

To,

Nov 28, 2016

Additional Principal Chief Conservator of Forests
Ministry of Environment, Forests & Climate Change
Regional Office (WCZ),
New Secretariat Building,
Civil Lines,
Nagpur-440 001

<u>Sub</u>: Submission of Six monthly compliance reports for the period April 2016 – September 2016 w.r.t <u>Rowale Bauxite Mine</u> of M/s. Ashapura Minechem Limited, at Village- Rowale, Taluk -Dapoli, District- Ratnagiri, Maharashtra reg.

Ref: Environmental Clearance granted by MoEF vide letter No-J-11015/417/ 2013-IA.II [M] Dated 24.02.2016.

Respected Sir,

With reference to the above cited subject, please find enclosed herewith six monthly compliance reports on environmental clearance conditions for the period April 2016-September 2016, stipulated for Rowale Bauxite Mine of Ashapura Minechem Ltd, at Village Rowale, Taluka Dapoli, Dist. Ratnagiri, Maharashtra.

We hope the above information will fulfill your requirement.

Thanking You,

For Ashapura Minechem Limited

Authorized Signatory

C.C: The Sub Regional Officer, Maharashtra Pollution Control Board, Chiplun, Dist. Ratnagiri, Maharashtra.

ENVIRONMENTAL COMPLIANCE STATEMENT

FOR THE PERIOD APRIL 2016 TO SEPTEMBER 2016

Environmental Compliance Statement for submission to the Ministry of Environment, Forests and Climate Change as a part of Environmental Clearance issued by MoEFCC vide No J-11015/417/2013-IA.II [M] for Expansion of Rowale Bauxite Mine, ML Area 218.825 ha from 2.5 LTPA to 8.0 LTPA at Village Rowale, Dapoli Taluka, Ratnagiri District, Maharashtra.

BY

ASHAPURA MINECHEM LTD Jeevan Udyog Building,3rd Floor,278,D.N.Road,Fort,Mumbai-400 001

SUBMITTED TO

MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE

REGIONAL OFFICE (WESTERN REGION)

NEW SECRETARIAT BUILDING

NAGPUR

SIX MONTHLY COMPLIANCE REPORT ON ENVIRONMNETAL CLEARANCE CONDITIONS FOR THE PERIOD <u>APRIL-2016 TO SEPTEMBER 2016</u>

<u>Name of the Project:</u> Rowale Bauxite Mine of M/s Ashapura Minechem Limited, Village- Rowale, Taluka-Dapoli, Dist.- Ratnagiri, Maharashtra State.

Reference: Environmental Clearance issued by MoEFCC vide letter No-J-11015/417/ 2013-IA.II [M] Dated 24.02.2016.

A. Specific Conditions

Sl. No	Condition	Compliance status
(i)	Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court of Maharashtra and any other Court of Law, if any, as may be applicable to this project.	Will be complied.
(ii)	Environmental clearance is subject to obtaining clearance, if any, under the Wildlife (Protection) Act, 1972 from the Competent Authority, as may be applicable to this project.	Clearance under Wildlife (Protection) Act, 1972 is not applicable as there are no wildlife sanctuaries, National Parks, Biosphere reserves, wildlife corridors within 10 km radius of the project boundary.
(iii)	No mining activities will be allowed in forest area, if any, for which the Forest Clearance is not available.	Forest clearance is not applicable as the entire lease area is Non-forest private patta land. Also, as per the records of revenue department in 7/12, the survey numbers under which lease falls is non forest land.
(iv)	The project proponent shall obtain Consent to Operate from the State Pollution Control Board, Maharashtra and effectively implement all the conditions stipulated therein.	Consent to Operate from Maharashtra Pollution Control Board has been obtained vide their letter having reference No. MPCB/ROK/SROC/193/03450/14 dated 09.04.2014 for production capacity of 2.5 LTPA. Consent to Operate for enhanced capacity i.e. 2.5 LTPA to 8.0 LTPA has also been obtained from MPCB vide Consent No. BO/JD(APC)/EIC No. KP-18257-16/0/10273 dated 21.10.2016.
(v)	A study from an Institution of Repute may be conducted on the impact of Bauxite dust on Crop Productivity in agricultural land located around mines and mitigation measures to be implemented by PP to reduce the impact.	We have approached National Environmental Engineering Research Institute (NEERI) for the said study and are in the phase of finalizing the scope of study, technical details and financials for the study.
(vi)	Recommendation by the Institute, for crops most suited in this environment and training to the farmers to switch over to new cropping system which will sustain nutrient loading.	Will be complied.

