and coco filters installed at regular intervals to arrest silt from being carried to water bodies. Adequate number of Check Dams and Gully Plugs shall be constructed across seasonal/perennial nallahs (if any flowing through the ML area and silts arrested. De- silting at regular intervals shall be carried out.	Dump run off water is channelized through Garland drains and M.S.pipes into the settling ponds at the toe of the dumps. De-silting if required is carried out well before the onset of monsoon. During the reporting period there was no de-silting carried out as there is no silt within the settling pond.	
(xviii)	Occupational health and safety measures for the workers including identification of work related health hazards, training on malaria eradication, HIV, and health effects on exposures to mineral dust etc. shall be carried out. The company shall engage a full time qualified doctor who is trained in occupational health. Periodic monitoring for exposure to Respirable mineral dust on the workers shall be conducted and records maintained including health records of the Workers. Awareness programme for workers on impact of mining on their health and precautionary measures like use of personal equipments etc. shall be carried out periodically. Review of impact of various health measures undertaken (at interval of five years or less) shall be conducted followed by follow up action wherever required.	Company has employed doctor who is trained in occupational health. Well-equipped occupational health center is at the site to conduct the spirometry, audiometry etc Periodic monitoring is carried out for all the employees for the exposure to dust and health records are maintained. Various awareness programme are organized for the workers related to occupational health and safety issues.	

(xix)	Green belt development and selection of plant species shall be as per CPCB guidelines. Herbs and shrubs shall also form a part of afforestation programme besides tree Plantation. Details of year wise afforestation programme including rehabilitation of mined out area shall be submitted to the Ministry within six months.	Company carries out annual plantation programme. The plantation comprises a mix of fast growing species, native species and grasses and shrubs. Details of afforestation programme submitted to ministry on regularly basis. The company has established its own state of art 'Root Trainer Nursery' at Codli mine.	Plantation is done on common dump along with Gaval Sonshi Mine & Mareto Sodo Mine Plantation details for the year 2016-17 are attached in the Annexure-2.
(xx)	Top soil/ solid waste shall be stacked properly with proper slope and adequate safeguards and shall be utilized for backfilling (wherever applicable) for reclamation and rehabilitation of mined out area. Top soil shall be separately stacked for utilization later for reclamation and shall not be stacked along with over burden.	There is no top soil within the lease area.	
xxi	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 30 m, each stage shall preferably be of 10m and overall slope of the dump shall not exceed 28°. The OB lump shall be backfilled. The OB dumps shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests on six monthly basis.	Over Burden is been stacked at earmarked dumps sites only and not kept active for a long period. The dumps are located outside the lease area .Dumping is carried out as per the approved mining plan, Step dumping method is followed and each step is of 10 -15 m each. Over all angle is maintained approx. 28 degrees. The finalized areas are covered with geotextiles and jute and taken up for plantation. .	

(xxii)	Slope of the mining bench and ultimate pit limit shall be as per the mining scheme approved by Indian bureau of mines.	Complied. Mining is carried out as per mining plan an approved by Indian Bureau of Mines.	
(xxiii)	The waste water from the mine shall be treated to conform to the prescribe standards before discharging in to the natural stream. The discharged water from the Tailing Dam (if any) shall be regularly monitored and report submitted to the Ministry of Environment & Forests, Central Pollution Control Board and the State Pollution Control Board.	Regular monitoring of discharge water is done to ensure that the discharge water is conforming to the standards. No tailing dam is present.	Water Monitoring Results is attached as Annexure- 1
(xxiv)	Action plan with respect to suggestions/improvements and recommendations made during public consultation/hearing shall be submitted to the Ministry and the State Govt. within six months.	Action plan prepared for the issues / suggestion made during public hearing had been submitted to MOEF.	
(xxv)	A final mine closure plan , along with details of Corpus Fund, shall be submitted to the Ministry of Environment & Forest ,5 years in advance of final mine closure for approval.	Final closure plan approved by Indian Bureau of mines would be submitted to MOEF in due course of time in accordance with rule 23C of MCDR.	
(xxvi)	Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation of ores and others shall have valid permissions as prescribed under Central Motor Vehicle Rules, 1989 and its amendments. Transportation of ore shall be done time. 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	PUC check certificate of all the truck plying for the transportation of the ore is checked and kept as record. All trucks leaving mining premises are covered with tarpaulin. No wild life sanctuaries fall in our transport routes. Trucks are weighed before the exit point to prevent the overloading.	

	transportation. No overloading of ores for transportation shall be committed. The trucks transporting ore shall not pass through wild life sanctuary.		
(xxvii)	The environmental clearance is subject to the condition. If any, stipulated by the IBM on the mining scheme submitted by the project proponent for its approval.		
(xxviii)	Adequate buffer zone shall be maintained between two consecutive mineral bearing deposits.	Since it is single pit operation, this is not applicable.	

B	GENERAL CONDITIONS		
S. No	Condition of clearance	Status of compliance	Remarks
i	No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment & Forest.	Complied. There is no change in mining technology and scope of working. Mining is carried out as per mining plan approved by Indian Bureau of Mines	
ii	No change in the calendar plan including excavation, quantum of mineral and waste shall be made.	Mining is carried out as per mining plan approved by Indian Bureau of Mines	

iii	Fugitive dust emission from all the sources shall be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points shall be provided and properly maintained.	<p>Complied</p> <p>(a) Manual cleaning followed by washing of the shoulders of the transport routes.</p> <p>(b) Regular water sprinkling on haul road is carried out to prevent the dust from getting air borne.</p> <p>(c) Ore carrying trucks plying on public road are covered with tarpaulin & free board is provided to prevent spillage.</p>	
iv	Four ambient air quality -monitoring stations shall be established in the core zone as well in the buffer zone for RPM, SPM,SO ₂ ,NO _x monitoring data , topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution control Board.	<p>Complied.</p> <p>Air monitoring stations are fixed within the core & buffer zone and monitored as per new Mining standards in core zone and NAAQ in buffer zone at the in-house environment laboratory approved by MOEF.</p>	Graphical Representation of the Air Monitoring results is attached as Annexure 1.

v	Data on ambient air quality (RSPM, SPM, SO ₂ , and NO _x) Should be regularly submitted to the Ministry including its Regional office located at Bangalore and the State Pollution Control Board /Central Board /Central Board / Central Pollution Control Board once in six months. The monitored data of criteria pollutants mentioned above shall be regularly uploaded on the company's website and also displayed at project site.	Monitoring for Ambient Air Quality is carried out twice a week as per guidelines stipulated under Consent to Operate and the results are submitted to Ministry and GSPCB on regular basis.	
vi	Measures shall be taken for control of noise levels below 85 dB in the work environment .Workers engaged in operations of HEMM, etc. Shall be provided with ear Plugs /muffs.	Complied. Most of the dumpers & HEMM is with A/C cabins which minimize the impact of noise on operator. DG sets are provided with acoustic enclosures. All people working in mines are provided with requisite personal protective equipment's.	
vii	Industrial waste water (Workshop and waste water from the mine) should be properly collected treated so as to confirm 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.	There is no work shop within the mine, however the facilities of adjoining gaval sonshi mine of cosme costa is utilized .Oil and grease trap is installed to treat the workshop effluent water. The treated water is utilized for vehicle washing ramp.	

viii	Personnel 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.	Dust mask are provided to the personnel's exposed to dusty conditions. All the dumpers & HEMM are with A/C cabins. Regular on the job training on health and safety aspects is provided to all personnel working on mines.	
ix	Provision shall be made for the housing the laborers 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.	Not applicable as there is no additional infrastructure facilities developed.	

