



September 28, 2017

**The Secretary,**  
Ministry of Environment, Forest & Climate Change  
Indira Paryavaran Bhavan  
**Jorbagh Road, Aliganj**  
**New Delhi - 110 003.**

**Sub.:** Proposal for Amendment in Environment Clearance – **Change in Fuel Source and Fuel Mix pertaining to Mahan Aluminium Project of Hindalco Industries Limited.**

**Ref.:** Letter No. J-11011/217/2007-IA-II (I) dated 18.03.2009 and subsequent Amendment dated 15.02.2012.

**Respected Sir,**

Please permit us to submit the following:

Our proposal for amendment in EC was considered before the Hon'ble EAC (Industry-I), in its 16<sup>th</sup> meeting held on 6<sup>th</sup> – 7<sup>th</sup> March, 2017. The MoM was uploaded on website and the EAC's observations/clarifications sought as under:

1. Certificate of Compliance of existing EC from Regional Office of MoEF& CC.
2. Details of coal linkage and transportation of coal to power plant shall be planned as per earlier EC (i.e. mode of transportation shall be through rail).
3. No pet coke will be allowed in CPP in view of high sulphur content".

In view of the above, we wish to submit the following point-wise information/clarification:

1. Certificate of Compliance of existing EC from Regional Office, MOEF& CC is **attached (Annexure-I)**.
2. During the presentation, we have informed to the EAC members that Mahan Unit was commissioned in the Year 2014 with 100% transportation of coal by road mode which was reduced to the level of 35% in FY 17 i.e. with our all efforts, upto 65% of total Coal is being transported by Rail Mode in FY 17.

As per the suggestions of the EAC, we have taken steps which are as follows:

- Operationalization & Enhancement of Coal Production of Captive Coal Mines was enhanced from 4.40 LMTPA to 6.00 LMTPA ,so that the dependency of coal from open market may be reduced and end to end coal transportation can be ensured by Rail Mode only from own mines to Mahan Aluminium Plant

**Hindalco Industries Limited**

(Unit : Mahan Aluminium)

Works: NH-75-E, Singrauli-Sidhi Road, PO: Bargawan - 486886, Dist: Singrauli (M.P.)

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Corporate ID No. L27020MH1958PLC011238

- We participated in IInd tranche of E-Linkage coal auction and secured the coal linkage for 13.34 LMTPA for long term period of five years with NCL this enable us to move this quantity by rail mode to Mahan Aluminium plant.

Therefore, the transportation of Coal by road mode has further been reduced to 27% from the level of 35% in FY 17-18.

We are ramping up the coal production in our captive mines in Jharkhand steadily year on year basis as per mining plan and by enhancement of production road transportation will come down to 21% altogether by FY 18-19.

Coal quantities to be transported by road will continue to operate by road till September 2021 from FY 18-19 as supply of linkage E-auction coal by road mode will continue to operate from Bina & Krishnashila Projects of NCL for 5 Years as per the terms of Long Term FSAs signed on 13.10.2016.

However, in order to further reduce this, NCL has been requested & persuaded to convert Road Mode to Rail-cum-Road (RCR) Mode, but NCL did not allow the same due to terms and conditions of FSAs. The copy of communication with NCL is attached (**Annexure-II**).

Thus, from Oct. '21 onwards, 100% transportation of Coal by road shall be eliminated as the linkage period of five years comes to an end for 7,18,900MTPA. Thereafter, we shall go for a fresh linkage assuming where the mode of transportation is prescribed as Rail-cum-Road (RCR) mode.

We wish to mention that while transporting the aforesaid quantity of coal by road, following extra initiatives and precautions besides the regular precautions is taken by us.

- Over loading of trucks are strictly monitored and avoided jointly with Coal Mine Management so as to stop spreading of coal on road.
  - Due care is taken during hiring of trucks i.e. fitness and other statutory requirements are checked very carefully. Even, a truck having raised height of carriage is rejected so as to avoid overloading.
  - Good quality water proof tarpaulin is used to cover full length and sides of truck dalla so as to avoid spillage and scattering of coal and coal dust from top and sides.
  - The entire length of tarpaulin is tied with good quality single length nylon rope so that tarpaulin could not fly with air pressure.
  - The knot of nylon rope is stamped with metallic seal so as to ensure discipline among transporters by imposing heavy penalty in case of metallic seal found tampered during receipt of material at plant.
  - Due transport permission is obtained from Singrauli District Administration to ensure transportation under the relevant rules. A copy of permission is **attached (Annexure-III)**.
3. In view of the observations raised by EAC, use of Pet Coke has not been planned at present. However, MoEF&CC has been approached to allow use of Pet Coke in CPP and it has communicated us on 20.07.2017 with the comment that use of Pet Coke in CPP is under examination and our proposal is kept on hold (**Annexure-IV**). Therefore, we shall use pet coke in the range of 1- 2% as mentioned in our application, once the usage of pet coke is allowed by MoEF&CC.

**We are taking liberty to submit the following additional points for kind consideration and approval of the Hon'ble Committee:**

# **Sale of Carbon Anode**

Mahan Aluminium proposes to sell baked anode being produced due to lesser rejection during the routine manufacturing process in the Carbon plant.

### **Brief Description of Baking Process:**

Green anodes from the Green anode plant are subjected to bake in the baking furnaces to drive away the volatiles and to impart strength to the anodes. These green anodes are baked in state-of-the-art ring type furnaces which are above the ground level. The anodes are packed in several layers in the pits with packing coke all around them. The furnaces are HFO fired and their temperature is controlled by specially designed firing system. In Anode baking furnace green anodes are slowly heated up and slowly cooled down to get desired quality.

After packing Green anodes in a section it takes few days to complete the baking cycle. The baked anode is then unpacked by FTA and is being stored after cleaning in the Anode storage area by Stacking cranes. From anode storage area, these anodes are supplied to Rodding Shop for further processing.

### **Quantity of anodes produced per annum as per design:**

Anode production quantity has been designed by considering the production efficiency and rejections during the manufacturing.

**Table 1: Mahan Aluminium Anode Production Details**

S. No	Description	UOM	Quantity
1	Mahan Anode Production per day	Nos.	554
2	Mahan Anode Production per annum	Nos.	202292
3	Anode required by Rodding shop per day	Nos.	540
4	Anode required by Rodding shop per annum	Nos.	197100

### **Reason for Sale**

The Designed Capacity of the Mahan Furnace to produce the Baked Anode is 202292 Nos./ Annum by considering the rejection rate of 1% of total Anodes Produced. As the process has been stabilized and is being optimized in the recent past, the Rejection rate has been reduced to 0.04% (FY17) of the Total Baked Anode and increases the Good Anode Production.

Due to the reduced rate of Rejection, Furnace is producing extra good quality Baked Anodes. In last 5 Months (FY18), Average Rejection: 0.16% (Against Target of 1%). Total No. of Baked Anodes Rejected/ Annum: 139. Therefore, inventory Build-up of Good Baked Anode/Annum: 12412(End of Aug'17). HIL intends to sell approx. 5,000 nos. of Anodes per annum.

Since our Production Capacity of Carbon Anode is within the approved limit, there is no increase in pollution load.

### **# Sale of Bath Material**

Mahan Aluminium proposes to sell bath material generated of approx. 9,000 TPA of bath material from one pot line of 360 pots. This is no increase in pollution load due to this.

### **# Sale of Molten Metal**

Some nearby ancillary units have approached us to provide Aluminium molten metal form our operating unit to run their plant.

Mahan Aluminium propose to sell approx. 50 - 80 KTPA Hot Metal to Industries having necessary approval for use of Hot Metal in their process and planning to set up their factory close to the boundary of the Plant. Mahan Aluminium will comply with all the requirements for transfer of molten metal.

It involves the following activities –

- Liquid metal transfer after weighment by crane mounted weigh scale
- Weighed metal will be transported through Metal Taping Vehicle
- Empty ladle will be received back and always be in circulation.

The proposed selling of molten metal to the adjacent factory will reduce re-melting options outside the Plant for downstream products and this will conserve energy & resources and shall not lead to any increase in existing pollution levels due to plant operations.

# **Use of Hindalco's other unit's Scrap in Aluminum Cast House**

Mahan Aluminium proposes to use 5.4 KTPA of Aluminium Billet Scrap generated in our sister unit's. This will help in reducing overall Energy Consumption in the Plant.

In all above **process, we**

- Do not require any additional Capital Investment
- Do not need Additional Raw Material
- Do not need additional Power (Power Consumption will remain within 750 MW)

And **there is no increase in Pollution Load.**

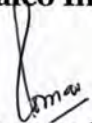
**Our submission:**

Sir, in view of the above, we seek your kind intervention to advise the concerned to expedite the process of amendment in EC, please.

Thanking you in anticipation,

Yours Sincerely,

For **Hindalco Industries Ltd.**

  
**(Ratan Kumar Somani)**  
**President**



सत्यमेव जयते

भारत सरकार  
GOVERNMENT OF INDIA

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय

MINISTRY OF ENVIRONMENT, FOREST &  
CLIMATE CHANGE

SPEED POST

क्षेत्रीय कार्यालय, पश्चिम क्षेत्र,

Regional Office, Western Region,

“केन्द्रीय पर्यावरण भवन”

“Kendriya Paryavaran Bhavan”

लिन्क रोड नं०-३/Link Road No. 3

E-5, रविशंकर नगर/Ravi Shankar Nagar,

भोपाल (म०प्र०)/Bhopal-462016 (M.P.)

फोन: 0755- 2465054, फैक्स: 0755- 2465054

अणुडाक /E-mail: bbbdx.dy@gmail.com

क्रमांक: 5-93/2009(पर्या) / 919  
प्रति,

दिनांक : 09.08.2017

श्री ज्ञानेश भारती,  
संयुक्त सचिव  
दुसरा तल, जल ब्लॉक  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय,  
इंदिरा पर्यावरण भवन,  
जोर बाग रोड, अलीगंज,  
नई दिल्ली – 110003

विषय: Integrated Aluminium Smelter complex along with coal based Captive Power plant at singrauli,  
MP by Hindalco industries Limited- reg.

संदर्भ: Ministry's letter No. J- 11011/217/2007-IA II (I), dated 18.03.2009 & dated 15.02.2012.

महोदय,

मंत्रालय के उपरोक्त संदर्भित पत्रों के संदर्भ में उक्त परियोजनाओं को पर्यावरणीय दृष्टिकोण से अनुमति देते समय अनुबद्ध शर्तों के अनुपालन एवं certification of compliance के निर्देशानुसार, पर्यावरणीय अनुमति दिनांक 18.03.2009 एवं 15.02.2012 का अनुवीक्षण प्रतिवेदन (मॉनिटरिंग रिपोर्ट) एतद् द्वारा संलग्न कर प्रेषित है।

2.0 यह सक्षम प्राधिकारी द्वारा अनुमोदित है।

भवदीय  
(बी.बी. बर्मन)  
सलाहकार

संलग्न: उपरोक्तानुसार

प्रतिलिपि:

1. श्रीमति रीता खन्ना, निदेशक, (अनुवीक्षण सैल), पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, इंदिरा पर्यावरण भवन, जोर बाग रोड, अलीगंज, नई दिल्ली – 110003 की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेतु।

2. Mr. Ratan Kumar Somani, Unit Head, M/s Hindalco Industries Limited, Mahan Aluminium, Century Bhavan Road, Worli, Mumbai 400 030.

