

November 27, 2015

Dr. K.K.Garg
Director
Govt. of India, MoEF
Regional Office (Central)
Kendriya Bhawan, 5th Floor,
Sector – H, Aliganj
LUCKNOW – 226 024

Sub: Expansion of Smelter and Alumina Plant & 40MW Co – generation Power Plant at Renukoot, Distt. Sonebhadra, U.P. of M/s Hindalco Industries Limited – Environment Clearance Reg.

Dear Sir,

Please find herewith-attached point wise compliance of conditions stated in our earlier environmental clearances granted by Ministry along with six monthly progress report. Also find soft copy of compliance report of all environmental clearances.

- Compliance letter of Env. Clearance granted vide letter J-11011/20/2001-1A.II (I) dt. August 22, 2001. Please see Annexure – I.
- Compliance letter of Env. Clearance granted vide letter J-13012/21/2003-1A.II (T) dt. June 8, 2004. Please see Annexure – II.
- Compliance letter of Env. Clearance granted vide letter J-111011/929/2008-1A.II (I) dt. December 2, 2011. Please see Annexure – III.
- We have Consent under Water(Prevention & Control of Pollution)Act 1974 valid till December 31, 2015. Copy of consent is already submitted alongwith our six monthly compliance report dated May 26, 2014.
- We have Consent under Air (Prevention & Control of Pollution) Act 1981 valid till December 31, 2015. Copy of consent is already submitted alongwith our six monthly compliance report dated May 26, 2014.
- Copy of Risk Held Cover Letter Public Liability Insurance Policy valid till March 31, 2016 is attached as Annexure - IV
- Copy of progress report for the month of September, 2015 as submitted to U.P. Pollution Control Board. Please see Annexure – V.

- Emission Parameters of stacks for the period April, 2015 September, 2015. Please see Annexure – VI.
- Ambient air monitoring data for the period April, 2015 September, 2015. Please see Annexure – VII.
- Work Zone monitoring data for the period April, 2015 September, 2015. Please see Annexure – VIII.
- Analysis of treated effluent for the period April, 2015 September, 2015. Please see Annexure – IX
- We have Authorization under Rule 5 of Hazardous Wastes (Management, Handling Transboundry Movement) Rules, 2008 with validity till March 2, 2016. A Copy of Authorization is already submitted.
- 13. Noise Monitoring done by us on quarterly basis. The Monitoring result for the period April, 2015 – June, 2015 and July, 2015 – September, 2015. Please see Annexure – X
- Fly Ash Utilization details for the period April, 2015 September, 2015. Please see Annexure – XI.

We hope you will please find the above in order.

Thanking you,

Yours faithfully, FOR HINDALCO INDUSTRIES LIMITED

M.Mittal

A.V.P. (Environment and Safety)

cc: SEE & Incharge, CPCB, Lucknow Member Secretary, UPPCB, Lucknow R.O. UPPCB, Robertsgani. Project Code: UP-50-139-2001

Name of the Project

Expansion of Smelter and Alumina plant at Renukoot, U.P. by M/s

Hindalco Ind.Ltd

Clearance Letter No.

: J-11011/20/2001 - IA II (I)