x	A separate Environment 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.	Complied Environment cell has multidisciplinary staff, qualified in –Environment engineering, Agriculture, Forestry who directly reports to the CEO of the Company.											
xi	The project authorities shall inform to the Regional Office of the Ministry located at Bangalore 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 an ongoing mining project.											
xii	The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year wise expenditure shall be reported to the Ministry and its Regional Office located at Bangalore.	Complied Expenditure for all the environmental measure / monitoring /reclamation etc. is separately earmarked in operational budget. Yearly expenditure on environment activities is submitted to ministry regional office.	<table><tr><td colspan="2">The Environmental Expenditure for FY 2016-17</td></tr><tr><td>Purpose</td><td>Expenditure in Rs.</td></tr><tr><td>General expenditure</td><td>44,735.00</td></tr><tr><td>Erosion control</td><td>67,998.65</td></tr><tr><td>–Dust suppression</td><td></td></tr></table>	The Environmental Expenditure for FY 2016-17		Purpose	Expenditure in Rs.	General expenditure	44,735.00	Erosion control	67,998.65	–Dust suppression	
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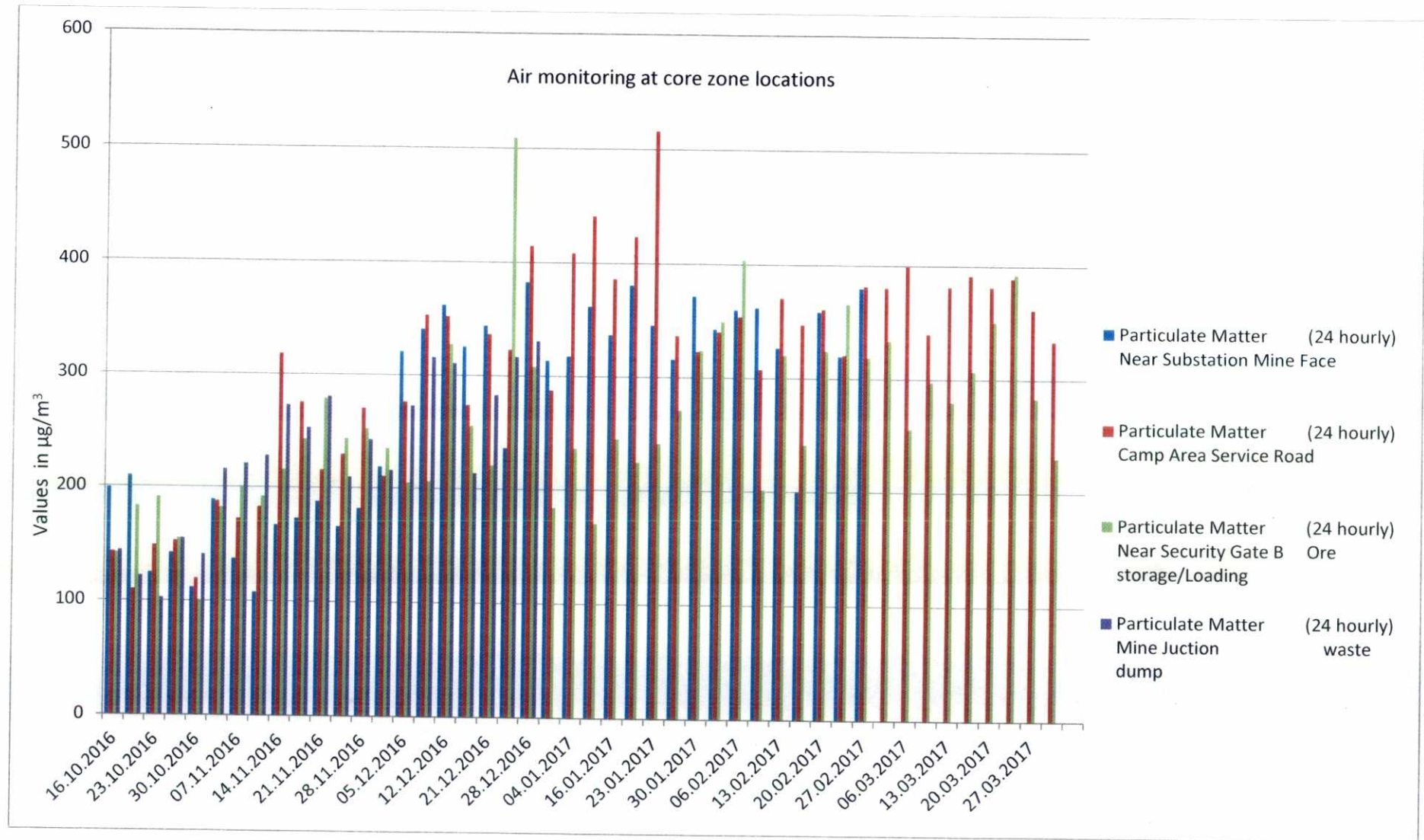
				725,674.00
			Total	838,407.65
xiii	The project authorities shall inform to the Regional Office of the Ministry located at Bangalore regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	It is an ongoing mining project.		
xiv	The Regional Office of the Ministry located at Bangalore shall monitor compliance of the stipulated conditions .The project authorities shall extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information /monitoring reports .	Necessary support shall be provided to the regional officer for the visit, furnishing requisite data etc.		
xv	The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests its Regional office, Bangalore, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environment of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forests, Bangalore. 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.	Is Submitted		

xvi	The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality /office of Municipal Corporation/Gram Panchayat concerned and on the company's web site within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution Control Board/Committee and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in .	Copy of advertisement of the Environment Clearance letter in two local newspapers has been done.	
xvii	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. The clearance letter shall also be put on the website of the company.	Is complied	
xviii	State Pollution Control Board shall display a copy of the clearance letter at the Regional office, District industries center and collector office/Tehsildar's Office for 30 days.	--	
xix	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the State Pollution Control Board as prescribed under The Environment (Protection) Rules, 1986, as amended subsequently and shall also be put on the website of the company along with the status of compliance of environmental clearance conditions. The same shall also be sent to the Regional Office of Ministry by e-mail.	Is complied.	

5	The Ministry of Environment and Forests reserves the right to revoke the clearance if conditions stipulate are not implemented to the satisfaction of the Ministry. MOEF may impose additional environmental conditions or modify the existing ones, if necessary.		
6	In case of any deviation or alteration in the project proposed from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition(s) imposed and to add additional environmental protection measures required, if any.		
7	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.		
8	Any appeal against this environment 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.		
9	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 and also any other orders passed by the Hon'ble Supreme Court of India/ High Court of Goa and any other Court of Law relating to the subject matter.		