(बी.बी. बर्मन)  
सलाहकार

**Monitoring implementation of Environmental Safe Guards**  
**Ministry of Environment & Forest Western Region,**  
**Regional Office Bhopal**

**PART-1**  
**DATASHEET**

<b>1</b>	<b>Project Type</b>	Aluminium
<b>2</b>	<b>Name of the project</b>	Integrated Aluminium Smelter complex along with coal based Captive Power capacity plant by Hindalco Industries Limited
<b>3</b>	<b>Clearance letter /OM No&amp; Date:</b>	J-11011/217/2007-IA II (I), Dt. - 18 <sup>th</sup> March, 2009 amended on 15 <sup>th</sup> February, 2012
<b>4</b>	<b>Location:</b>	Village - Orgari, Bargawan
a	District (S)	Singrauli (Formerly - Sidhi)
b	State	Madhya Pradesh
<b>5</b>	<b>Address For the correspondence</b>	
a	Address of concerned project chief (with pin code & telephone /Telex/fax numbers)	Mr. Ratan Somani President Hindalco Industries Limited, Unit - Mahan Aluminium, Vill.- Orgari, Bargawan, Distt - Singrauli (Formerly - Sidhi) – 486886 (M.P.) Phone - 07805261052
b	Address of Executive project engineer (with pin code & telephone /Telex/fax numbers)	Mr. Ratan Somani President Hindalco Industries Limited, Unit - Mahan Aluminium, Vill.- Orgari, Bargawan, Distt - Singrauli (Formerly - Sidhi) – 486886 (M.P.) Phone - 07805261052
<b>6</b>	<b>Salient Features</b>	
a	Of the Project	The plant is an Integrated Aluminium smelter having capacity of 3.59 LTPA along with 900 MW Captive Power Plant including 1 X 150 MW stand by unit. Water sourced from River Gopad through underground pipeline which is about 40 KM from plant side. Nearest town is Bargawan located about 4 KM southwards. Main Raw Material Alumina is sourced from Captive units. Mahan Aluminium has adopted state-of art best technology from Aluminium Pechiney, France, a world's best technology supplier. In this technology, many modern equipment like dry scrubbers at pot room and anode baking furnaces has been incorporated in process to take care the emissions from smelter complex.
b	Of the Environmental Management plans	The plant is based on ZLD . An Individual Effluent treatment plant for Smelter and CPP have been provided having capacity of 7200 KLD and 12600 KLD respectively. For Sewage treatment two no's of STP in colony having capacity of 300 & 150 KLD and one nos for Industrial sewage having capacity of 240 KLD of ETP have been installed. All treated effluent are being reused in process, cooling, horticulture etc. To control the particulate and gaseous emission, Every boiler is connected with ESP followed by 125 mtr height stack. In smelter division two Gas treatment system and one Fume treatment center have been installed. All stack are equipped with online monitoring system and data are being transmitted online to CPCB, MPPCB. We have obtained the membership of TSDF M/s M.P. Waste Management Limited for Haz Waste Disposal & management. 04 nos of CAAQMS

		are installed and data are being transmitted online to CPCB MPPCB.
7	<b>Break up the project area</b>	
a	Submergence area (forest & Non forest)	1256 Ha. (Non Forest Area)
b	Others	-
8	<b>Break up the project affected population with enumeration of those losing houses /dwelling unit only and agricultural land only</b>	2958 Families
a	SC/ST/ Adivasi	SC – 1095, ST/ Adivasi -343
b	Others	528
c	Numbers of villages Affected	04
d	Status	1628 families Living in R & R Colony and remaining in Self houses against Compensation of Houses distributed
	(Please indicate whether these figures are based on any scientific survey carried out or only provisional figure. If a survey is carried out give details and year of survey.	Figure are based on the actual numbers of compensation and rehabilitation done
9	<b>Financial details</b>	
a	Project Cost as originally planned subsequent revised estimates and year of price reference	10500 Crores 14000 Crores [revised]
b	Allocations made for environment managements plans, with –item wise and year-wise break up.	The amount incurred on environmental management is Rs. 1128.37 where as allocated amount was Rs. 873.75 Cr. Item wise and year wise breakup is annexed as <b>Annexure – A in main report.</b>
c	Benefit cost ratio/ internal rate of return and the year of assessment.	15.94 %
d	Whether (c) include the cost of environmental Management as shown in (b) above	Yes
e	Actual expenditure incurred on the project so far.	14035.17
f	Actual Expenditure incurred on the Environmental Management plans so far.	1128.37
10	<b>Forest land requirement</b>	
a	The status of approval for a diversion of forest land for non-forest use	No forest land is occupied for the project.
b	The status of the clearing filling	No forest land is occupied for the project, hence clearing filling is not required.
c	The status of Compensatory afforestation, if any	No forest land is occupied for the project, hence compensatory afforestation is not applicable.
d	Comments of the viability & sustainability of compensatory a forestation program in the light of actual field experience so far.	No forest land is occupied for the project, hence compensatory afforestation is not applicable.
11	<b>The status of clear felling in non-forest area. (Such as submergence area or reservoir, approach roads), if any with quantitative information required</b>	Following was fall under project area (non-forest) – Galla Godown - 01 Nos. Handpump - 28 Nos. Pond - 03 Nos. Primary School - 03 Nos. Gov. Junior High School - 01 Nos. Bhed Palan - 01 Nos. Kazi house - 01 Nos. Well - 02 Nos. Reservoir - 01 Nos. (21.11 ha.) Angan badi - 01 Nos.
12	<b>Status of Construction</b>	

a	Date of Commencement (actual)	9 <sup>th</sup> July, 2009
b	Dated of completion (actual)	28 <sup>th</sup> September, 2016
13	Reasons for the delay if project is yet to start	Project is completed and production is started.
14	Dates of visits	
a	The dates on which the project was monitored by the RO on previous occasions	
b	Date of site visit for this monitoring	15 <sup>th</sup> July, 2017
14	Details of correspondence with PA for obtaining action plan /information on status of compliance to safeguard other than the routine letters for logistic for site visits.	
15	Details of correspondence with PA for obtaining action plans/information on status of compliance to safeguards other than the routine letters for logistic support for site visits.	
	<b>Date &amp; No.</b>	<b>Letter from RO</b>
		<b>Date &amp; No</b>
		<b>Reply from PA</b>
1	06.07.2017 5-93/2009(ENV)/ Part I/538 seeking clarification and additional documents	1. 15.05.2017 MAP/ENV/CPCB/FA/2017-18/12 Seeking certified EC compliance report
2..	17.07.2017 5-93/2009(ENV)/Part-I/438 Seeking certified EC compliance report	2.- 06.06.2017 Mail Requesting site visit
		3. 28.07.2017 MAP/ENV/CPCB/FA/2017-18/32 Revised EC Compliance report

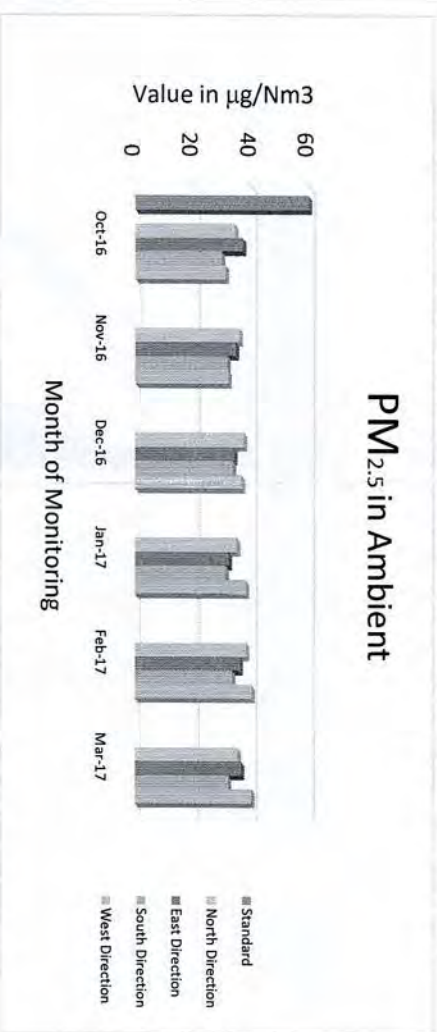
**PART - II & III**  
**DESCRIPTIVE REPORT ON STATUS OF COMPLIANCE FOR THE PERIOD OF OCTOBER 2016 - MARCH, 2017 TO**  
**CONDITIONS OF ENVIRONMENTAL CLEARANCE AND ENVIRONMENTAL MANAGEMENT**  
**EC No: J-11011/217/2007-IA II (I), Dated 18.03.2009**

**A. Specific Conditions :-**

Sl.	CONDITIONS	COMPLIANCE STATUS
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i. Efforts shall be made to reduce RSPM levels in ambient air and a time bound action plan shall be submitted.

- Following efforts have been stated to have been made to reduce RSPM levels in ambient air.
- Proper upkeep and maintenance of vehicle, water sprinkling, and sweeping on roads are being done regularly for dust Suppression.
  - All the Internal roads are either RCC or black top road.
  - Bag filters provided at all raw material transfer points to control fugitive emission during handling of materials.
  - Dust suppression system has been provided at coal crushing house, conveyor belt, transfer points, raw material handling area etc.
  - Regular water sprinkling done at nearby area site to minimize fugitive emission due to vehicle movement.
  - Development of green belt in & around the plant and colony is in progress. We have planted about 6,62,868 plants in 276 ha till date. However in FY 16-17 we have planted 2,30,300 plants in 103 ha.
  - Closed conveying system for alumina handling installed to control fugitive emission during handling. The monitoring results during the compliance period are as under



**Graph 1 –Ambient Air Monitoring Trend during compliance period**

Standard	North Direction			East Direction			South Direction			West Direction			
	Max	Min	AVG	Max	Min	AVG	Max	Min	AVG	Max	Min	AVG	
PM <sub>2.5</sub> µg/Nm <sup>3</sup>	60	38.4	34.5	36.2	37.2	32.4	35.2	33.8	29.9	32.1	40.4	31.2	36.5

Details are annexed as **Annexure 1. Complied**

Time bound action plan for reducing PM2.5 is as under;

ii.

Electrostatic precipitator (s) shall be provided to Captive Power Plant to control gaseous emission within 100 mg/Nm<sup>3</sup>.

The stack of adequate height to be provided to power plant and anode plant as per CPCB guidelines.

Gaseous emission shall be regularly monitored and record maintained and reports submitted to the Ministry including its Regional Office at Bhopal/Central Pollution Control Board (CPCB) and M.P. Pollution Control Board (MPPCB) six monthly.

PP stated that Adequate capacity and latest Electrostatic precipitator is provided to captive power plant to control gaseous emission well within 100 mg/Nm<sup>3</sup>

The stack of sufficient height is provided to power plant and anode plant as per CPCB guidelines. The desired height as per CPCB guidelines and actual height provided is as under:

Stack	Required Height (Mtr.) as CPCB guidelines	Actual Height (Mtr.)
CPP (1 to 6)	106	125
GTC (1 & 2)	96.70	100
FTC	69.20	70

Table No 4- Stack Height

Gaseous monitoring is being monitored regularly and record is maintained and being submitted to Regional office at Bhopal/ Central Pollution Control Board (CPCB) and M.P. Pollution control Board on six monthly basis. The latest six monthly compliance report submitted to Bhopal/Central Pollution Control Board (CPCB) and M.P. Pollution Control Board (MPPCB) vide letter No – MAP/ENV/CPCB/FA/2017-18/12 dated 15.05.2017.