Sl. No	Condition	Compliance status
(vii)	Proponent shall carry out occupational Health surveillance for workers engaged in the project and records maintained and necessary remedial / preventive measures to be taken accordingly. Implementation of the recommendations of National Institute for ensuring good occupational environment for mine workers.	Initial medical examination and periodic medical examination of workers is being undertaken on regular basis from authorized medical officer and records are maintained.
(viii)	Use of mechanical devices for excavating the ore and reducing use of explosives.	HEMM is being used for excavating the ore. Drilling and blasting is being done to loosen the ore strata only. In order to minimize blasting, ripper dozer is also being practiced.
(ix)	Concurrent reclamation of mined out areas shall be done.	The reclamation of exhausted pits is being carried out as per Environmental Management Plan. In the year 2016-2017 5.25 Ha of the area has been reclaimed and 3200 nos. of native plant species of Cashew have been planted. Aftercare of the plantation is being taken until it's self-sustainable.
(x)	Use of effective sprinkler system to suppress fugitive dust on haul roads and other transfer points and undertaking comprehensive study in a year's time for slope stabilization of mine benches and OB dumps.	In order to control the fugitive dust emission during mining operations, following arrangements has been provided: 1. Constructed ~160 m of black topped metalled road near weigh bridge, 2. Permanent water sprinkling system on main haul roads, 3. Constructed metalled road from mobile crusher unit to stack, 4. Water Sprinkling on haul raod inside the lease and outside over the transport road by means of mobile water tankers, 5. Water sprinkling arrangements at the mobile crusher unit, Please refer Annexure 1 for the Environment Management Practices followed for dust control. As per the geological profile of the lease area, strata of the area consist of top soil (which is mostly absent) followed by laterite (seen as small capping at places) and Bauxite (average thickness of 4-5 m) followed by lithomarge and Basalt, is hard and compact in nature. Also the mining will be carried out by Open Cast Mining Method with single bench with a maximum working depth of around 6 m. Thus in this case, slope stabilization of mine bench is not required. Also as mentioned in the IBM approved mining scheme, there is no Topsoil or Overburden present. Thus, slope stabilization of OB dumps

Sl. No	Condition	Compliance status						
		is also not required.						
(xi)	Implementation of action plan on the issues raised during Public Hearing. The proponent shall complete all the tasks as per the action plan submitted with the budgetary provisions during the Public Hearing.	The issues raised during public hearing are being implemented in line with the submitted action plan. The proponent has committed to do CSR in the Public Hearing. Since Apr 16 – Sep 16. Rs. 6,14,546/- has been spent under CSR.						
(xii)	The mining operations shall be restricted to above ground water table and it should not intersect groundwater table. Prior approval of the Ministry of Environment & Forests and Central Ground Water Authority shall be obtained for mining below water table.	We are in the process of obtaining Ground Water Clearance from Central Ground Water Authority.						
(xiii)	The project proponent shall ensure that no natural watercourse shall be obstructed due to any mining operations.	Is complied. No natural watercourse is obstructed due to any mining operations.						
(xiv)	Top soil should be stacked with proper slope at earmarked site(s) only with adequate measures and should be used for reclamation and rehabilitation of mined out areas.	The entire mine lease area is having lateritic capping and there is no top soil in the lease area.						
(xv)	The entire waste generated shall be backfilled and there shall be no external over burden dump left at the end of the mine life. The entire backfilled area shall be reclaimed by plantation. The backfilling should be carried out in such a manner that it is restored to the normal ground level. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forests and its Regional Office, Nagpur on six monthly basis.	No OB is present within lease area. However intercalated waste is generated which is used for backfilling the mine out areas. In the year 2016-2017 5.25 Ha of the area has been reclaimed and 3200 nos. of native plant species of Cashew have been planted. Compliance Status in terms of Six Monthly Compliance Report is being submitted to the Regional Office of the MoEF&CC, Nagpur on regular basis.						
(xvi)	Catch drains and siltation ponds of appropriate size should be constructed for the working pit, temporary OB dumps, if any and mineral dumps to arrest flow of silt and sediment. The water so collected should be utilized for watering the mine areas, roads, greenbelt development etc. The drains should be regularly desilted, particularly after monsoon, and maintained properly.	During pre-monsoon preparatory work, temporary catch drains / trenches are constructed around the working pits, mineral stacks and waste dumps to channelize the rain water towards mined out pits / rain water harvesting pits. Size, length and gradient of these drains depends upon the slope and distance from the pit. This water gets collected into the pits where it is allowed for sedimentation under gravity. Siltation ponds are also provided in the direction of overflow of these pits in order to arrest the silt flowing with the overflow, if any. Please refer Annexure 2 for the photographs showing the Environment Management Practices (EMPs) carried out for water conservation.						