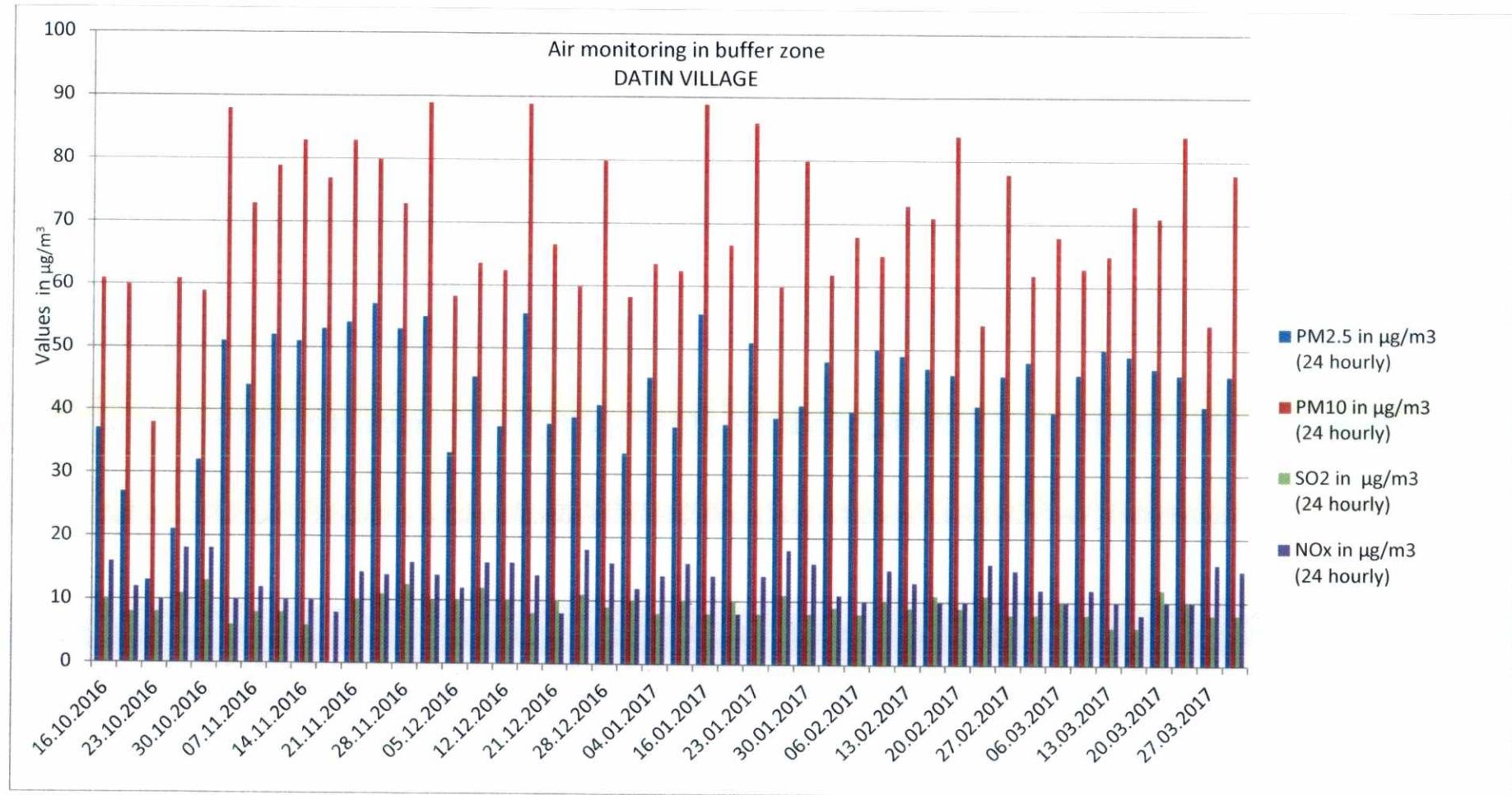
Ambient Air Quality Monitoring Report

Mareto Sodo Iron Ore Mine



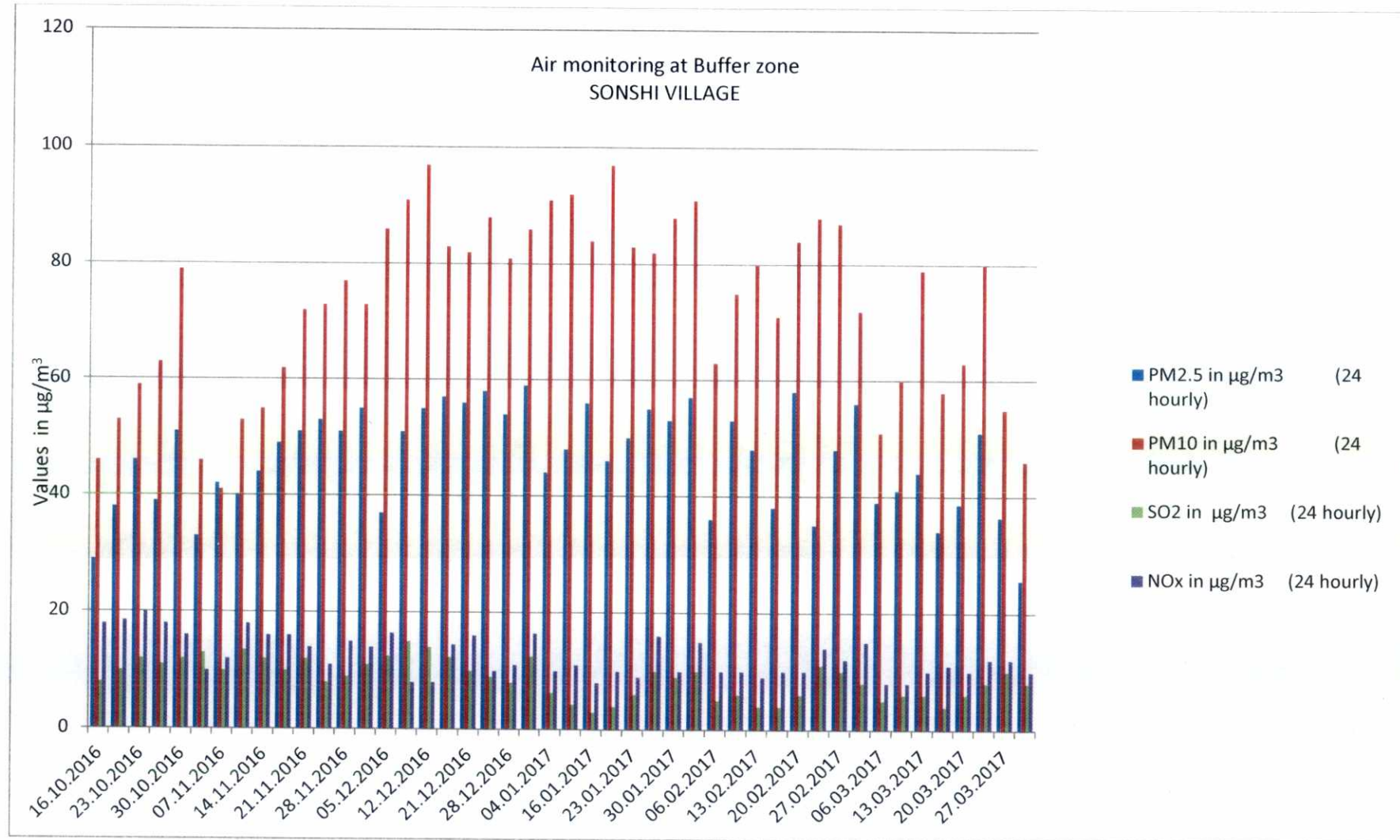
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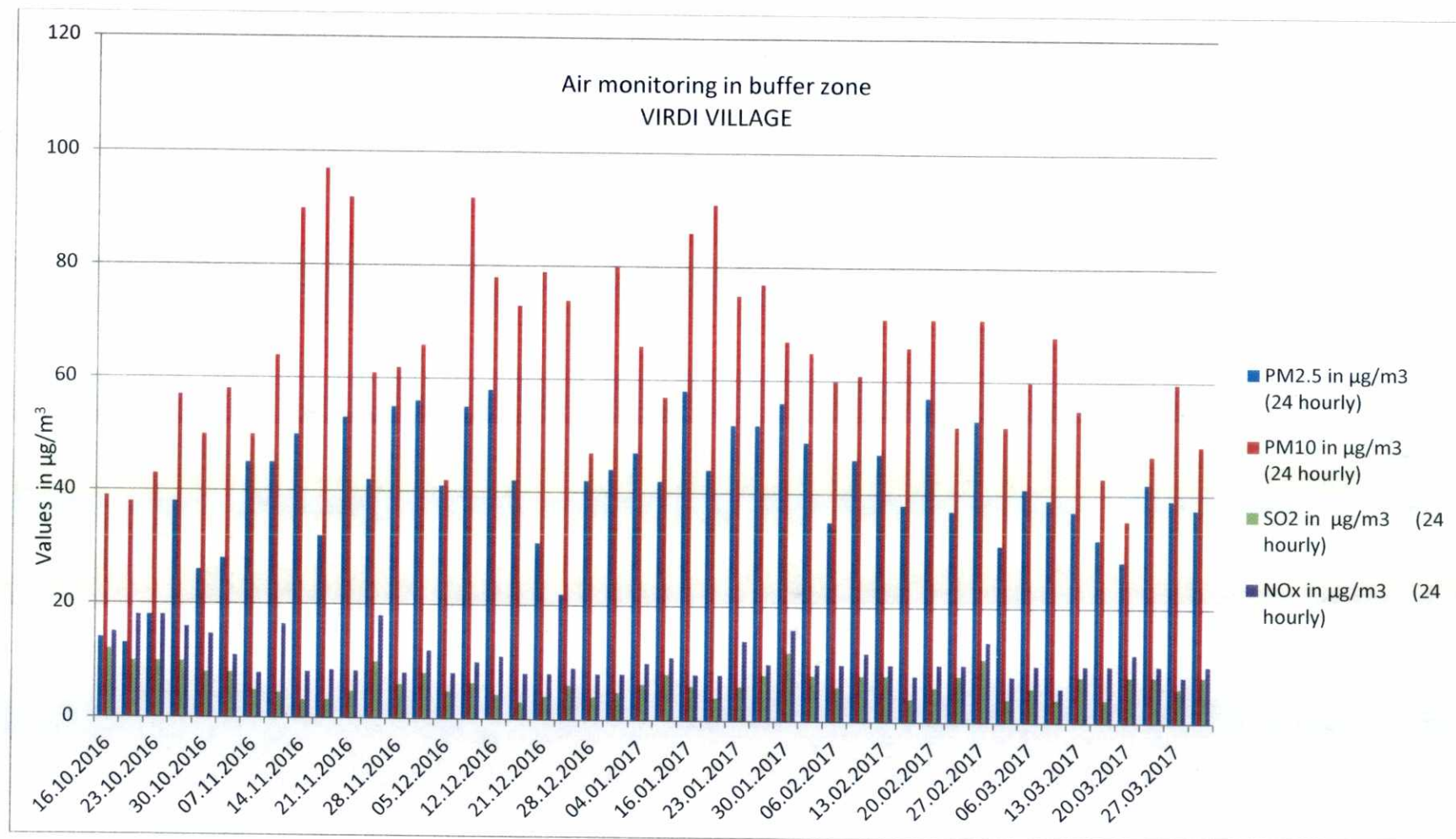