Month	CPP 1			CPP 2			CPP 3			CPP 4			CPP 5			CPP 6		
	PM	SO2	Nox	PM	SO2	Nox	PM	SO2	Nox	PM	SO2	Nox	PM	SO2	Nox	PM	SO2	Nox
Stand arid	50	600	300	50	600	300	50	600	300	50	600	300	50	600	300	50	600	300
Oct-16	33.3	499	189	30.	531	220	27.	512.0	207.0	34.	512	227	30.	521	229			
Nov-16	29.5	519	223	38.	551	245	25.	536.0	233.0	33.	538	240	37.	541	233			
Dec-16	23.0	514	218	24.	490	210	34.	520.0	242.0	5.	555	245	31.	511	226			
Jan-17	20.9	534	218	23.	514	221	33.	546.0	241.0	38.	522	228	32.	532	237			
Feb-17	22.1	530	280	26.	545	222	37.	510.5	211.5	32.	545	232	36.	532	237			
Mar-17	28.2	512	210	28.	534	214	NO	NO	NO	34.	540	236	31.	542	208			
Avg.	26.2	518	223	28.	527	222	31.	524.9	226.9	35.	535	234	33.	530	228			

Table No 5 – Month wise Emission level at CPP in (mg/Nm<sup>3</sup>)

STACK	PMmg/Nm <sup>3</sup>	SO2mg/Nm <sup>3</sup>	NOxmg/Nm <sup>3</sup>
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Standard	50	600	300
CPP 1 ESP	26.15	518.00	223.13
CPP 2 ESP	28.72	527.58	222.12
CPP 3 ESP	31.92	524.90	226.90
CPP 4 ESP	35.34	535.43	234.70
CPP 5 ESP	33.36	529.97	228.48
CPP 6 ESP	31.20	542.80	208.60

Table No 6 – Avg. Emission at CPP in (mg/Nm<sup>3</sup>), during Compliance period

Complied

PP stated that Particulate fluoride emissions from pot room is well below the 0.65 mg/Nm<sup>3</sup>. The last monitoring data observed is 0.26mg/Nm<sup>3</sup>. Detail report is as below.

Fugitive particulate fluoride emission from pot rooms is well below the 1.85 mg/Nm<sup>3</sup>. The last monitoring data observed 1.40 mg/Nm<sup>3</sup>. Detail report is as below;

Emissions to atmosphere	Mg/Nm <sup>3</sup> (Measured value)	F (kg/T of Al)	Norms
<b>GTC</b>			
fluoride Gaseous	0.50	0.05	
fluoride particulate	0.26	0.02	0.65
<b>FTC</b>			
fluoride Gaseous	0.30	0.003	
fluoride particulate	1.24	0.01	
<b>Potroom</b>			
fluoride Gaseous	2.20	0.29	
fluoride particulate	1.40	0.19	1.85
<b>TOTAL</b>	<b>0.6</b>	<b>0.6</b>	<b>0.7</b>

Continuous fluoride emission monitoring system has been installed at pot room stack. The photograph of continuous fluoride monitoring analyzer installed at pot room.

iii. Particulate fluoride emission shall not be more than 0.65 mg/Nm<sup>3</sup> and Fugitive particulate fluoride emission from pot rooms shall not be more than 1.85 mg/Nm<sup>3</sup>.

Continuous fluoride emission monitoring system shall be installed at pot room stack.

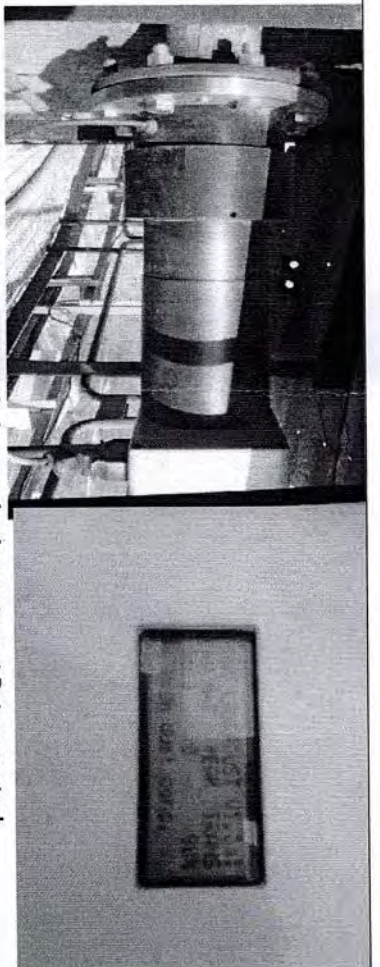


Photo 2 - Continuous emission monitoring system at Pot room stack

Parallely manual monitoring of pot room stacks (i.e. GTC 1 & 2) are also being done by external agency. Results are tabled as below- Details are annexed as Annexure - 3.

	GTC 1		GTC 2	
	HF	Part. FI	HF	Part. FI
Standard	- mg/Nm <sup>3</sup>	0.65 mg/Nm <sup>3</sup>	- mg/Nm <sup>3</sup>	0.65 mg/Nm <sup>3</sup>
Oct-16	0.06	0.28	0.08	0.21
Nov-16	0.07	0.26	0.06	0.22
Dec-16	0.08	0.24	0.06	0.26
Jan-17	0.09	0.27	0.07	0.29
Feb-17	0.07	0.29	0.09	0.23
March-17	0.08	0.31	0.09	0.23
Max	0.09	0.31	0.09	0.29
Min	0.06	0.24	0.06	0.21
Avg.	0.08	0.28	0.08	0.25

Table 7 – Pot Room Stack Monitoring

Complied

iv. The particulate emission from bake oven plant shall not exceed 50 mg/ Nm<sup>3</sup>.

It has been stated that The particulate emission from bake oven plant is well within the limit against 50 mg/Nm<sup>3</sup>  
The latest monitoring report is attached as Annexure - 4.

Standard	FTC			
	PM	HF	HF	PAH
50 mg/Nm <sup>3</sup>	-	-	-	02 mg/Nm <sup>3</sup>

Oct-16	22.15	0.07	BDL
Nov-16	14.20	0.08	BDL
Dec-16	20.24	0.07	BDL
Jan-17	22.60	0.08	0.00
Feb-17	23.80	0.09	0.00
March-17	20.12	0.09	BDL
Max	23.80	0.09	0.00
Min	14.20	0.07	0.00
Avg.	20.52	0.08	BDL

**Table 8 – Anode Bake Oven Stack Monitoring**

Complied

Data on ambient air quality, stack emission and fugitive emission is being regularly monitored and data of stack emission is submitted on-line to the Ministry's Regional Office at Bhopal, M.P. Pollution Control Board (MPPCB) and Central Pollution Control Board (CPCB). The hard copy of the same is being submitted also to the respective Govt. agencies on six monthly basis. The last ambient air quality, Stack emission and fugitive emission data submitted to Ministry's Regional Office at Bhopal, M.P. Pollution Control Board (MPPCB) and Central Pollution Control Board (CPCB) is attached as **Annexure - 1to4**

Data on ambient air quality, stack emission and fugitive emission is being regularly monitored and data of stack emission is submitted on-line to the Ministry's Regional Office at Bhopal, M.P. Pollution Control Board (MPPCB) and Central Pollution Control Board (CPCB). The hard copy of the same is being submitted also to the respective Govt. agencies on six monthly basis. The last ambient air quality, Stack emission and fugitive emission data submitted to Ministry's Regional Office at Bhopal, M.P. Pollution Control Board (MPPCB) and Central Pollution Control Board (CPCB) is attached as **Annexure - 1to4**

Standard	Standard	North Direction			East Direction			South Direction			West Direction		
		Max	Min	AVG	Max	Min	AVG	Max	Min	AVG	Max	Min	AVG
PM <sub>10</sub> µg/Nm <sup>3</sup>	100	69.1	62.3	65.7	72.8	62.5	66.3	68.5	57.1	61.0	74.5	61.1	67.7
PM <sub>2.5</sub> µg/Nm <sup>3</sup>	60	38.4	34.5	36.2	37.2	32.4	35.2	33.8	29.9	32.1	40.4	31.2	36.5
SO <sub>2</sub> µg/Nm <sup>3</sup>	80	19.4	15.9	17.3	17.6	14.6	15.5	13.7	12.5	13.2	17.0	13.9	14.8
Nox µg/Nm <sup>3</sup>	80	28.4	25.1	26.3	30.9	24.6	27.8	24.3	14.8	20.5	33.0	24.4	27.2
PAH µg/Nm <sup>3</sup>	-	0.0	0.0	BDL	0.0	0.0	BDL	0.0	0.0	BDL	0.0	0.0	BDL
CO mg/Nm <sup>3</sup>	04	0.7	0.5	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6
Fluoride µg/Nm <sup>3</sup>	-	0.0	0.0	BDL	0.0	0.0	BDL	0.0	0.0	BDL	0.0	0.0	BDL

**Table 9 – Ambient Air Quality during compliance period Monitored**

Data on SPM, SO<sub>2</sub> and NOx shall also be displayed outside the premises at the appropriate place for the general public.

In plant, control measures for checking fugitive emissions from spillage/raw material handling shall be provided.



Photo 3 - Screenshot of status Display at CPCB & MPPCB Website respectively

Data on SPM, SO<sub>2</sub> and NOx is being displayed at the main gate for general public. The snap shot of display board is attached under

Stack	Height (mtr)	APCE	PM [mg/Nm <sup>3</sup> ]	SOx [mg/Nm <sup>3</sup> ]	NOx [mg/Nm <sup>3</sup> ]
CPP 2	125	ESP	26.70	344.6	115.8
CPP 3	125	ESP	37.30	323.9	128.1
CPP 4	125	ESP	32.06	366.3	132.1

Photo 4 - Data Displayed at Main Gate

Complied

It has been stated by PP that In Plant the following control measures for checking fugitive emission from spillage/ raw material handling are adopted as under:

- All transfer points are equipped with adequate capacity bag filters
- Material is transported in covered belt conveyor system

The photographs of covered belt conveyor are attached under:

Fluoride emissions shall be monitored from the pot room and

in the forage around the smelter complex and The data submitted regularly to the Ministry/Regional Office at Bhopal and MPPCB.

Further dry scrubbing system to control the emission from the pot lines shall be provided.



Photo 5 - Conveyer belt For Alumina & Pet Coke Handling and Coal respectively

The Fluoride emissions is being monitored from the pot room and in the forage around the smelter complex and the data is being submitted regularly to the Ministry/Regional Office at Bhopal and MPPCB. The fluoride emission data observed and submitted to Ministry/Regional Office at Bhopal and MPPCB is as under:

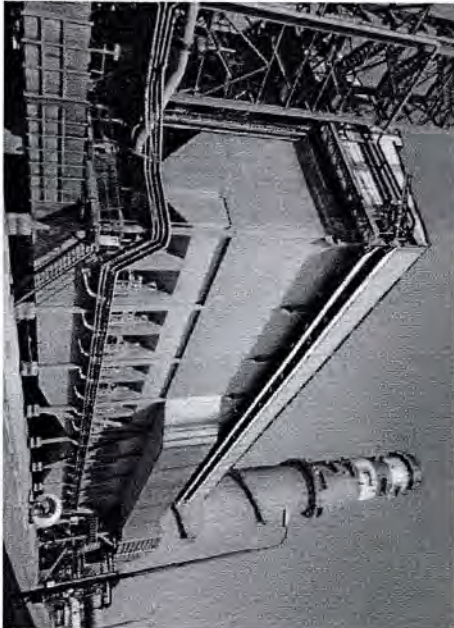
The observed values forage around smelter complex

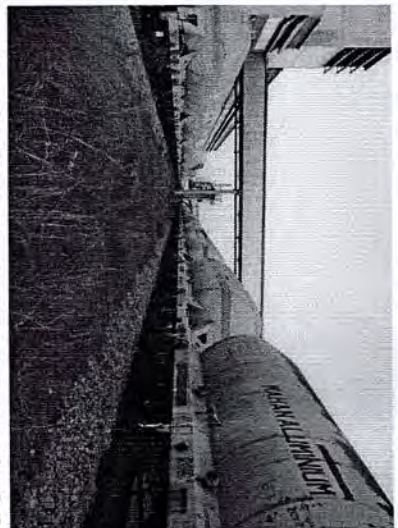


Annexed as Annexure - 5.