Sl. No	Condition	Compliance status
(xvii)	Garland drain of appropriate size, gradient and length shall be constructed for both mine pit and temporary dumps 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.	Temporary garland drains are constructed around the working pits, mineral stacks and waste dumps to channelize the rain water towards mined out pits / rain water harvesting pits. Size, length and gradient of these drains depends upon the slope and distance from the pit.
(xviii)	Dimensions of the retaining wall at the toe of temporary dumps and OB benches within the mine to check run-off and siltation should be based on the rainfall data.	Retaining wall has been constructed at mining lease. The total length of retaining wall is 131 m.
(xix)	Plantation shall be raised in the specific area including a 7.5 m wide green belt in the safety zone around the mining lease by planting the native species around ML area, backfilled and reclaimed area, around water body, roads etc. in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha.	Every year during the monsoon season, plantation is being carried out over backfilled area, boundary of haul roads and also along lease boundary where ever is possible. Saplings of cashew and mango are being planted after consultation with scientist from Konkan Krishi Vidyapeth, Dapoli and also taking the consideration of local villagers. Other saplings like Amla, Kokam, Jamun, Jack Fruit are also being planted. Also after discussion with experts, for better growth of saplings, plantation is being carried out in 4m x 4m area per sapling. In the year 2016-2017 5.25 Ha of the area has been reclaimed and 3200 nos. of native plant species of Cashew have been planted. Please refer Annexure 3 for Plantation Photographs.
(xx)	Regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of SPM and RSPM such as haul road, loading and unloading point and transfer points. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	 In order to suppress the dust generation at critical points following are the provision carried out: Provided permanent water sprinkling system at the main haul road, Provided permanent water sprinkling system at the mobile crusher units, Constructed ~160 m black topped metalled road near weigh bridge within lease, Provided metalled road from mobile crusher unit to stack within lease area, Also, deployed mobile water tankers for

Sl. No	Condition	Compliance status
()		sprinkling on haul road with lease and transport road outside lease area. Please refer Annexure 1 for the EMPs carried out for Air Pollution Control. Ambient air monitoring is being done by MoEFCC approved lab and AAQ parameters are within the permissible limits as specified by CPCB. Please refer Annexure 4 for Ambient Air monitoring results.
(xxi)	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	For recharging groundwater rain water is channelized into the mined out pits by the means of drains/ trenches. Dimensions of rain water harvesting pit = $60m \times 50m \times 3.5$ - $4m$.
(xxi1)	Regular monitoring of ground water level and quality should be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring should be carried out four times in a year i.e. January, April-May, August, November and the data thus collected may be sent regularly to Ministry of Environment and Forests, its Regional Office, Nagpur; Central Ground Water Authority and Central Ground Water Board.	Regular monitoring of water quality in and around the mining lease is being carried out by MoEFCC approved laboratory. A comprehensive hydrogeological study is also carried out for the entire area by CGWB. Central ground water Board (CGWB) and Ground water survey and Development Agency (GSDA) has carried out water exploration in district. The report of study carried by CGWB is available at http://cgwb.gov.in/district_profile/maharasht ra/ratnagiri.pdf
(xxiii)	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.	Vehicles are maintained on regular basis to have emission under control. All the vehicles are made mandatory to carry PUC certificate. Transportation of ore is being done through tarpaulin covered trucks only. There will be no overloading of trucks. Weigh bridges are being maintained at the outlet of mine area.
(xxiv)	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 is done only to loosen the strata and is being done during day time only. Controlled blasting operations are carried out.
(xxv)	Drills shall either by operated with dust extractors or equipped with water injection system.	Drilling is being carried out using dust extractors along with wet drilling. To minimize blasting ripper-dozer is also used at mining site.
(xxvi)	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.	Will be complied.