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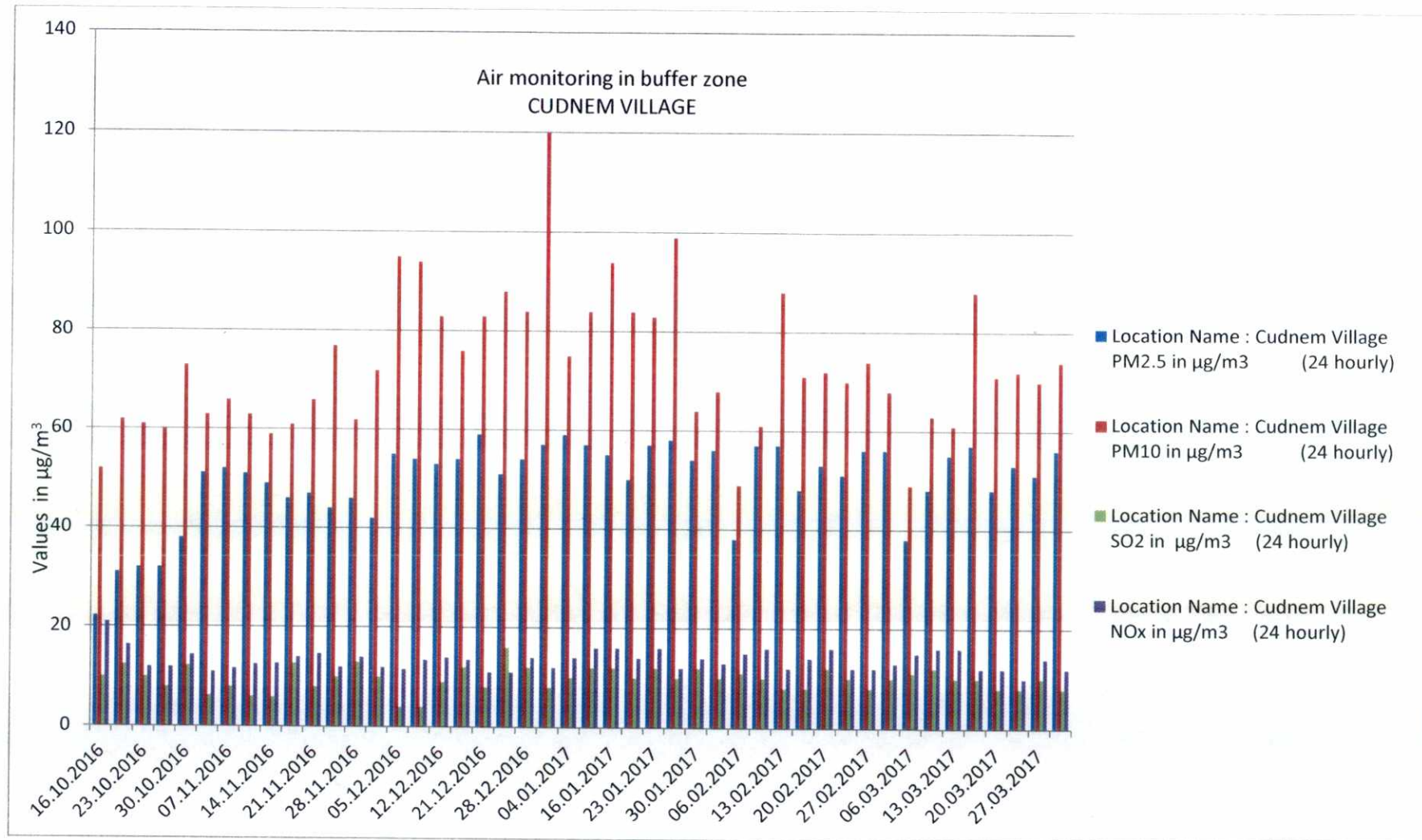
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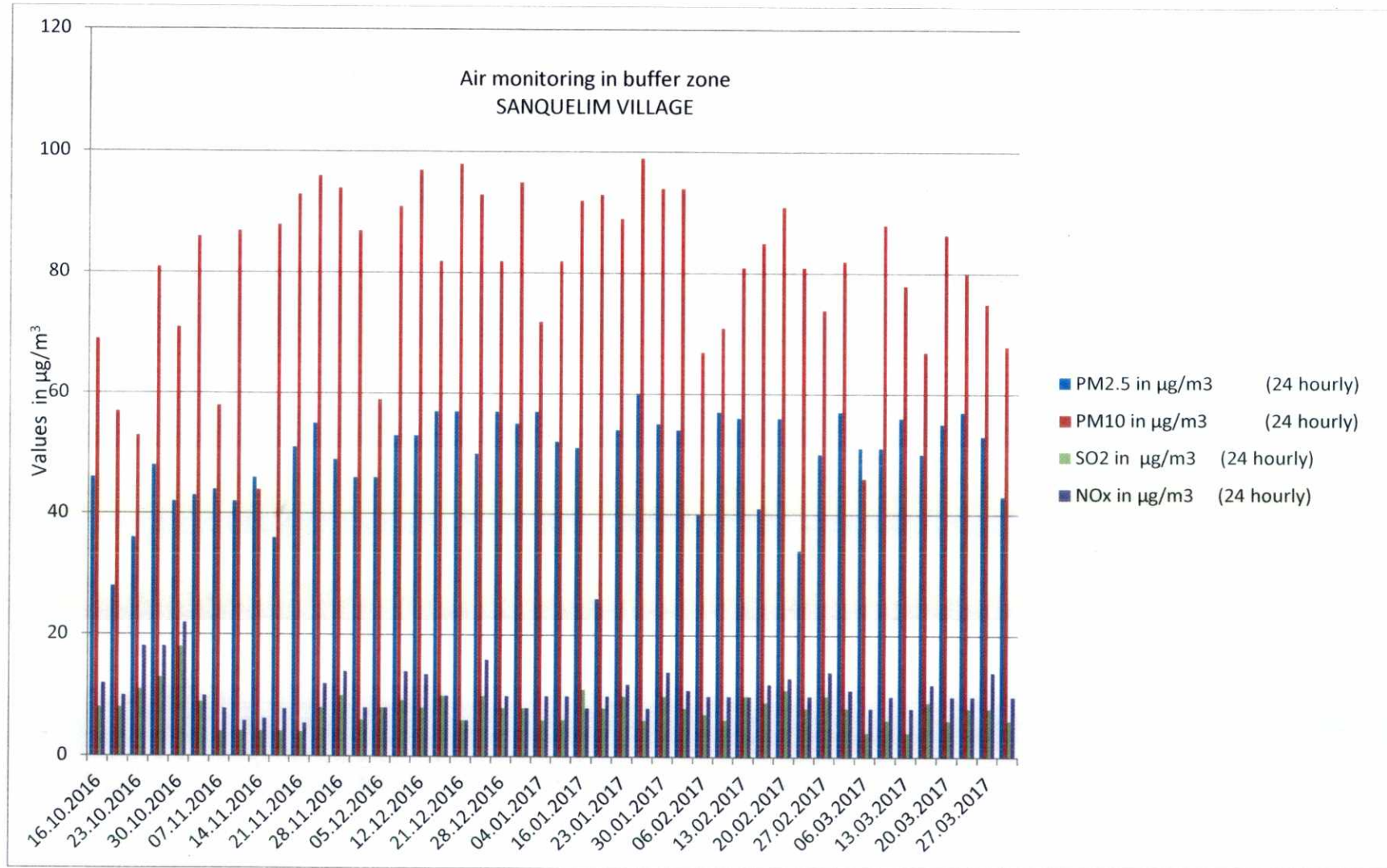
Ambient Air Quality Monitoring Report