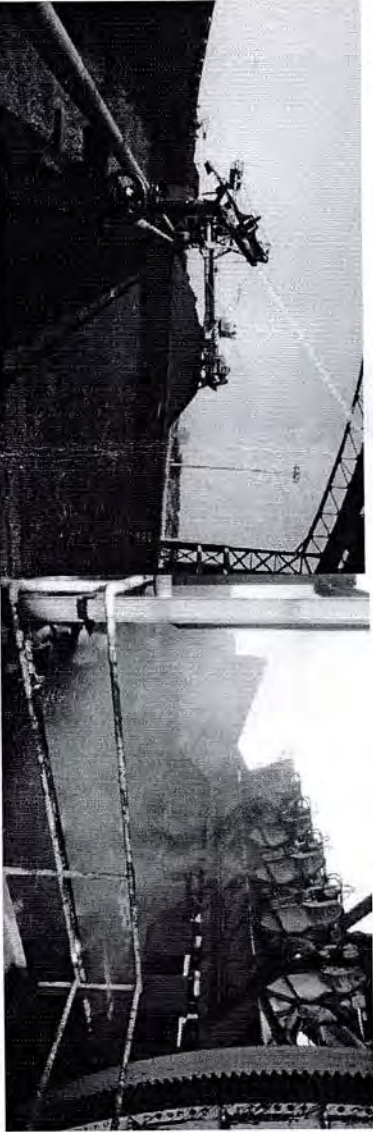
Location	Value of Forage Fluoride (ppm)
<b>Standard</b>	<b>One month – 80 ppm</b>
Near ETP Boundary Wall	8.24
Near Ash dyke Boundary Wall	6.86
Near railway Track Boundary Wall	7.92
Near ETP Boundary Wall	6.43

Table No 10 –Forage Fluoride Monitoring

The dry scrubbing system to control the emission from the pot lines is provide. The photograph of dry scrubber is attached under:

	<p>Total fluoride emissions shall not exceed 0.7 kg/ton of Aluminium produced.</p> <p>Further the pot emissions through fume treatment plants shall not exceed 0.30 kg/ton of Aluminium produced.</p> <p>Fugitive fluoride emission from the pot room shall be monitored and report submitted regularly to the Ministry/Regional Office at Bhopal and MPPCB.</p>
<p>vii.</p> <p>The company shall install gas treatment centers (GTC) to treat fumes coming out from pot line pots.</p> <p>The emissions shall conform to the standards prescribed by the Ministry/CPCB/MPPCB whichever is more stringent.</p>	<p>The total fluoride emissions is well below the 0.7 kg/ton of Aluminium produced. The latest values observed is 0.6 kg/Ton of aluminum produced.</p> <p>The pot emission through fume treatment plants is well below the 0.30 kg/ton of Aluminium produced. The latest value observed is 0.07 kg/ton of aluminum produced</p> <p>The Fugitive fluoride emission from the pot room is being monitored and report is submitted regularly to the Ministry/Regional Office at Bhopal and MPPCB.</p> <p><b>Complied</b></p> <p>It has been stated that the company has installed the 02 nos of Gas treatment Centre (GTC) to treat fumes coming out from pot line pots.</p> <p>The emission level conform the stringent standards which is prescribed by MoEFFCC Emission level from GTC is well within the standards prescribed by MoEFFCC. Table provided above.</p> <p><b>Complied</b></p>
<p>viii.</p> <p>Bag filters shall be provided to anode baking plant and transfer points to control fugitive emissions.</p> <p>Gas treatment center (GTC) shall be provided to</p>	<p>Photo No 6 – Dry Scrubbing System for Pot Room.</p>  <p>It has been stated that the adequate capacity of bag filters in anode baking plant, and transfer points are installed to control fugitive emission</p> <p>Gas treatment centers are provided to treat the fumes from pot lines. Shown in photo No 6 in</p>

<p>treat the fumes from the pot line.</p> <p>Closed alumina wagon and dense phase conveying for alumina handling shall be provided to reduce the fugitive emission.</p>	<p>specific condition No- vi</p> <p>Closed alumina wagon and dense phase conveying system for alumina handling has been provided to reduce fugitive emission during handling.</p>   <p>Photo 6 - Wagon For Alumina Transportation &amp; Covered Truck for Finished Good Transportation</p>
<p>High efficiency collection hoods, flue gas treatment plants and dry scrubbers shall be provided to keep the fluoride emission below 0.7 kg/ton from Anode bake oven.</p> <p>Internal roads shall be paved /asphalted.</p> <p>Calcined petroleum based dry scrubbers, dust suppression and collection system shall be</p>	<p>High efficiency collection hoods, flue gas treatment plants and dry scrubbers is provided to keep the fluoride emission below 0.7 kg/ton from Anode bake oven. The report is shown in specific condition No- iii.</p>  <p>Internal roads are made black topped.</p> <p>Calcined petroleum based dry scrubbers, dust suppression and collection system are provided to Carbon paste plant. De-dusting system is also provided to control the fugitive emissions.</p>

	<p>provided to Carbon paste plant. De-dusting system shall be provided to control the fugitive emissions.</p> <p>Dust suppression systems to be provided to control fugitive emissions from the crushing house, dumpers, conveyor belt, moving vehicle, pneumatic compressors, raw material handling etc.</p> <p>Dust suppression system such as bag filter of adequate capacity is provided to control fugitive emission from the crushing house, and water sprinkling system is provided to control fugitive emission generated from dumpers, conveyor belt, moving vehicle, pneumatic compressor and raw material handling. The photographs of bag filters and water sprinkling system installed is as under:</p>  <p style="text-align: center;"><u>Photo 7 - Water Spray System at Coal handling plant and at Coal Wagon Tippler in CPP</u></p> <p>Complied</p>
<p>ix</p> <p>The poly aromatic hydrocarbon (PAH) from the carbon plant shall not exceed 2 mg/Nm<sup>3</sup>.</p> <p>The data on PAH shall be monitored quarterly and report submitted regularly to the Ministry/Regional Office at Bhopal and MPPCB.</p>	<p>PP submitted the following:</p> <p>The polyaromatic hydrocarbon (PAH) from the carbon plant is not exceeding 2mg/Nm<sup>3</sup>. The PAH monitored and value observed is annexed as <b>Annexure – 4</b>.</p> <p>The PAH is being monitored quarterly and Quarterly report is being submitted regularly to concerned authorities.</p>



Material	Mode of Transportation	
	Truck	Rail
Coal	✓	✓
Alumina	-	✓
CP Coke	-	✓
Fuel Oil	✓	-
Pitch	✓	-
Aluminium Fluoride	✓	-

Table 11 - Mode of Transportation for Different Raw Materials

Complied

PP stated that total water requirement from River Gopad is well below 4,600 m<sup>3</sup>/hr and prior permission for the drawl of 4600 m<sup>3</sup>/hr water has been obtained from the concern department i.e. Ganga Kachhar water resource department, Rewa Govt. Of M.P. The letter of water withdrawal permission is annexed as Annexure - 6.

Month	Total Water Withdrawal Qty.(KL)	Permission@ m <sup>3</sup> /hr	Actual Withdrawal@ m <sup>3</sup> /hr
<b>Total</b>	<b>8271377</b>	<b>4600</b>	<b>1894</b>

Table 12 – Water Withdrawal from Gopad River during Oct-16 to March-17

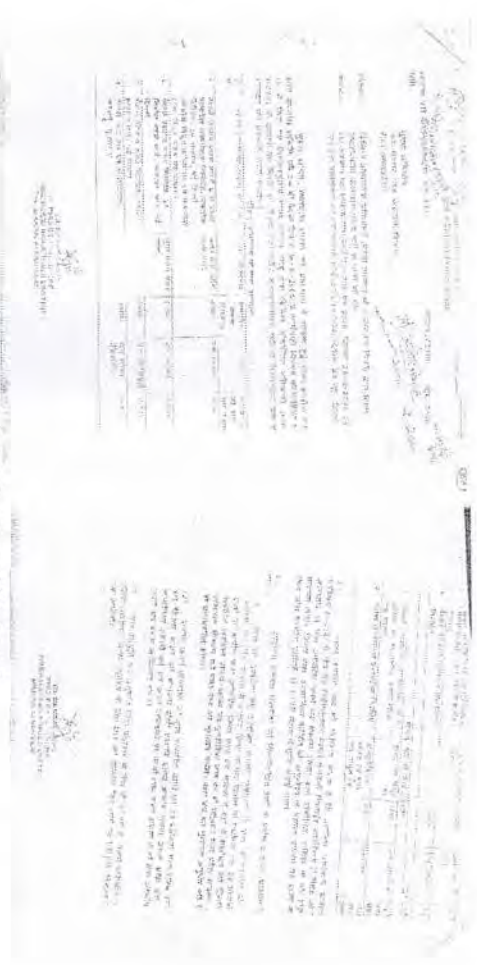


Photo 9 - Permission for water Withdrawal

Closed circuit system shall be adopted to reduce water consumption and control water pollution.

Closed circuit is adopted to reduce water consumption and control water pollution. Sufficient capacity of Effluent treatment plant is installed to treat the process effluent. The treated waste

	<p>As reflected in EIA/EMP, all the process effluent shall be treated in effluent treatment plant (ETP) and treated waste water shall be recycled and reused for cooling, dust suppression, green belt development and coal/ash handling to achieve zero discharge.</p>																												
<p>xiii. A detailed hydrological study of ground water movement shall be carried out for the assessment of ground water contamination to assess the risk of ground water contamination and report submitted to the Ministry and its Regional Office at Bhopal within six months.</p>	<p>water is being used in cooling, dust suppression and plantation purpose.</p> <table border="1" data-bbox="1093 996 1428 1960"> <thead> <tr> <th>Sr.</th> <th>Name of Treatment Facility</th> <th>Capacity KL/Day</th> <th>Total Quantity Recycled after Treatment during Period (M3)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Smelter ETP</td> <td>7200</td> <td>98735</td> </tr> <tr> <td>2</td> <td>CPP ETP</td> <td>12600</td> <td>39146</td> </tr> <tr> <td>3</td> <td>Industrial STP</td> <td>240</td> <td>1300</td> </tr> <tr> <td>4</td> <td>STP C Type Colony</td> <td>150</td> <td>4932</td> </tr> <tr> <td>5</td> <td>STP F Type Colony</td> <td>300</td> <td>9348</td> </tr> <tr> <td colspan="3"><b>Total</b></td> <td><b>153461</b></td> </tr> </tbody> </table> <p>Table 13-Treated Water Quantity Recycled</p> <p>Two no's of STP having capacity 150 m<sup>3</sup>/day and 300 m<sup>3</sup>/day have installed to treat domestic effluent. The treated water is conforms to the standards for land application, also used in green belt development within the plant premises.</p> <p><b>Complied</b></p>	Sr.	Name of Treatment Facility	Capacity KL/Day	Total Quantity Recycled after Treatment during Period (M3)	1	Smelter ETP	7200	98735	2	CPP ETP	12600	39146	3	Industrial STP	240	1300	4	STP C Type Colony	150	4932	5	STP F Type Colony	300	9348	<b>Total</b>			<b>153461</b>
Sr.	Name of Treatment Facility	Capacity KL/Day	Total Quantity Recycled after Treatment during Period (M3)																										
1	Smelter ETP	7200	98735																										
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4	STP C Type Colony	150	4932																										
5	STP F Type Colony	300	9348																										
<b>Total</b>			<b>153461</b>																										
<p>xiv. Proper care shall be taken to ensure no run off or seepage from the disposal site to natural drainage. Ground water all around the disposal area shall be monitored regularly and report submitted to the MPPCB/CPCB and Regional Office of the Ministry at Bhopal.</p>	<p>PP stated that a detailed hydrological study of ground water movement is carried out for the assessment of ground water contamination and risk of ground water contamination by M/s GEO, Kolkata and report is submitted to the Ministry and its Regional Office at Bhopal vide our letter MAP/UBA/09-10/11, dt.04.11.2009.</p> <p>A copy of the same is enclosed as <b>Annexure- 14.</b></p> <p><b>Complied</b></p> <p>PP stated that Proper care has been taken, such as HDPE liner has been provided to ensure no run off or seepage from the disposal site to natural drainage. The ground water all around the disposal area is monitored regularly and report has been submitted to the MPPCB/CPCB and Regional Office of the Ministry at Bhopal. The latest ground water report is attached as <b>Annexure – 15.</b></p> <p><b>Complied</b></p>																												
<p>xv. The spent pot lining generated from the smelter shall be properly treated and disposed off in secured landfill site (SLF). The location and</p>	<p>It has been stated that spent pot lining generated from the smelter is properly stored in covered and concrete shed. We have envisage the authorized vendor M/s Green Energy, Odisha for disposal of pot lining. The M/s Green Energy, Odisha is authorized recycler, we have</p>																												