(i)	No change in mining technology and scope of working shall be made without prior approval of Ministry of Environment and Forests.	There is no change in Mining technology.
(ii)	No change in calendar plan including excavation, quantum of mineral and waste shall be made.	Only calendar year plan as per approved Mining Plan is being followed for excavation quantum of mineral and waste.
(iii)	The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and ground water for the project.	We are in the process of seeking NOC for abstraction of Ground Water from CGWA. We will submit the copy of NOC for ground water abstraction on receipt of same.
(iv)	Regular monitoring of ground water table to be carried out at the upstream and depth of water available in the dug well to be measured. Monitoring to be done by establishing a network of existing wells and constructing new piezometers.	Regular monitoring of water quality in and around the mining lease is being carried out by MoEFCC approved laboratory. A comprehensive hydrogeological study is also carried out for the entire area by CGWB. Central ground water Board (CGWB) and Ground water survey and Development Agency (GSDA) has carried out water exploration in district. The report of study carried by CGWB is available at http://cgwb.gov.in/district_profile/maharash tra/ratnagiri.pdf
(v)	Monitoring of ambient air quality to be carried out based on the 2009 Notification, as amended from time to time by the Central Pollution Control Board. Water sprinkling should be increased at places i.e. loading and unloading points & transfer point to reduce fugitive emissions.	Ambient air quality monitoring is done in accordance with the notification issued by Central Pollution Control Board in 2009. Water sprinkling is done regularly at loading and unloading points and transfer point to reduce fugitive emission.
(vi)	The upliftment of scheduled caste/ scheduled tribe population, specific programmes have been taken into consideration especially with respect to education, health care, livelihood generation, infrastructure development and promotion of sports & culture for SC/ST population and that these will be intensified in future.	Due to mining activities, employment for the locals (as per their abilities) has been generated in the area. In-directly, in terms of small business opportunities like, garages for vehicles and equipment maintenance, spare parts shops, hardware shops, food stalls, local dabhas, local conveyance, local grocery shops etc. has been increased in the area. Also, company has given contracts to local villagers for providing water sprinkling tankers for dust control. Because of these, there is an increase in the money flow in the locals which eventually strengthen the socio-economic conditions of the area including the SC/ST population. Villages in the area constitute committees like; Navtarun Gramasth Mandal, Rowale, Vidhyadhan Sikhsa Sanstha, Jawle, Vanjloli Bodhjan Seva Sangh,

(vii)	Plantation shall be raised in a 7.5 m wide greenbelt in the safety zone around the mining lease, backfilled and reclaimed area, around water body, along the roads etc. by planting the native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.	 Shayadhari Sikhsa Sansthan, Mandiwali etc. With whom company is in regular discussion to carry out CSR activities depend on their needs. Activities like; Distribution of free text books, guide books & provision of Digital Classroom in Primary Schools, Free medical camp in study area, Donation for Construction of Community centers, water pipeline, compound wall etc in the study area, Donation for the promotion of sports activities. Educational Aids to the schools, has been performed in the area on regular basis for the upliftment of society. Please refer Annexure 5 for the photographic presentation of the CSR activities carried out in the area. Every year during the monsoon season, plantation is being carried out over backfilled area, boundary of haul roads and also along lease boundary where ever is possible. Saplings of cashew and mango are being planted after consultation with scientist from Konkan Krishi Vidyapeth, Dapoli and also taking the consideration of local villagers. Other saplings like Amla, Kokam, Jamun, Jack Fruit are also being planted. Also after discussion with experts, for better growth of saplings, plantation is being carried out in 4m x 4m area per sapling. In the year 2016-2017 5.25 Ha of the area has been reclaimed and 3200 nos. of native plant species of Cashew have been planted. Please refer Annexure 3 for Plantation Photographs.
(viii)	Dimension of the retaining wall at the toe of over burden dumps and OB benches within the mine to check run-off and siltation shall be based on the rainfall data.	Retaining wall has been constructed at mining lease. The total length of retaining wall is 131 m.
(ix)	Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of points. It shall be ensured that the Ambient Air Quality parameters conform to the	 In order to suppress the dust generation at critical points following are the provision carried out: Provided permanent water sprinkling system at the main haul road,