Mareto Sodo Iron Ore Mine



Ambient Air Quality Monitoring Report

Mareto Sodo Iron Ore Mine



M/s Sesa Environment Laboratory

Vedanta Limited, Mining Division, Codli Mines, P.O. Kirlapale, Goa-403727

Recognised by Ministry of Environment, Forests and Climate change, Govt. of India Vide Notification S.O.137(E). Dated 12th January 2015, valid up to 11.01.2020

* Certified by ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007

Well Water Analysis Report

Mine Name: Mareto Sodo Mine

Date of Sample collection : 10.10.2016

Standard method used for analysis: APHA Standard


Test Report No:178

Date of Receipt of sample: 10.10.2016
Analysis completion date: 17.10.2016

Parameter	Unit	Permissible Limit	Location			
			Sonshi Well	PTI Camp Well	Mahesh Gaude Well	Mr. Gokuldas Gawde Well
Colour	Hazen	<5	<5	<5	<5	<5
pH	-	6.5-8.5	5.5	6.3	5.2	5.7
Turbidity	NTU	5	1.3	2.5	1.8	2.4
Conductivity	$\mu\text{S}/\text{cm}$	-	31	46	44	67
Dissolved Solids	mg/lit	500	16	23	22	34
Suspended Solids	mg/lit	-	2	2	2	2
Chloride	mg/lit	250	8	2	6	9
Total Hardness as CaCO_3	mg/lit	200	10	16	14	16
Calcium as Ca^{++}	mg/lit	75	2.4	4.8	2.4	3.2
Magnesium as mg^{++}	mg/lit	30	1.0	1.0	1.9	1.9
Sulphate as SO_4	mg/lit	200	0.6	2.9	1.7	8.1
Nitrate as NO_3	mg/lit	45	BDL	0.1	0.1	0.1
Alkalinity	mg/lit	200	24	35	13	31
Iron as Fe	mg/lit	0.3	0.03	BDL	0.04	0.04
Manganese as Mn	mg/lit	0.1	BDL	BDL	BDL	0.01
MPN/100ml	-	Absent	6	10	21	17

BDL- Below Detection Limit

Govt. Analyst

for. 
Laboratory Incharge

M/s Sesa Environment Laboratory

Vedanta Limited ,Mining Division ,Codli Mines,P.O. Kirlapale ,Goa-403727

Recognised by Ministry of Environment, Forests and Climate change, Govt. of India Vide Notification .S.O.137(E).

dated 12th January 2015 , Valid up to 11.01.2020

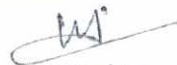
* Certified by ISO 9001: 2008, ISO 14001:2004 and OHSAS 18001:2007

Well Water level Report

Mine Name: Mareto Sodo mine

Instrument Used: Well water tape

Sr.No	Location	Total Depth of well in mtr	Depth of Water level from the reference point in mtr	Water Column in mtr
			10.10.2016	
1	Well of M/s Vedanta Limited	7.28	1.8	5.5
2	Well of Mr. Mahesh Gaude	3	0.6	2.4
3	Well of Mr. Gokuldas Gaude	7.4	2.1	5.3
4	PTI camp well	6	2.0	4.0


Govt Analyst



for 
Laboratory Incharge

M/s Sesa Environment Laboratory

Vedanta Limited, Mining Division, Colli Mines, P.O. Kirlapale, Goa-403727

Recognised by Ministry of Environment, Forests and Climate change, Govt. of India Vide Notification S.O.137(E). Dated 12th January 2015, Valid up to 11.01.2020