	<p>design of the landfill site shall be approved by MPPCB as per Hazardous Waste (Management and Handling) Rules, 2003 and should be as per CPCB guidelines. The ground water quality around the landfill site shall be monitored and the data submitted to the Ministry/MPPCB. Spent pot lining generation shall not exceed as per guidelines mentioned in the Corporate Responsibility for Environment Protection (CREP) for Aluminium Sector and shall be disposed off in secured landfill (SLF) designed and constructed as per CPCB guidelines with proper leachate collection system.</p> <p>sent SPL approx. 234.36 MT for recycling. The spent pot lining generation is well within the guidelines mentioned in corporate responsibility for environment protection (CREP) foraluminium sector. We are not disposing off the SPL in secured landfill.</p>
<p>ETP &amp; STP sludge will be used as soil conditioner for green belt development.</p> <p>All the dross, used oil and batteries shall be sold to the authorized recycler/re-processors.</p>	<p>STP Sludge is being used for soil conditioning for horticulture purpose,green belt development.</p> <p>All the dross, used oil and batteries is sold to the authorized recycler/re-processors.</p> <p><b>About ETP sludge, nothing has been mentioned. It is not therefore, clear as to how the sludge of ETP being managed by the PP. This may be explained. Partly complied.</b></p>
<p>xvi. Better housekeeping measures should be taken to reduce fluorine levels in the vicinity of the pot line building and in the effluent emanating from anode preparation section. Surface run-off outside the pot house should be properly collected, handled and disposed off.</p>	<p>It has been stated that Better housekeeping measures are taken to reduce fluorine levels in the vicinity of the pot line building and in the effluent emanating from anode preparation section. Surface run-off outside the pot house is properly collected and treated in ETP. Monitoring report of treated effluent is annexed as <b>Annexure - 7</b>.</p>

EPCOR WATER SERVICES INC. LTD. 2700016

REPORT NUMBER/PERIOD OF MEASUREMENT: 2003-03-17/2003-03-17

SITE: 14-FLY ASH UTILIZATION REPORT

ANALYST: J. B. BROWN

NO.	ITEM	DESCRIPTION	QTY	UNIT
1	BA Gen MT	23163	MT	23163
2	FA Gen MT	92654	MT	92654
3	Total ash Gen MT	115817	MT	115817
4	Cement Ind.	57044	MT	57044
5	Bottom ash	23163	MT	23163
6	Ash (HCSO)	35610	MT	35610
7	Road Constr.	0	MT	0
8	Other	0	MT	0
9	Ash Utilization (%)	49	%	49
10	BA Gen MT	23163	MT	23163
11	FA Gen MT	92654	MT	92654
12	Total ash Gen MT	115817	MT	115817
13	Cement Ind.	57044	MT	57044
14	Bottom ash	23163	MT	23163
15	Ash (HCSO)	35610	MT	35610
16	Road Constr.	0	MT	0
17	Other	0	MT	0
18	Ash Utilization (%)	49	%	49

J. B. BROWN  
EPCOR WATER SERVICES INC. LTD.  
2700016

**Photo 10 – ETP Outlet treated water Monitoring Report**

**Complied**

It has been stated that the fly ash utilization is complied with asper Fly ash Notification 1999 and subsequent amendments in 2003. The fly ash generated is properly stored in ash storage pond and provided to cement manufacturers for further utilization.

Details are annexed as **Annexure – 8.**

FY16-17	BA Gen MT	FA Gen MT	Total ash Gen MT	Cement Ind.	Ash Disposal				Ash Utilization (%)
					Bottom ash	Ash (HCSO)	Road Constr.	Other	
Oct 16	23163	92654	115817	57044	23163	35610	0	0	49
Nov 16	22258	89031	111288	50523	22258	39726	0	0	45
Dec 16	21720	86880	108600	30016	21720	61795	0	0	28
Jan 17	22269	89078	111347	37770	22269	32124	18704	0	34
Feb 17	22295	89181	111476	53824	22295	17920	17536	0	48
Mar 17	23317	93268	116585	64960	23317	17012	10422	0	79
<b>TOTAL</b>	<b>261070</b>	<b>1044280</b>	<b>1305350</b>	<b>688690</b>	<b>261070</b>	<b>292242</b>	<b>46662</b>	<b>20843</b>	<b>57</b>

**Table 14—Fly Ash Utilization Report**

**Complied**

Proper utilization of fly ash shall be ensured as per Fly ash Notification 1999 and subsequent amendments in 2003. All the fly ash generated shall be properly stored in ash storage pond and provided to cement and brick manufacturers for further utilization.

xvii.

xviii.	Occupational health surveillance of workers shall be done on a regular basis and records maintained as per Factories Act.	PP has stated that the occupational health surveillance of workers is being done on a regular basis and records are maintained as per Factories Act. Details are annexed as <b>Annexure - 9.</b>
xix.	Green belt shall be developed in 500 ha (33%) out of total 1500ha area to mitigate the impact of fugitive emissions as per CPCB guidelines.	<b>Complied</b> PP has stated that the Green belt is developed in 276ha out of total 415 ha instead of 500ha area to mitigate the impact of fugitive emissions as per CPCB guidelines, We have acquired total land 1256 ha against 1500 ha. The action plan to achieve the 33% is attached as <b>Annexure- 16.</b>
xx.	The company shall develop rain water structures to harvest the run-off water for recharge of ground water in consultation with the Central Ground Water Authority/Board.	<b>Complied</b> PP has stated that the company has developed rain water structures to harvest the run-off water for recharge of ground water all around the plant. The rain water harvesting study by M/s Wolkemis in progress
xxi.	Land acquisition for the proposed integrated Aluminum Smelter Complex (3.25 LTPA & primary aluminum) along with coal based Captive Power Plant (750 MW) at Village Orgari, Bargawan, District Sidhi, Madhya Pradesh shall not exceed 1,500 ha.	<b>Partly Complied</b> PP has stated that the Land acquired for the integrated Aluminum Smelter Complex (3.25 LTPA & primary aluminum) along with coal based Captive Power Plant (750 MW) at Village Orgari, Bargawan, District Sidhi, Madhya Pradesh is 1256 Ha which is less than the 1500 Ha.
xxii.	As proposed no forest land shall be used.	<b>Complied</b> PP has stated that no forest lands are used.
xxiii.	Recommendations of the State Forests department regarding the impact of the proposed expansion plant on the surrounding reserve forest viz. MohanbanRF ( 4 km WSW),Jiwan RF (5.5 km NNE), Muher RF ( 9.2 km SE), Pokhara RF (6.3 km NE), Orgari PF ( 0.2 km N), Majhigawan PF ( 7 km NNE),Teldah PF (4.6 km SE) , Pachwar PF ( 9.9 k m NNE) Gidher PF ( 2.7 km NW), Uska PF ( 6.3 km E), Lohara PF (4.5 km NNW), Bichi PF (6.6 km N) ,Parhasi PF (4.6 km NNE) and Borri PF (7.8 km N) shall be obtained and implemented	<b>Partly Complied</b> PP has stated that this study has been carried out by a reputed agency, M/s Vimta lab and it has been mentioned in our comprehensive EIA report [Chapter - 4 Page No C4-16] that there is no impact envisaged on ecological environment. Accordingly, it has been approved by MoEF and granted Environment Clearance. <b>However, report has not been enclosed/submitted.</b>

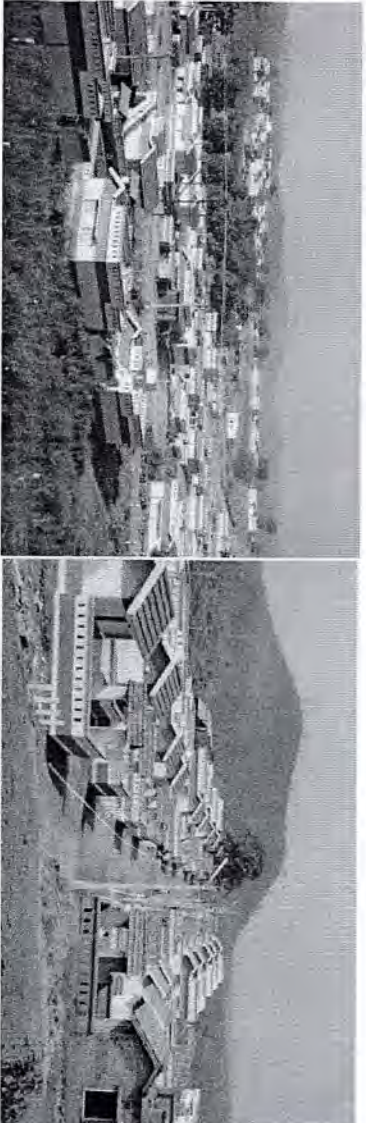

xxiv.	<p>Measures shall also be taken to prevent impact of particulate emission /fugitive emissions, if any from the proposed plant on the surrounding forest located within 10 km radius of the project. Further, conservation plan for the conservation of wild fauna of Schedule I located in the forest/reserve forest in consultation with the State Forest Department shall be prepared and implemented.</p>	<p>PP has stated that measures are already taken to prevent impact of particulate emission /fugitive emissions, if from plant on the surrounding forest located within 10 km radius of the project. We have engaged competent agency M/s Consulting Engineers Group Ltd, Jaipur for aforesaid study and preparation of conservation plan of Wild Fauna as per schedule-1 located in the surrounding forest / reserve forest accordingly. The study is in progress</p> <p><b>Partly Complied</b></p>
xxv)	<p>Rehabilitation and Resettlement shall be implemented as per R&amp;R Policy of the State Government of Madhya Pradesh. Suitable employment to all the oustees shall be provided. Compensation paid to the land oustees in any case shall not be less than The norms prescribed under the National Resettlement and Rehabilitation Policy, 2007.</p>	<p>PP has stated that rehabilitation and Resettlement has been implemented as per R&amp;R Policy of the State Government of Madhya Pradesh. The Suitable employment to all the oustees is provided. The Compensation paid to the land oustees is not less than the norms prescribed under the National Resettlement and Rehabilitation Policy, 2007. Total Ousteess were 2958, we have provided employment to 1560, pension to 391oustees as per National Resettlement and Rehabilitation Policy, 2007. The photograph of R &amp; R colony developed by Hindalco Industries and provided to oustee is as under</p>  <p><b>Complied</b></p>
xxvi)	<p>All the recommendation made in the charter on Corporate Responsibility for Environment Protection (CREP) for Aluminium Sector shall be strictly implemented.</p>	<p>PP has stated that all the recommendation made in the charter on Corporate Responsibility for Environment Protection (CREP) for Aluminium Sector is being strictly implemented. The compliance report is attached as <b>Annexure –13 D</b></p> <p><b>Complied</b></p>