	norms prescribed by the Central Pollution Control Board in this regard.	 Provided permanent water sprinkling system at the mobile crusher units, Constructed ~160 m black topped metalled road near weigh bridge within lease, Provided metalled road from mobile crusher unit to stack within lease area, Also, deployed mobile water tankers for sprinkling on haul road with lease and transport road outside lease area. Please refer Annexure 1 for the EMPs carried out for Air Pollution Control. Ambient air monitoring is being done by MoEFCC approved lab and AAQ parameters are within the permissible limits as specified by CPCB. Please refer Annexure 4 for Ambient Air monitoring results.
(x)	Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintained. Regular monitoring of water quality upstream and downstream of water bodies shall be carried out and record of monitoring data should be maintained and submitted to the Ministry of Environment, Forest & Climate Change, its Regional Office, Nagpur, Central Groundwater Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.	No springs and perennial nallahs are flowing in and around the lease area. Regular monitoring of water quality and level is being carried out by MoEFCC approved lab and the report of the same is submitted to MoEFCC, Regional Office and MPCB, Chiplun on regular basis.
(xi)	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring shall be carried out four times in a year – Pre Monsoon (April – May), Monsoon (August), post – monsoon (November) and winter (January) and the data thus collected may be sent regularly to Ministry of Environment, Forest & Climate Change and its regional office, Nagpur, Central Ground Water Authority and Regional Director, Central Ground Water Board.	Regular monitoring of water quality in and around the mining lease is being carried out by MoEFCC approved laboratory. A comprehensive hydrogeological study is also carried out for the entire area by CGWB. Central ground water Board (CGWB) and Ground water survey and Development Agency (GSDA) has carried out water exploration in district. The report of study carried by CGWB is available at http://cgwb.gov.in/district_profile/maharash_tra/ratnagiri.pdf
(xii)	The critical parameters such as PM_{10} (size less than 10 micro meter), $PM_{2.5}$ (size less than 2.5 micro meter), NO_X in the ambient air within the impact zone, peak particle velocity at 300 m 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	Regular monitoring of PM10, PM2.5, SOX and NOX is carried out regularly by MoEFCC approved laboratory and the report of same is submitted to MoEFCC, Regional Office and MPCB, Chiplun regularly. No discharge of water takes places from mining lease. The monitored data is uploaded on company's website.

(xiii)	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, Forests & Climate Change, which is available on the website of the Ministry www.emvfor.nic.in shall also be referred in this regard for its compliance.	Four ambient air quality monitoring stations
	shall be established in the core zone as well as in the buffer zone for RPM, SPM, SO_2 , NO_x monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board. Data on ambient air quality should be regularly submitted to the Ministry including its Regional Office located at Nagpur and the State Pollution Control Board/ Central Pollution Control Board once in six months.	are established in core zone as well as in the buffer zone. Locations: a. Near Mining Pit, b. Near Mobile Crusher Unit, c. On Haul Road, d. In Respective Village Results of these are being submitted to the MPCB, Chiplun office on regular basis.
(xiv)	Fugitive dust emissions 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.	 In order to suppress fugitive dust following are the provision carried out: Provided permanent water sprinkling system at the main haul road, Provided permanent water sprinkling system at the mobile crusher units, Constructed ~160 m black topped metalled road near weigh bridge within lease, Provided metalled road from mobile crusher unit to stack within lease area, Also, deployed mobile water tankers for sprinkling on haul road with lease and transport road outside lease area. Please refer Annexure 1 for the EMPs carried out for Air Pollution Control.
(xv)	Measures shall be taken for control of noise level below 85 dB (A) in the work environment. Workers engaged in operations of HEMM, etc. shall be provided with ear plugs / muffs.	Adequate measures are taken to minimize the noise level by doing regular maintenance of all machineries. Workers engaged in operation of HEMM are provided with Ear Muffs.
(xvi)	Industrial Waste water (workshop & waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May 1993 and 31st December, 1993 or as amended from time to time. Oil and Grease trap shall be installed before discharge of workshop effluents.	We have not established any workshop within the mining lease. Maintenance of all the vehicles and machineries are done at nearby town Dapoli in private garages. Waste water from the mine is not discharged into surface water and diverted to settling pond.
(xvii)	Personnel working in dusty areas shall wear protective respiratory devices and they shall also	Personnel working in dusty areas are provided with respiratory devices like masks