* Certified by ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007

Surface Water Analysis Report for the Month of October 2016

Mine Name: Mareto Sodo Mine

Date of Sample collection: 10.10.2016

Standard method used for analysis: APHA Standard


Test Report No: 177

Date of Receipt of sample: 10.10.2016


Analysis completion date: 17.10.2016

Parameter	Unit	Permissible Limits	Location								
			Upstream Advoi Nallah	Downstream Advoi nallah	Upstream sonshi nallah	Down stream sonshi nallah	Pit Discharge	Pissurlem dump run off	Sonshi dump run off	Sonshi Nallah near Ajoba Temple	Vaghurem side dump runoff
Colour	Hazen	----	6	5	6	5	6	12	11	9	8
pH	----	5.5 to 9.0	5.88	5.85	6.18	6.2	6.26	6.13	6.21	6.25	6.19
Turbidity	NTU	----	1.5	1.8	1.9	2.1	3.0	4	4.5	5	2.2
Dissolved Solids	mg/lit	----	18	18	20	21	17	16	19	22	17
Conductivity	µS/cm	----	36	35	40	42	34	32	38	44	35
Suspended Solids	mg/lit	100	6	3	2	2	2	8	2	3	7
Chlorides	mg/lit	----	6	5	5	5	6	4	4	5	5
Total Hardness as CaCO ₃	mg/lit	----	12	14	16	16	12	12	14	20	12
Calcium as Ca ⁺⁺	mg/lit	----	3.2	2.4	4.0	4.0	2.4	2.4	2.4	3.2	3.2
Magnesium as Mg ⁺⁺	mg/lit	----	1.0	1.9	1.5	1.5	1.5	1.5	1.9	2.9	1.0
Sulphate as SO ₄	mg/lit	----	0.6	0.8	0.6	1.0	1.0	0.6	0.6	0.6	0.6
Phosphate as PO ₄	mg/lit	5	BDL	BDL	BDL	BDL	BDL	0.1	0.1	BDL	BDL
Nitrate as NO ₃	mg/lit	10	0.1	0.1	BDL	BDL	BDL	0.1	0.1	0.1	0.1
B.O.D (3days, 27°C)	mg/lit	30	<3	<3	4.6	<3	<3	<3	<3	<3	<3
C.O.D	mg/lit	250	<10	<10	19	<10	<10	<10	<10	<10	<10
Total Iron	mg/lit	3	0.06	0.07	0.08	0.07	0.07	BDL	0.06	0.09	BDL
Manganese as Mn	mg/lit	2	BDL	BDL	0.03	0.03	0.02	BDL	BDL	0.03	BDL
D.O	mg/lit	----	6.6	6.9	7	7	7	7	7	7	7
Oil & Grease	mg/lit	10	<1	<1	<1	<1	<1	Nil	Nil	<1	Nil

BDL- Below Detection Limit


Govt. Analyst




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Well Water Analysis Report

Mine Name: Mareto Sodo Mine

Date of Sample collection :17.01.2017

Standard method used for analysis: APHA Standard

Test Report No: 231

Date of Receipt of sample:17.01.2017

Analysis completion date:31.01.2017

Parameter	Unit	Permissible Limit	Location			
			Sonshi Well	PTI Camp Well	Mahesh Gaude Well	Mr. Gokuldas Gawde Well
Colour	Hazen	<5.0	<5	<5	<5	<5
pH	-	6.5-8.5	6.4	6.5	6.5	6.5
Turbidity	NTU	5	1	1.0	0.9	0.8
Conductivity	µs/cm	-	50	38	47	51
Dissolved Solids	mg/lit	500	25	19	28	32
Suspended Solids	mg/lit	-	2	1	2	2
Chloride	mg/lit	250	6.9	7	7	8
Total Hardness as CaCO ₃	mg/lit	200	12	14	18	18
Calcium as Ca++	mg/lit	75	2	3.2	4.0	4.0
Magnesium as mg++	mg/lit	30	1.5	1.5	1.9	1.9
Sulphate as SO ₄	mg/lit	200	1.0	2.1	0.6	4.8
Nitrate as NO ₃	mg/lit	45	BDL	BDL	0.1	0.1
Alkalinity	mg/lit	200	21	26	16	33
Iron as Fe	mg/lit	0.3	0.21	0.20	0.06	0.16
Manganese as Mn	mg/lit	0.1	0.09	0.01	BDL	0.05
MPN/100ml	mg/lit	Absent	4	21	10	20


Govt. Analyst
Laboratory Incharge

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Well Water level Report


Mine Name: Mareto Sodo mine

Instrument Used: Well water tape

Sr.No	Location	Total Depth of well	Depth of Water level from the reference point in mtrs	Water Column in mtrs
			17.01.2016	
1	Well of M/s Vedanta Limited	7.28	4.1	3.18
2	Well of Mr. Mahesh Gaude	3	1.4	1.6
3	Well of Mr. Gokuldas Gaude	7.4	4.3	3.1
4	PTI camp well	6	3.4	2.6


Govt Analyst




Laboratory Incharge

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Surface Water Analysis Report for the Month of January 2017

Mine Name: Mareto Sodo Mine

Date of Sample collection: 17.01.2017

Standard method used for analysis: APHA Standard

Test Report No: 223

Date of Receipt of sample: 17.01.2017

Analysis completion date: 24.01.2017

Parameter	Unit	Location						
		Permissible limits	Upstream Advoi Nallah	Downstream Advoi nallah	Upstream sonshi nallah	Down stream sonshi nallah	Pit Discharge	Sonshi Nallah near Ajoba Temple
Colour	Hazen	----	<5	<5	<5	<5	<5	<5
pH	----	5.5 to 9.0	6.5	6.60	6.7	6.75	6.5	6.48
Turbidity	NTU	----	1.0	0.9	0.9	1.0	0.9	1
Dissolved Solids	mg/lit	----	22	26	33	18	16	20
Conductivity	μ S/cm	----	44	47	66	35	32	34
Suspended Solids	mg/lit	100	2	2	2	2	2	2
Chlorides	mg/lit	----	7	6	7	7	6	6
Total Hardness as CaCO ₃	mg/lit	----	16	16	28	24	16	14
Calcium as Ca ⁺⁺	mg/lit	----	2.4	2.4	6.4	4.8	2.4	2.4
Magnesium as Mg ⁺⁺	mg/lit	----	2.4	2.4	2.9	2.9	2.4	1.9
Sulphate as SO ₄	mg/lit	----	1.2	1	1	2	1	1
Phosphate as PO ₄	mg/lit	5	BDL	BDL	0.1	BDL	BDL	0.1
Nitrate as NO ₃	mg/lit	10	0.1	0.1	0.1	BDL	BDL	BDL
B.O.D (3days, 27°C)	mg/lit	30	<3	<3	5	5	<3	<3
C.O.D	mg/lit	250	<10	<10	18	14	<10	<10
Total Iron	mg/lit	3	0.14	0.11	0.12	0.15	0.16	0.11
Manganese as Mn	mg/lit	2	0.05	0.06	0.05	0.08	0.06	0.04
D.O	mg/lit	----	7.0	6.9	7	7	7	7
Oil & Grease	mg/lit	10	<1	<1	<1	<1	1	1

Note :- No water discharge from Pissurlem dump run off, Sonshi Dump run off & Vaghure side dump run off

BDL- Below Detection Limit

Govt. Analyst



Laboratory Incharge

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Surface Water Analysis Report for the Month of February 2017

Mine Name: Mareto Sodo Mine

Date of Sample collection: 22.02.2017

Standard method used for analysis: APHA Standard

Test Report No: 251

Date of Receipt of sample: 22.02.2017

Analysis completion date: 27.02.2017

Parameter	Unit	Location		
		Permissible limits	Pit Discharge	Sonshi Nallah near Ajoba Temple
Colour	Hazen	----	<5	<5
pH	----	5.5 to 9.0	6.58	6.51
Turbidity	NTU	----	0.9	0.9
Dissolved Solids	mg/lit	----	25	29
Conductivity	μ S/cm	----	50	58
Suspended Solids	mg/lit	100	2	2
Chlorides	mg/lit	----	7	7
Total Hardness as CaCO ₃	mg/lit	----	16	20
Calcium as Ca ⁺⁺	mg/lit	----	2.4	4.0
Magnesium as Mg ⁺⁺	mg/lit	----	2.4	2.4
Sulphate as SO ₄	mg/lit	----	2.3	2
Phosphate as PO ₄	mg/lit	5	0.1	0.1
Nitrate as NO ₃	mg/lit	10	BDL	BDL
B.O.D (3days, 27°C)	mg/lit	30	<3	<3
C.O.D	mg/lit	250	<10	<10
Total Iron	mg/lit	3	0.20	0.16
Manganese as Mn	mg/lit	2	0.09	0.06
D.O	mg/lit	----	7	7
Oil & Grease	mg/lit	10	1	<1