Photo 11 - R & R Colony Constructed By Hindalco

xxvii	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report and suggested during public hearing meeting.	PP has stated that they have complied with all the environmental protection measures and safeguards recommended in the EIA/EMP report and suggested during public hearing meeting. The compliance report is attached as <b>Annexure-17</b> . <b>Complied</b>
xxviii	The company shall provide housing for construction labor within the site with all 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.	PP has stated that the company had provided housing for construction labor within the site with all STP, safe drinking water, medical health care, crèche etc. The housing were in the form of temporary structures and have been removed after the completion of the project. <b>Deemed Complied</b>
<b>B. GENERAL CONDITIONS:</b>		
i)	The project Authority must strictly adhere to the stipulations made by M.P. Pollution Control Board (MPPCB) and State Government.	PP has stated that they are strictly adhere to stipulation made by M.P. Pollution Control Board (MPPCB) and state Government. The compliance of CTO is attached as <b>Annexure-13</b> <b>Complied</b>
ii)	No expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment and Forests	PP has stated that condition is being complied with. <b>Complied</b>
iii)	The gaseous emission from various process units should conform to the standards prescribed by the concerned authorities from time to time. The MPPCB may specify more stringent standards for the relevant parameters keeping in view the nature of the industries and its size and location. At no time the emission level should go beyond the prescribed standards. In the event of failure of any Pollution control system adopted by the unit, the respective unit should not be restarted until the control measures are rectified to achieve the desired efficiency.	PP has stated that the gaseous emission from various process units is conformed to the standards prescribed by the concerned authorities from time to time. The emission level is observed well within the prescribed standards. The failure of Pollution control system adopted by the unit is not happened till date If happened in future the respective unit will not be restarted until the control measures are rectified to achieve the desired efficiency. <b>Complied</b>

<p>iv) Adequate ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO<sub>2</sub> and NO<sub>x</sub> are anticipated in consultation with the MPPCB.</p>	<p>PP has stated that adequate ambient air quality monitoring stations (04no's) are established in the downward direction as well as where maximum ground level concentration of SPM, SO<sub>2</sub> and NO<sub>x</sub> are anticipated in consultation with the MPPCB. Photograph of AAQM installed is attached under :</p>  <p style="text-align: center;"><u>Photo 12 - Ambient Air Quality monitoring Station</u></p> <p>Data on ambient air quality, fugitive emission, and stack emission is regularly submitted to the Ministry's Regional office and MPPCB once in six months.</p> <p><b>Complied</b></p>
<p>v) In- plant control measures for checking fugitive emission from spillage /raw materials handling etc shall be provided.</p> <p>Closed Alumina wagon and dense phase conveying for Alumina handling shall be provided to reduce fugitive emission.</p>	<p>PP has stated that in- plant control measures for checking fugitive emission from spillage /raw materials handling etcare provided such as all transfer points are equipped with adequate capacity bag filters to arrest the dust emission, raw material is stored in silo. Transportation of material in closed belt conveyor or thru pneumatic system. All internal roads are made paved/concrete.</p> <p>Closed alumina wagon is provided for transport of alumina and Dense phase conveying system provided for transportation of Alumina within plant. The photograph of closed wagon and dense phase system is shown in photograph No 4 &amp; 6 in specific condition No -vi and viii respectively.</p>

Bag filters and covered conveyers and adequate water sprinkling shall be done to control fugitive emission.

Adequate capacity of bag filters and covered conveyers provided to control the fugitive emission. We have dedicated water tanker attached with sprinkling system to keep internal road wet condition.

**Complied**

vi) The overall noise level in and around plant area should be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time)

PP has stated that the overall noise level in and around plant area is kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc on all sources of noise generation. The ambient noise levels is conformed to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time). The ambient noise level monitored is attached as under:

<b>Ambient Noise Monitoring Data Sheet</b>											
Sound Level (dBA)											
Location	ETP (WEST)		SMELTER LAB (NORTH)		RESERVOIR (SOUTH)		GATE NO.3 (EAST)				
	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	
date	11:51 AM	10:30 PM	12:03 PM	10:40 PM	12:30 PM	11:00 PM	3:35 PM	11:30 PM			
	48.3	40.2	59.3	48.2	49.2	47.3	48.5	42.6			
	49.3	42.6	59.4	51.2	51.2	47.9	50.2	41.8			
	50.2	41	60.6	49.3	52.4	48.2	47.5	43.8			
	53.2	41.5	58.3	48.9	51.4	49.1	50.6	42.7			
15 March, 2017	50.1	42.3	62.3	50.3	48.9	47.8	52.1	42.8			
	49.8	41.9	52.6	49.8	49.7	46.9	49.3	43.4			
	52.7	39.8	53.3	51.6	54.8	49.5	51.9	43.9			
	51.7	42.6	54.6	48.6	56.3	45.8	48.7	44.7			
	49.9	43.5	55.8	50.8	56.7	48.3	50.1	45.9			
	50.8	45.4	58.9	51.8	54.8	47.6	49.8	43.7			
AVG.	53.2	45.4	62.3	51.8	56.7	49.5	52.1	45.9			

Table 15- Ambient Noise Monitoring Report

**Complied**

vii) The occupational health surveillance of workers shall be done on regular basis and

PP has stated that the occupational health surveillance of workers is being done on regular basis and records maintained as per Factories Act, The record of occupational

	records maintained as per Factories Act.	health checkup enclosed as <b>Annexure – 9</b> <b>Complied</b>																																																																				
viii)	The company shall also comply with all environmental protection measures and safeguards recommended in EIA/EMP report. Further, the company shall earmark funds separately for improving the socio – economy and ecology of the region.	PP has stated that the company is complied with all environmental protection measures and safeguards recommended in EIA/EMP report. The separate funds has been earmarked for improving the socio –economy and ecology of the region.  Separate fund has been earmarked for environmental protection and improving socio-economic as well as ecology of the region. <b>Complied</b>																																																																				
ix)	As proposed, Rs. 405.00 crores for environmental management plan, Rs. 45.00 Lakhs towards total capital cost and Rs. 21.00 lakhs earmarked towards recurring cost/annum for environmental pollution control measures shall be judiciously utilized for implementation of conditions stipulated by Ministry of environment and Forests as well as State Government along with the implementation schedule for all the conditions stipulated herein .The funds so provided should not be diverted for any other purpose.	PP has stated that they have already invested more than Rs. 873.75 Crores on capital cost for pollution control and Rs 31.00 lakh for FY-17 as recurring cost . The fund earmarked has been used judiciously and not diverted to any other purpose. The details of cost incurred on pollution control measures are under:																																																																				
		<table border="1"> <thead> <tr> <th rowspan="2">Sr.</th> <th rowspan="2">Items</th> <th rowspan="2">Supplier</th> <th colspan="2">Allocated Cost (Crores)</th> <th rowspan="2">Actual Cost</th> </tr> <tr> <th>Allocated Cost</th> <th>Actual Cost</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Gas Treatment Center</td> <td>Alstom</td> <td>225</td> <td>310.52</td> </tr> <tr> <td>2</td> <td>Fume Treatment Center</td> <td>DC/Thermax</td> <td>50</td> <td>58.17</td> </tr> <tr> <td>3</td> <td>Smeller &amp; CPP ETP</td> <td>Thermax</td> <td>83</td> <td>111.32</td> </tr> <tr> <td>4</td> <td>Smeller ETP Settling Pond (Civil)</td> <td>Rohan</td> <td>25</td> <td>-</td> </tr> <tr> <td>5</td> <td>Underground drainage system</td> <td>L&amp;T</td> <td>10</td> <td>-</td> </tr> <tr> <td>6</td> <td>Pot hoods</td> <td>Indiab. Orient</td> <td>10</td> <td>13</td> </tr> <tr> <td>7</td> <td>Ventilation System</td> <td>Colt</td> <td>10</td> <td>32.62</td> </tr> <tr> <td>8</td> <td>Dust suppression / Bag filters (Smeller&amp; CPP)</td> <td>Ducon, Techno, L&amp;T</td> <td>40</td> <td>17.65</td> </tr> <tr> <td>9</td> <td>Pot room sampling system</td> <td>Advance Ventilation</td> <td>5</td> <td>-</td> </tr> <tr> <td>10</td> <td>Hyper Dense Phase System(HDPS)</td> <td>AP</td> <td>80</td> <td>94.85</td> </tr> <tr> <td>11</td> <td>ALPSYS (automatic Pot control system)</td> <td>AP</td> <td>80</td> <td>169.59</td> </tr> <tr> <td>12</td> <td>CAFD &amp; ATFD</td> <td>ECL</td> <td>10</td> <td>-</td> </tr> </tbody> </table>	Sr.	Items	Supplier	Allocated Cost (Crores)		Actual Cost	Allocated Cost	Actual Cost	1	Gas Treatment Center	Alstom	225	310.52	2	Fume Treatment Center	DC/Thermax	50	58.17	3	Smeller & CPP ETP	Thermax	83	111.32	4	Smeller ETP Settling Pond (Civil)	Rohan	25	-	5	Underground drainage system	L&T	10	-	6	Pot hoods	Indiab. Orient	10	13	7	Ventilation System	Colt	10	32.62	8	Dust suppression / Bag filters (Smeller& CPP)	Ducon, Techno, L&T	40	17.65	9	Pot room sampling system	Advance Ventilation	5	-	10	Hyper Dense Phase System(HDPS)	AP	80	94.85	11	ALPSYS (automatic Pot control system)	AP	80	169.59	12	CAFD & ATFD	ECL	10	-
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13	Electro Static Precipitator, 6 units	BHEL	180	274.93
14	Chimney/Closed drainage - 6 Units	L&T	50	45.72
15	Land Scaping and Green belt Development (Smelter and CPP)	-	15	-
16	Clony STP	Ion Exchange	0.75	Not Capitalized
Total			873.75	1128.37

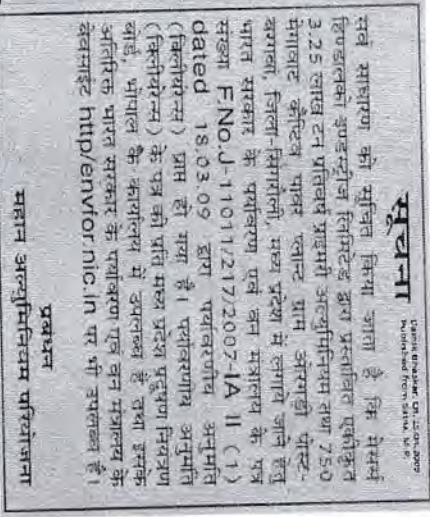
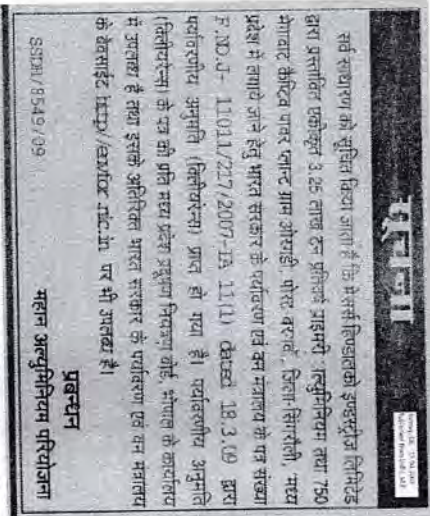
**Table 16 - Investment towards Pollution Control Equipment & Technology**

**Complied**

PP has stated that six monthly Compliance report is being submitted regularly to MoEFCC/MPPCB regularly. Last compliance report submitted to MoEFCC/CPCB/MPPCB is vide letter no MAP/ENV/MOEF/EC/2017-18/16, dated 27.05.2017. Covering letter of last three six monthly report submitted is annexed as Annexure – 10.