	be provided with adequate training and	and goggles. The	nformation and training is							
	information on safety and health aspects.		ise of these devices.							
(xviii)	Occupational health surveillance program of the	Initial medical e	examination and periodic							
	workers should be undertaken periodically to		ion of workers is being							
	observe any contractions due to exposure to dust	undertaken on regular basis from authorized								
	and take corrective measures, if needed.	medical officer and records are maintained A separate Environmental Management ce								
(xix)	A separate environmental management cell with	_	•							
	suitable qualified personnel shall be set up under	-	rironment is appointed and							
	the control of a Senior Executive, who will report	he is directly rep	orting to the head of the							
	directly to the Head of the Organization.	organization.								
(xx)	The funds earmarked for environmental		arked for Environmental							
	protection measures shall be kept in separate		is kept separately. The							
	account and should not be diverted for other	_	rred for above said job							
	purpose. Year wise expenditure shall be reported		th is Rs. 10,09,343/-							
	to the ministry and its Regional Office located at	Particular of the								
	Nagpur.	job	Expenditure (Rs.)							
		Afforestation &	1,92,000/-							
		Aftercare	1,52,000/							
		Environmental	1,50,000/-							
		Monitoring	2,00,000							
		Water Sprinkling	_							
		(Dust	4,22,489/-							
		suppression)								
		Garland drains /	1,19,094/-							
		Settling ponds	1,10,001/							
		Others (Road	1,25,760/-							
		maintenance)	,							
6 12		TOTAL	10,09,343/-							
(xxi)	The project authorities should inform to the	_	r own resources and this							
	Regional office located at Nagpur regarding date	clause is not applic	able.							
	of financial closure and final approval of the project by the concerned authorities and the date									
	of start of land development work.									
(xxii)	The Regional office of this Ministry located at	The project aut	horities will extend co-							
(XXII)	Nagpur shall monitor compliance of the		of the concerned officer by							
	stipulated conditions. The project authorities	furnishing the requ								
	should extend full co-operation to the officer (s)	rarmoning the requ	norte data.							
	of the Regional office by furnishing the requisite									
	data / information / monitoring reports.									
(xxiii)	The project proponent shall submit six monthly	Six monthly repo	ort on the status on the							
` ´	report on the status of the implementation of the	implementation	of the stipulated							
	stipulated environmental safeguards to the	environmental sa	feguards is submitted to							
	Ministry of Environment, Forest and Climate	MoEFCC, Regional	Office and MPCB, Chiplun							
	Change, its regional Office, Nagpur, Central	on regular basis.	-							
	Pollution Control Board and State Pollution									
	Control Board.									
(xxiv)	The project proponent shall submit six monthly		ort on the status on the							
	report on the status of the implementation of the	implementation	of the stipulated							
	stipulated environmental safeguards to the		feguards is submitted to							
	Ministry of Environment, Forest and Climate	_	Office and MPCB, Chiplun							
	Change, its Regional Office, Nagpur, Central	on regular basis.								
	Pollution Control Board and State Pollution									
	Control Board.									