Note :- No water discharge from Pissurlem dump run off , Sonshi Dump run off ,Vaghure side dump run off , Upstream Advoi Nallah, Downstream Advoi nallah, Upstream sonshi nallah, & Downstream sonshi nallah

BDL- Below Detection Limit

Govt. Analyst



Laboratory Incharge

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Well Water level Report

Mine Name: Mareto Sodo mine

Instrument Used: Well water tape

Sr.No	Location	Total Depth of well in mtrs	Depth of Water level from the reference point in mtrs	Water Column in mtrs
			22.02.2017	
1	Well of M/s Vedanta Limited	7.28	5.7	1.58
2	Well of Mr. Mahesh Gaude	3	1.8	1.2
3	Well of Mr. Gokuldas Gaude	7.4	4.9	2.5
4	PTI camp well	6	4	2


Authorized Govt. Analyst




Laboratory Incharge

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Well Water Analysis Report

Mine Name: Mareto Sodo Mine

Date of Sample collection :22.02.2017

Standard method used for analysis: APHA Standard

Test Report No:252

Date of Receipt of sample:22.02.2017

Analysis completion date:27.02.2017

Parameter	Unit	Desirable Limit	Location			
			Sonshi Well	PTI Camp Well	Mahesh Gaude Well	Mr. Gokuldas Gawde Well
Colour	Hazen	<5	<5	<5	<5	<5
pH	-	6.5-8.5	6.45	6.19	6.40	5.63
Turbidity	NTU	1	1	0.9	1	1
Conductivity	µs/cm	-	40	54	52	60
Dissolved Solids	mg/lit	500	20	27	26	30
Suspended Solids	mg/lit	-	1	1	2	1
Chloride	mg/lit	250	7	8	7	8
Total Hardness as CaCO3	mg/lit	200	12	14	16	18
Calcium as Ca++	mg/lit	75	2.4	3.2	3.2	4.0
Magnesium as mg++	mg/lit	30	1.5	1.5	1.9	1.9
Sulphate as SO4	mg/lit	200	1	4.7	3.1	2.8
Nitrate as NO3	mg/lit	45	0.1	0.2	0.2	0.2
Alkalinity	mg/lit	200	18	26	23	13
Iron as Fe	mg/lit	0.3	0.11	0.11	0.12	0.15
Manganese as Mn	mg/lit	0.1	0.03	0.02	0.04	0.05
MPN/100ml	mg/lit	Absent	10	17	17	21

Authorized Govt. Analyst



Laboratory Incharge

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Surface Water Analysis Report for the Month of March 2017

Mine Name: Mareto Sodo Mine

Date of Sample collection: 20.03.2017

Standard method used for analysis: APHA Standard

Test Report No: 263

Date of Receipt of sample: 20.03.2017

Analysis completion date: 25.03.2017

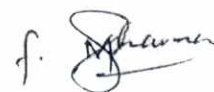
Parameter	Unit	Location		
		Permissible limits	Pit Discharge	Sonshi Nallah near Ajoba Temple
Colour	Hazen	----	<5	<5
pH	----	5.5 to 9.0	6.61	6.56
Turbidity	NTU	----	1.0	0.9
Dissolved Solids	mg/lit	----	32	32
Conductivity	μ S/cm	----	64	64
Suspended Solids	mg/lit	100	2	2
Chlorides	mg/lit	----	9	7
Total Hardness as CaCO ₃	mg/lit	----	20	24
Calcium as Ca ⁺⁺	mg/lit	----	3.2	4.9
Magnesium as Mg ⁺⁺	mg/lit	----	2.9	2.9
Sulphate as SO ₄	mg/lit	----	3.0	2
Phosphate as PO ₄	mg/lit	5	0.1	0.1
Nitrate as NO ₃	mg/lit	10	0.1	BDL
B.O.D (3days, 27°C)	mg/lit	30	<3	4
C.O.D	mg/lit	250	<10	19
Total Iron	mg/lit	3	0.18	0.17
Manganese as Mn	mg/lit	2	0.08	0.06
D.O	mg/lit	----	7	7
Oil & Grease	mg/lit	10	1.2	<1

Note :- No water discharge from Pissurlem dump run off, Sonshi Dump run off, Vaghure side dump run off, Upstream Advoi Nallah, Downstream Advoi nallah, Upstream sonshi nallah & Down stream sonshi nallah.

BDL- Below Detection Limit


Govt. Analyst




Laboratory Incharge

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Well Water level Report

Mine Name: Mareto Sodo Mine

Instrument Used: Well water tape

Sr.No	Location	Total Depth of well in mtr	Depth of Water level from the reference point in mtr	Water Column in mtr
			16.11.2016	
1	Well of M/s Vedanta Limited	7.28	4.0	3.3
2	Well of Mr. Mahesh Gaude	3	1.0	2.0
3	Well of Mr. Gokuldas Gaude	7.4	4.4	3.0
4	PTI camp well	6	3.6	2.4


Govt Analyst




Laboratory Incharge

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Well Water Analysis Report**Mine Name:** Mareto Sodo Mine**Date of Sample collection :** 16.11.2016**Standard method used for analysis:** APHA Standard**Test Report No:** 198**Date of Receipt of sample:** 16.11.2016**Analysis completion date:** 21.11.2016

Parameter	Unit	Permissible Limit	Location			
			Sonshi Well	PTI Camp Well	Mahesh Gaude Well	Mr. Gokuldas Gawde Well
Colour	Hazen	<5	<5	<5	<5	<5
pH	-	6.5-8.5	6.1	6.2	6.3	6.0
Turbidity	NTU	5	1.0	2.0	1.2	1.1
Conductivity	µs/cm	-	30	50	38	70
Dissolved Solids	mg/lit	500	15	25	19	35
Suspended Solids	mg/lit	-	2	2	2	2
Chloride	mg/lit	250	6	3	5	9
Total Hardness as CaCO ₃	mg/lit	200	8	18	14	18
Calcium as Ca ⁺⁺	mg/lit	75	1.6	4.0	2.4	4.0
Magnesium as mg ⁺⁺	mg/lit	30	1.0	1.9	1.9	1.9
Sulphate as SO ₄	mg/lit	200	0.8	2	0.6	4.8
Nitrate as NO ₃	mg/lit	45	BDL	BDL	BDL	0.1
Alkalinity	mg/lit	200	25	33	15	33
Iron as Fe	mg/lit	0.3	0.1	0.06	0.07	0.08
Manganese as Mn	mg/lit	0.1	0.08	BDL	BDL	0.05
Coliform (MPN) Organism/100ml	-	Absent	13	16	20	12

BDL- Below Detection Limit


Govt. Analyst
Laboratory Incharge

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Surface Water Analysis Report for the Month of November 2016