**Complied**

PP has stated that this has been advertised in two local newspaper in vernacular namely  
 i) Dainik Bhaskar, published from Satna, dated 15.04.2009  
 ii) Samay,published from Sidhi, dated 15.04.2009  
 The copy of the relevant portion of the newspapers have been submitted vide our letter dated April 18, 2009.



**Photo 13 - Paper Cutting of Advertisement**

x) The Regional Office of this Ministry at Bhopal /MPPCB/ SPCB will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation should be submitted to them regularly.

xi) The company shall inform the public that the project has been accorded environmental clearance by the Ministry and the copies of the clearance letter are available with the MPPCB and may also be seen at Website of the Ministry of Environment and Forests at <http://envfor.nic.in>. This should be advertised within seven days from the date of issue of the clearance letter at least in two local newspapers that are widely circulated in the region of which one shall be in vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional Office.

		<p><b>However, since the advertisement was not published within 7 days as was mandated, this is not complied.</b></p> <p><b>Not Complied</b></p>
xii)	<p>The project authorities shall inform the Regional Office as well as the Ministry, the date of the financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.</p>	<p>PP has stated that Hindalco Industries Limited has informed to Regional Office as well as the Ministry regarding the date of the financial closure and final approval of the project and the date of commencing.</p> <p><b>However, there is no such record.</b></p> <p><b>Deemed Complied</b></p>
7.	<p>The ministry may revoke or suspend the clearance, if implementation of any of the above condition is not satisfactory.</p>	<p>PP stated that they have Agreed.</p>
8.	<p>The ministry reserves the right to stipulate additional condition if found necessary. The company in a time bound manner will implement these conditions.</p>	<p>PP stated that they have Agreed.</p>
9.	<p>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 Environmental Appellate Act, 1997.</p>	<p>PP stated that they have Agreed.</p>
10.	<p>The above conditions will be enforced, inter-alia under the provision of the Water (Prevention &amp; Control of Pollution) Act, 1974, The Air (Prevention &amp; Control of Pollution) Act, The Environment (Protection) Act, 1986, The Hazardous Waste (Management and Handling) Rules, 2003 and The Public Liability Insurance Act, 1991 along with their amendments and rules</p>	<p>PP stated that they have Agreed.</p>

11.	The Environment Clearance letter issued vide even no. letter dated 2 <sup>nd</sup> January, 2009 may be treated as null and void.	PP stated that they have Agreed.
-----	---	----------------------------------


**Summary:**

Out of 45 total conditions, it may be seen that 33 are fully complied, 4 are partly complied, 1 is not complied, 2 are deemed complied and 5 are agreed by PP by compliance. These have been explained in the foregoing compliance report against each of the conditions, and the PP needs to take necessary and time bound action for early compliance in respect of the relevant conditions.

**PART – II & III**  
**DESCRIPTIVE REPORT ON STATUS OF COMPLIANCE FOR THE PERIOD OF OCTOBER 2016 - MARCH, 2017 TO**  
**CONDITIONS OF ENVIRONMENTAL CLEARANCE AND ENVIRONMENTAL MANAGEMENT**  
**EC No: J-11011/217/2007-IA II (I), Dated 15.02.2012**

Sl. No.	CONDITIONS	Compliance as replied to Govt. agencies
i.	There shall be no additional acquisition of land, requirement of water and coal which will remain same as per the environmental clearance dated 18.03.2009	PP stated that there shall be no additional acquisition of land, requirement of water and coal which will remain same as per the environmental clearance dated 18.03.2009
	Although the overall power requirement would increase from 624 MW to 695 MW and would be met from CPP 750 MW and lower power consumption by 80 KWH/Ton of Al	Overall power requirement would be increased from 624 MW to 695 MW and would be met from CPP 750 MW.
	Alumina requirement would increase from 6.4 LTPA to 6.9 LTPA and would be met from the captive refinery.	Alumina requirement would be increased from 6.4 LTPA to 6.9 LTPA and would be met from the own captive refinery. <b>Complied</b>
ii.	The company shall achieve levels of fluoride emissions from 0.7 kg/ton to 0.67 kg/ton of Aluminium produced within a period of three years.	PP stated that the fluoride emission level is well within the stipulated limits i.e. 0.67 kg/ tone. The latest monitoring results obtained is 0.6 kg/ton of Al. <b>Complied</b>
iii.	The particulate emission shall be controlled below 50 mg/Nm <sup>3</sup> by installation of ESP in the captive power plant.	PP stated that the particulate emission is controlled and it is observed below 50 mg/Nm <sup>3</sup> by installation of ESP in the captive power plant. Shown in table No 3 in specific condition No- i <b>Complied</b>
iv.	Data on ambient air quality, stack emission and fugitive emission shall be regularly submitted online to the Ministry's Regional Office at Bhopal, SPCB and Central Pollution Control Board (CPCB) as	PP stated that the Data on ambient air quality, stack emission and fugitive emission is regularly submitted to the Ministry's Regional Office at Bhopal, SPCB and Central Pollution Control Board (CPCB) once in six months and online display board has been provide to display the data on PM <sub>10</sub> , SO <sub>2</sub> and NOx at factory gate

<p>v</p> <p>The National Ambient Air Quality Standards issued by the ministry vide G.S.R. No.826 (E) dated 16<sup>th</sup> November, 2009 shall be followed</p>	<p>Shown in photo No 3 in specific condition No- V.</p> <p><b>Complied</b></p> <p>PP stated that the National Ambient Air Quality Standards issued by the ministry vide G.S.R. No.826 (E) dated 16<sup>th</sup> November, 2009 is being followed</p> <p><b>Complied</b></p>
<p>vi</p> <p>The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental condition including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of this Ministry at Bhopal/CPCB/SPCB shall monitor the stipulated conditions.</p>	<p>PP stated that the six monthly reports on status of the compliance of the stipulated environmental condition including results of monitored data is being submitted to the respective Regional Office of this Ministry at Bhopal/CPCB/SPCB. The last report submitted vide letter no MAP/EC Compl/16-17/02, Dt. 21.11.2016. Covering letter of last three six monthly report submitted is annexed as <b>Annexure – 10</b>.</p> <div data-bbox="582 1120 1101 1736" data-label="Image"> </div> <p><b>Complied</b></p>
<p>vii</p> <p>The environmental statement for each financial year ending 31<sup>st</sup> March in form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Board as prescribed under the Environmental (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental condition and shall</p>	<p>PP stated that the environmental statement for each financial year ending 31<sup>st</sup> March in form-V is submitted to MPPCB and Regional office MoEFCC respectively, as prescribed under the Environmental (Protection) Rules, 1986, as amended subsequently. The last Environmental Statement submitted to MPCB and RO, MoEFCC vide letter no.- MAP/Env/EAS/15-16/01, dt. - 26.09.2016.annexed as <b>Annexure – 11</b>.</p> <p><b>Complied</b></p>

<p>viii</p> <p>The company shall submit within three months their policy towards corporate Environment Responsibility which should inter-alia address (i) Standard operating processes/ procedure to being into focus any infringement /deviation /violation of environmental or forest norm/conditions, (ii) Hierarchical system or Administrative order of the company to deal with environmental issues and ensuring compliance to the environmental clearance condition and (iii) System of reporting of non-compliance /violation environmental norms to the Board of Director of the company and /or stakeholders or shareholders.</p>	<p>also be sent to the respective Regional officers of the MOEF by e-mail.</p>
<p>PP stated that they have policy towards corporate Environment Responsibility which address (i) Standard operating processes/ procedure to being into focus any infringement /deviation /violation of environmental or forest norm/conditions, (ii) Hierarchical system or Administrative order of the company to deal with environmental issues and ensuring compliance to the environmental clearance condition and (iii) System of reporting of non-compliance /violation environmental norms to the Board of Director of the company and /or stakeholders or shareholders.</p> <p>We have obtained IMS certification from Bureau Veritas and in the system all the SOP and procedure are incorporated and being followed. Annexed as <b>ANNEXURE -12</b></p>	<p><b>Complied</b></p>  <p><b>Photo 15 – Environmental Statement for FY 2015-16</b></p>


	 <p><b>HINDALCO INDUSTRIES LIMITED</b></p> <p><b>ISO 9001:2008 &amp; ISO 14001:2004</b></p> <p><b>Manufacturing and supply of Aluminium Pipes, Wire Ropes, Glass from Smelter and Captive Generation and supply of Power</b></p> <p>Valid from: 23 September 2018 to: 23 September 2019</p>
<p>viii. The Company shall comply with all the conditions stipulated vide Ministry's letter of even no. dated 18.03.2009. In future, in case of change in the scope of the project, the company shall obtain fresh environmental clearance.</p>	<p>PP has stated that they have complied with all the conditions stipulated vide Ministry's letter of even no. dated 18.03.2009. In future, in case of change in the scope of the project, we will obtain fresh environmental clearance.</p> <p><b>Complied</b></p>

Photo 16 – IMS Certificate

However, it has been not submitted as desired.

Partly Complied

**Summary:**

Out of 9 total conditions, it may be seen that 8 are fully complied, 1 is partly complied, these have been explained in the foregoing compliance report against each of the conditions, and the PP needs to take necessary and time bound action for early compliance in respect of the relevant conditions.

**Court case and show cause/closure notice:**

Regarding Court case the PP informed OA No-276 of 2013 Ashwani kumar Dubey Vs union of India and others is pending with Hon'ble National Green Tribunal, Delhi. This proceeding is related to all major industries in Singrauli area (both UP & MP). The total respondents are 26. Regarding notice the PP informed only one show cause notice was received from CPCB wide letter No CPCB/PCI-II/AI/OMS/2280 dated 24.05.2017 regarding installation of online effluent and emission monitoring system and another show cause notice was received from MPPCB wide letter no 1308/Tech/HOPPCB/2017 dated 12.05.2017.

*[Handwritten Signature]*  
Scientist 'G'

5/c.

Ref.No. RPD/CQ/39/3031

08.04.2017

**Chairman-cum-Managing Director,  
Northern Coalfields Limited  
PO – Singrauli-486889  
Distt. Singrauli (MP)**

**Sub: Transportation of Coal, procured under Linkage e-Auction, from Bina & K'shila Projects of NCL to Mahan Aluminium Project of Hindalco Industries Limited through Road-cum Rail Mode from Krishnashila Goods Shed of Indian Railway.**

Dear Sir,

This is to appraise your kind-self that Hindalco Industries Limited, being a Responsible Corporate Citizen & Sensible Organization towards Environment Protection, is exploring and planning to transport Linkage e-Auction Coal from Bina & Krishnashila Projects to HIMB, Private Railway Siding of our CPP of Mahan Aluminium Project situated at Bargawan, through Road-cum-Rail Mode from Krishnashila Goods Shed of Indian Railways.