(xxv)	A copy of Clearance letter will be marked to concern Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.	Complied.
(xxvi)	State Pollution Control Board should display a copy of the clearance letter at the Regional office, District industry Centre and collector's office / Tehsildars office for 30 days.	Not Applicable
(xxvii)	The project authorities shall 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 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 shall be forwarded to the Regional Office of this Ministry located at Nagpur.	Complied.
Date: 2	8.11.2016	For Ashapura Minechem Limited.
Place: N	Mumbai	Authorized Signatory

Annexure 1: Environment Management Practices for Dust Control



Mobile Water Tanker in Rowale Mines



Water Sprinkling Arrangements on Main Road at Rowale Mines



Sprinkling System at Mobile Crusher Unit



Metalled Girt Road wihin lease



Metalled Road from Mobile Crusher unit to Stock



Transportation by tarpaulin covered trucks



Manual Air Quality Monitoring in Rowale Mines

<u>Annexure 2: Environment Management Practices for Water</u> <u>Conservation</u>





Bund around Stack to check run-off



Drains to collect and channelize the rain water around bunds





Retention Walls within lease area







Water after de-siltation coming from retention wall

Annexure 3: Plantation Photographs











Plantation carried out in backfilled area within lease

Annexure-4: Ambient Air quality Monitoring Results 2016-2017

S.No.	Locations		April 2016 Parameters (μg/m³)				May 2016 Parameters (μg/m³)			June 2016				July 2016 Parameters (μg/m³)				August 2016			
]								Parameters (µg/m³)			Parameters (μg/m³)								
		PM ₁₀	PM _{2.5}	SO _X	NO _X	PM ₁₀	PM _{2.5}	SO _X	NO _X	PM ₁₀	PM _{2.5}	SO _X	NO _X	PM ₁₀	PM _{2.5}	SO _X	NO _X	PM ₁₀	PM _{2.5}	SO _x	NO _X
1.	Crushing Plant	80.19	64.28	28.20	18.71	82.54	63.77	24.13	15.43	46.04	17.75	16.48	7.72	45.32	34.50	17.37	7.81	49.27	37.08	18.50	6.70
2.	Haulage Road	76.00	39.81	24.42	11.46	78.04	41.42	29.18	14.81	50.66	26.05	18.79	7.88	50.63	25.45	17.00	8.27	50.39	25.81	16.74	6.88
3.	Near Mining Pit	79.87	40.83	22.25	16.35	81.42	37.19	23.53	15.59	46.05	26.82	20.55	8.42	43.10	26.39	19.08	7.32	39.95	26.23	20.28	7.19
4.	Umbershet Village	79.30	40.58	29.63	11.97	81.11	40.00	24.44	9.70	50.67	24.81	17.97	8.52	47.10	25.38	19.14	7.03	49.03	23.21	16.68	7.29
5.	Rowale Village	81.85	41.46	20.42	11.37	79.38	36.77	19.98	9.41	51.62	25.44	18.33	9.68	48.84	30.36	17.85	8.28	49.15	27.43	17.42	10.34
6.	Kavadoli Village	78.07	42.45	36.63	9.69	77.13	40.63	34.24	13.75	63.02	40.59	18.07	8.04	59.89	43.11	18.16	8.27	53.77	36.56	16.60	8.51

Permissible limits as per NAAQS Standards

 $\begin{array}{ll} PM_{10} & 100 \ \mu\text{g/m}^3 \\ PM_{2.5} & 60 \ \mu\text{g/m}^3 \\ SO_X & 80 \ \mu\text{g/m}^3 \\ NO_X & 80 \ \mu\text{g/m}^3 \end{array}$

Annexure 5: Corporate Social Responsibility



Donation for the Construction of Water Shed , Rowale Village



Renovation of Temple, Village Rowlae



Monthly Cleaning of Kelshi Beach









Donation for the Construction of School Floor, Rowale Village



Donation for the Construction of Community Hal, Ilne Village



Donation for the Constrcution of Community, Vanjloli Village







Opening of Digital Classroom, Ambavali Primary School



Donation for the Constrction of School Veranda, Rowale Primary School



Distribution of SYSKA LED Street Lights, Kelhi



Donation for the Construction of Pipeline, Sakhari Village



Donation for School Building, Mandivali School