Mine Name: Mareto Sodo Mine

Date of Sample collection: 16.11.2016

Standard method used for analysis: APHA Standard

Test Report No: 197


Date of Receipt of sample: 16.11.2016

Analysis completion date: 21.11.2016

Parameter	Unit	Location						
		Permissible limits	Upstream Advoi Nallah	Downstream Advoi nallah	Upstream sonshi nallah	Down stream sonshi nallah	Pit Discharge	Sonshi Nallah near Ajoba Temple
Colour	Hazen	----	<5	<5	<5	<5	<5	<5
pH	----	5.5 to 9.0	6.23	6.16	6.2	6.31	6.39	6.2
Turbidity	NTU	----	1.0	1.2	1.3	1.7	2.1	2
Dissolved Solids	mg/lit	----	19	18	22	23	20	26
Conductivity	μS/cm	----	38	36	44	46	40	52
Suspended Solids	mg/lit	100	2	2	2	2	2	2
Chlorides	mg/lit	----	6	5	6	5	6	6
Total Hardness as CaCO ₃	mg/lit	----	14	12	16	18	14	20
Calcium as Ca ⁺⁺	mg/lit	----	3.2	2.4	4.0	4.0	3.2	3.2
Magnesium as Mg ⁺⁺	mg/lit	----	1.5	1.5	1.5	1.9	1.5	2.9
Sulphate as SO ₄	mg/lit	----	1	1	0.8	1	1	1
Phosphate as PO ₄	mg/lit	5	BDL	BDL	BDL	BDL	BDL	BDL
Nitrate as NO ₃	mg/lit	10	0.1	0.1	0.1	0.1	BDL	0.1
B.O.D (3days, 27°C)	mg/lit	30	<3	<3	3.2	3.6	<3	<3
C.O.D	mg/lit	250	<10	<10	18	18	<10	<10
Total Iron	mg/lit	3	0.1	0.08	0.07	0.10	0.16	0.09
Manganese as Mn	mg/lit	2	0.08	0.03	0.03	0.04	0.04	0.04
D.O	mg/lit	----	6.6	6.9	7	7	7	7
Oil & Grease	mg/lit	10	1	1	<1	<1	1.1	1

Note :- No water discharge from Pissurlem dump run off, Sonshi Dump run off & Vaghure side dump run off

BDL- Below Detection Limit


Govt. Analyst




Laboratory Incharge

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Well Water level Report

Mine Name: Mareto Sodo mine

Instrument Used: Well water tape

Sr.No	Location	Total Depth of well in mtr	Depth of Water level from the reference point in mtr	Water Column in mtr
			26.12.2016	
1	Well of M/s Vedanta Limited	7.28	4.3	3.0
2	Well of Mr. Mahesh Gaude	3	1.6	1.4
3	Well of Mr. Gokuldas Gaude	7.4	4.25	3.2
4	PTI camp well	6	3.8	2.2


Govt Analyst




Laboratory Incharge

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Well Water Analysis Report

Date of Receipt of sample: 26.12.2016
Analysis completion date: 31.12.2016

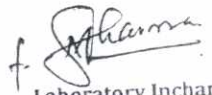
Mine Name: Mareto Sodo Mine
Date of Sample collection : 26.12.2016
Standard method used for analysis: APHA Standard
Test Report No: 219

Parameter	Unit	Permissible Limit	Location			
			Sonshi Well	PTI Camp Well	Maresh Gaudé Well	Mr. Gokuldas Gawde Well
Colour	Hazen	<5	<5	<5	<5	<5
pH	-	6.5-8.5	6.4	6.5	6.2	6.5
Turbidity	NTU	5	0.9	1.0	1.0	0.8
Conductivity	µs/cm	-	32	48	49	65
Dissolved Solids	mg/lit	500	16	24	25	32
Suspended Solids	mg/lit	-	2	1	2	2
Chloride	mg/lit	250	7	6	8	8
Total Hardness as CaCO ₃	mg/lit	200	8	14	16	18
Calcium as Ca++	mg/lit	75	10	3.2	3.2	4.6
Magnesium as mg++	mg/lit	30	1.6	1.5	1.9	1.9
Sulphate as SO ₄	mg/lit	200	1.0	2.1	0.6	4.8
Nitrate as NO ₃	mg/lit	45	BDL	BDL	0.1	0.1
Alkalinity	mg/lit	200	22	30	18	33
Iron as Fe	mg/lit	0.3	0.1	0.08	0.05	0.09
Manganese as Mn	mg/lit	0.1	0.04	0.02	0.03	0.04
MPN/100ml	-	Absent	17	16	21	12

BDL- Below Detection Limit


Govt. Analyst




Laboratory Incharge

M/s Sesa Environment Laboratory

Vedanta Limited, Mining Division, Codli Mines, P.O. Kirlapale, Goa-403727

Recognised by Ministry of Environment, Forests and Climate change, Govt. of India Vide Notification .S.O.137(E). Dated 12th January 2015, Valid up to 11.01.2020

* Certified by ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007

Surface Water Analysis Report for the Month of December 2016

Mine Name: Mareto Sodo Mine

Date of Sample collection: 26.12.2016

Standard method used for analysis: APHA Standard

Test Report No: 217

Date of Receipt of sample: 26.12.2016

Analysis completion date: 31.12.2016

Parameter	Unit	Location						
		Permissible limits	Upstream Advoi Nallah	Downstream Advoi nallah	Upstream sonshi nallah	Down stream sonshi nallah	Pit Discharge	Sonshi Nallah near Ajoba Temple
Colour	Hazen	----	<5	<5	<5	<5	<5	<5
pH	----	5.5 to 9.0	6.51	6.56	6.83	6.57	6.52	6.39
Turbidity	NTU	----	1.0	1.0	0.8	1.0	1.3	2
Dissolved Solids	mg/lit	----	22	21	33	20	16	16
Conductivity	µS/cm	----	44	42	66	39	32	33
Suspended Solids	mg/lit	100	2	2	2	2	2	2
Chlorides	mg/lit	----	7	6	7	5	5	6
Total Hardness as CaCO ₃	mg/lit	----	16	14	26	20	12	12
Calcium as Ca ⁺⁺	mg/lit	----	2.4	2.4	5.6	3.2	2.4	2.4
Magnesium as Mg ⁺⁺	mg/lit	----	2.4	1.9	2.9	2.9	1.5	1.5
Sulphate as SO ₄	mg/lit	----	0.9	1	0.8	1	1	1
Phosphate as PO ₄	mg/lit	5	BDL	BDL	BDL	BDL	BDL	0.1
Nitrate as NO ₃	mg/lit	10	0.1	0.1	0.1	BDL	BDL	0.1
B.O.D (3days, 27°C)	mg/lit	30	<3	<3	4	4	<3	<3
C.O.D	mg/lit	250	<10	<10	18	18	<10	<10
Total Iron	mg/lit	3	0.12	0.11	0.09	0.15	0.15	0.1
Manganese as Mn	mg/lit	2	0.06	0.03	0.04	0.07	0.05	0.04
D.O	mg/lit	----	7.0	6.9	7	7	7	7
Oil & Grease	mg/lit	10	<1	1	<1	<1	<1	1

Note :- No water discharge from Pissurlem dump run off, Sonshi Dump run off & Vaghure side dump run off
BDL- Below Detection Limit

Govt. Analyst



Laboratory Incharge

**PLANTATION DETAILS
FOR THE FINANCIAL YEAR 2016-2017**

Location		Species	QTY	Area
PLANTATION 2016				
Mareto Sodo Mines	Accacia		4200	OML
	Apta		200	
	Bamboo		100	
	Cashew		500	
	Casia siamea		150	
	Peltorum		105	
	Rain tree		245	
	Tamrind		100	
	Total		5600 nos	
Total area			1.38 Ha	Plantation is done on common dump along with BD Mine & Mareto Sodo mine