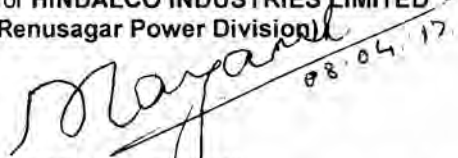
This is, mainly, to eliminating trucks / tippers / trailers from the main road for following benefits to society at large :

1. Elimination of Air Pollution.
2. Elimination of Road Accidents
3. Conservation of Natural Resources
4. Less Maintenance of PWD Road
5. Assurance of Quality Life
6. And many more

The above information is being forwarded for your kind information.

Thanking you,

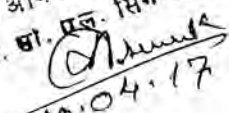
Yours faithfully,  
For **HINDALCO INDUSTRIES LIMITED**  
(Renusagar Power Division)

  
(Mayank Shrivastava)  
Sr. General Manager (Coal Quality & Linkage Coal)

cc: Director (T/O), NCL, Singrauli  
cc: Director (T/P&P), NCL, Singrauli  
cc: GM (S&M), NCL, Singrauli

cc: Unit Head (MAP), Bargawan  
cc: President (Power), Renusagar  
cc: President (F&C), Renukoot  
cc: Shri PK Mishra, Renukoot  
cc: Shri Amitava Das, Bargawan

  
10/4/17

प्राप्त किया  
कन्द्रीय अदिक जावक विकास  
बन. सा. मल. सिगा-पोलो  
  
10.04.17 (3)

o/c

Ref.No. RPD/CQ/39/3031

08.04.2017

**Chairman-cum-Managing Director,  
Northern Coalfields Limited  
PO – Singrauli-486889  
Distt. Singrauli (MP)**

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This is, mainly, to eliminating trucks / tippers / trailers from the main road for following benefits to society at large :

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2. Elimination of Road Accidents
3. Conservation of Natural Resources
4. Less Maintenance of PWD Road
5. Assurance of Quality Life
6. And many more

The above information is being forwarded for your kind information.

Thanking you,

Yours faithfully,  
For **HINDALCO INDUSTRIES LIMITED**  
(Renusagar Power Division)

  
08.04.17

**(Mayank Shrivastava)**  
**Sr. General Manager (Coal Quality & Linkage Coal)**

cc: Director (T/O), NCL, Singrauli  
cc: Director (T/P&P), NCL, Singrauli  
cc: GM (S&M), NCL, Singrauli

cc: Unit Head (MAP), Bargawan  
cc: President (Power), Renusagar  
cc: President (F&C), Renukoot  
cc: Shri PK Mishra, Renukoot  
cc: Shri Amitava Das, Bargawan

PKI & Mahan copy sent through Department on 10/4/17

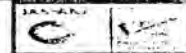


# NORTHERN COALFIELDS LIMITED

(A Mini Ratna Company)

## Sales & Marketing Deptt.

PO- Singrauli Colliery, Distt- Singrauli, MP- 486 889  
(An ISO 14001, ISO 9001 & OHSAS-18001 Certified Company)  
Ph: 07805-266605/256210, FAX: 07805-266640



No.NCL/SGR/Sales/17-18/78

Date: 13.04.2017

To,  
Shri Mayank Shrivastava,  
Sr. General Manager (Coal Quality & Linkage Coal),  
Hindalco Industries Limited,  
PO- Renusagar, Sonebhadra

### Sub: Transportation of coal booked under Linkage e-Auction from Bina and Krishnashila

Dear Sir,

Kindly refer your letter no. RPD/CQ/39/3031 dated 08.04.2017 to Chairman-cum-Managing Director, NCL regarding subject matter. It has been intimated vide aforesaid letter that coal booked against Fuel Supply Agreements a/c Linkage e-Auction with Hindalco Industries Limited, Mahan Aluminium Plant is being planned to be transported through road-cum-rail mode.

In this regard it is to inform you that coal has been allocated to HIL, Mahan against Fuel Supply Agreements a/c Linkage e-Auction held for supply of coal from Bina and Krishnashila Projects through Road mode as per annexure-III of FSAs. Further, clause no. 5.3 of Fuel Supply Agreement states that-

*"No flexibility shall be given to the Purchaser to take delivery of the Contracted Grade of Coal through any mode other than the mode specified in Annexure III."*

Violation if any shall be liable to action as per terms of FSA. In view of the above you are requested to adhere with the terms and conditions of Fuel Supply Agreements.

This is for your kind information pl.

General Manager (S&M)

N/P

न्यायालय:- उपखण्ड अधिकारी, सिंगरौली, जिला सिंगरौली (म0प्र0)

बैठन दिनांक 17.08.2017

कोयला परिवहन की अनुमति

क्रमांक / 1072/एसडीओ/री-1/2017 M/S Mangla Murari EnterPrises New Market Signrauli Distt-Singrauli MP. द्वारा एनसीएल झिंगुरदह परियोजना का डी.ओ. नंबर JRD1718ER0056 दिनांक 11.08.2017 द्वारा 3300.00 मैट्रिकटन एनसीएल झिंगुरदह परियोजना से गोरबी, बरगवां होते हुये हिन्डाल्को इन्डस्ट्रीज लिमि0 बरगवां तक कोयला परिवहन की अनुमति चाही गई है :-

2. कलेक्टर एवं जिला मजिस्ट्रेट सिंगरौली के आदेश क्रमांक 543/आरडीएम/2015 सिंगरौली दिनांक 13.10.2015 द्वारा इस कार्यालय को कोयला परिवहन किये जाने की अनुज्ञा दिये जाने हेतु आदेशित किया गया है।

3. आवेदक को निम्न शर्तों के आधार पर उपखण्ड सिंगरौली क्षेत्रान्तर्गत कोयला परिवहन की अनुमति दी जाती है-

1. कोयला परिवहन की अनुमति दिनांक 17.08.2017 से 24.09.2017 तक अनुमति रहेगी।
2. कोयला की अनुमति का परिवहन सुबह 06.00 बजे से शाम 6.00 बजे तक के लिये ही रहेगी।
3. वाहन चालक नशीली पदार्थ का सेवन वाहन चलाते समय नहीं करेगा।
4. वाहन में क्षमता से अधिक परिवहन करने की अनुमति नहीं रहेगी।
5. कोयला परिवहन हेतु यह सुनिश्चित किया जावेगा कि कोई भी धूल कर्ण या प्रदूषण कोयला परिवहन से न फैले। कोयले का परिवहन पूर्णतः बन्द वाहन से किया जावेगा।
6. आवेदक को संबंधित थाना प्रभारी को कोयला की अनुमति परिवहन की सूचना समय-समय पर देनी होगी।
7. आवेदक द्वारा शर्तों का पालन न किये जाने की स्थिति में बिना पूर्व सूचना के अनुमति निरस्त कर दी जावेगी।
8. आवेदक कम्पनी द्वारा नियमानुसार वाहन का रोड टैक्स जमा किया जावेगा।
9. यदि कोयला परिवहन के समय वाहन द्वारा दुर्घटना घटित होती है तो मृतक के निकटम वारिस को वाहन स्वामी एवं ट्रान्सपोटर मे0 ओम साई राम इन्टरप्राइजेज द्वारा उसकी क्षतिपूर्ति की जावेगी।
10. कोयला परिवहन एनसीएल झिंगुरदह परियोजना से गोरबी, बरगवां होते हुये हिन्डाल्को इन्डस्ट्रीज लिमि0 बरगवां तक आने जाने की अनुमति होगी। म0प्र0 सीमा के बाहर क्षेत्राधिकारी से कोयला परिवहन की अनुमति लेनी होगी।
11. वाहन चलाने की गति 40 कि0मी0 प्रति घंटा रहेगी।
12. कोयला की अनुमति के रूट के अनुसार समस्त आने वाले थाने में वाहन चालक एवं वाहन की सूची उपलब्ध कराना होगा।
13. समस्त गाड़ियों पर वाहन चालक समस्त दस्तावेज ड्राइविंग लाइसेंस एवं कोयला की अनुमति संबंधी आवश्यक दस्तावेज रखना अनिवार्य होगा। संबंधित अधिकारी / कर्मचारी द्वारा मार्ग जाने पर प्रस्तुत करना होगा।

(विकास कुमार सिंह)

उपखण्ड अधिकारी

सिंगरौली

जिला-सिंगरौली (म.प्र.)

बैठन दिनांक 17.08.2017

पृ.क. / 1072 एस.डी.एम. / री-1 / 2017

प्रतिलिपि:-

1. कलेक्टर एवं जिला मजिस्ट्रेट सिंगरौली की ओर सूचनार्थ।
2. पुलिस अधीक्षक जिला सिंगरौली की ओर सूचनार्थ।
3. अनुविभागीय अधिकारी, पुलिस मोरवा की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेतु।
4. मुख्य महाप्रबंधक एनसीएल झिंगुरदह परियोजना की ओर सूचनार्थ।
5. जिला परिवहन अधिकारी सिंगरौली की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेतु।
6. निरीक्षक थाना प्रभारी मोरवा / बरगवां को सूचनार्थ।
7. M/S M/S Mangla Murari EnterPrises New Market Signrauli Distt-Singrauli MP की ओर सूचनार्थ एवं पालनार्थ।

उपखण्ड अधिकारी

सिंगरौली

जिला-सिंगरौली (म.प्र.)

F. No. J-11011/217/2007- IA II (I)  
**Government of India**  
**Ministry of Environment and Forests**  
**(I.A. Division)**

Indira Paryavaran Bhawan  
Jor Bagh Road, Ali Ganj,  
New Delhi – 110003  
**E-mail: [sharath.kr@gov.in](mailto:sharath.kr@gov.in)**  
**Tel: 011-24695319**  
Dated: 20.07.2017

To

**M/s HINDALCO Industries Ltd.,  
Village Orgari, Tehsil Deosar,  
P.O.Bargawan, District Singrauli,  
Madhya Pradesh**

**Sub: Use of petcoke as fuel in Captive Power Plant of 900 MW (5×150 MW in operation and 1×150 MW as stand by) in the existing Integrated Aluminium Smelter Complex (3.25 LTA & primary aluminium) – reg.**

Sir,

This has reference to your online application No. IA/MP/IND/3428/2008 dated 27<sup>th</sup> January 2017 regarding use of pet coke as fuel in boiler of Captive Power Plant (CPP) in the above-mentioned project.

The proposal was examined in the ministry and I am directed to say that use of petcoke in cement kiln is admissible as per the provisions of S.O.3518 (E) dated 23<sup>rd</sup> November 2016 issued by this Ministry. As far as, the request for use of petcoke in the Captive Power Plant is concerned, I am directed to inform that the matter is under examination in the Ministry and your proposal is kept hold.

This issues with the approval of Competent Authority

  
**Sharath Kumar Pallerla)**  
**Scientist F/Director**

Copy to:-

1. The Secretary, Department of Environment and Forests, Govt. of Madhya Pradesh.
2. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar New Delhi - 110 032.
3. The Chairman, Madhya Pradesh Pollution Control Board, Paryavaran Parishar, E-5, Arera Colony, Bhopal - 462016
4. The Additional Principal Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office, Link Road No.3, E - 5, Arera Colony, Bhopal - 462 016.
5. Guard File/Monitoring File/Record File.Bottom of Form