Period of Compliance

: April, 2015 to September, 2015

Report

SI.	Description	Compliance Status
	SPECIFIC CONDITIONS	
1.	All recommendations made by the State Department of Environment, Govt. of UP vide their letter dt. 23 rd July, 2001 & conditions stipulated in the report of the compliance constituted by the State Government to examine the expansion proposal should be strictly adhered to and action plans implemented in time bound schedule.	Complied with.
2.	As reflected in the EMP, the company should install state -of- art Dry Scrubber Technology (DSS) in Potline 9, 10 and 11 to bring down the fluoride emission and PM from the proposed expansion. The company should also modify the existing DSS in Potlines 1 - 8 after evaluating the performance of the DSS installed in Potlines 9, 10 and 11. Also the existing Baking Furnaces must be retrofitted with fume treatment plants within a maximum period of 4 years.	Retrofitting job of DSS in Pot Lines and Baking Furnaces has been already completed and established. Baking Furnace # 6 has been Commissioned and operational as CTO has been issued by UPPCB valid till December 31,2015.
3.	Six monthly progress report on (i) and (ii) above should be submitted to the Ministry's Regional Office at Lucknow, CPCB and SPCB.	Six monthly reports are being regularly submitted as required complied with.
	Office de Laciation, or the	197
4.	As reflected in the EMP, the treated effluent should be reused in plant process and green belt development. The existing ETP and STP should be suitably upgrade to ensure "zero discharge" by April, 2002.	Towers use.
		144 I maked against to manuar fluoring
5.	There will be no disposal of spent pot lining. The spent pot lining will be processed for recovery of fluorine to produce cryolite and the carbon residue will be used as fuel in the boilers.	values from spent pot litting complied with.
		the time I do have called a double water
6.	The fluoride levels in the ground water & soil around the plant site should be regularly monitored for fluoride and data recorded to ensure there is no contamination of ground water.	attached as Annexure – A. Ground water

1	Description	Compliance Status
1.	Description	
No .	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the E.I.A. and risk analysis report.	Complied with.
	OFNEDAL CONDITIONS	
1.	GENERAL CONDITIONS The project authorities most strictly adhere to the stipulations made by U.P. State Pollution Control Board and the State Government.	Noted.
		Nated
2.	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.	Noted.
3.	The project authorities must strictly comply with the rules and regulations under manufacture, storage and import of hazardous chemicals rules 1989 and subsequent amendments.	
4.	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management & Handling) Rules 2000. Authorization from the Sate Pollution Control Board must be obtained for collection treatment/storage/disposal of hazardous wastes.	2008, which is valid till May 2, 2016. Complied with.
5.	Occupational health surveillance program should be undertaken as a regular exercise for all employees specially for those engaged in handling hazardous substances.	1 10030 000 000
6	The overall noise levels in and around the plan area should be kept well within the standard (85 dBA) by providing noise control measure including acoustic hoods, silencers, enclosures et on all sources of noise generation. The ambier noise levels should conform to the standard prescribed under EPA Rules 1989 viz 75 dBA (datime) and 70 dBA (night time).	is interest of the second of t
7	The project proponent should have a scheme f social upliftment in the nearby village with reference to contribution in road construction, education children, festivals, health centres, sanitation facilities, drinking water supply, communawareness and employment to local whenever possible both for technical and non technical jobs.	of detail in attached Annexure – C.

SI. No	Description	Compliance Status
3.	Green belt of adequate width and density should be provided to mitigate the effects of fugitive emission all around the plant. A minimum of 25 % of the total land acquired should be developed as green belt in consultation with the local DFO.	We have lush greenery in and around the plant Noted.
9.	A separate Environmental Management Cell with full fledges laboratory machines must be set up to carry out the environmental management and monitoring functions.	An Environment management cell is working to monitor environmental activities. Complied with.
10.	The project authorities must provide adequate funds both recurring and non recurring to implement the conditions stipulated by Ministry of Environment and Forests as well as the State Government alongwith the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.	Complied with.
11.	The implementation of the project vis – a vis environmental action plans will be performed by Ministry's Regional Office, Lucknow / State Pollution Control Board/Central Pollution Control Board. A six monthly compliance report should be submitted to monitoring agencies.	Complied with.
12.		Already complied with.
13.	The Project Authorities should inform the Regional Office as well as the Ministry the date of financial closure and final approval of the project by the concerned authorities and the date of land development work.	The due intimation with regard to start of the project and financial year closing has been intimated to the concerned authorities.

Project Code: UP-28-170-04

Name of the Project

: 40 MW Co - Generation Power Plant of M/s. Hindalco Industries Ltd., Renukoot

Clearance Letter No.

: J-13012/21/2003- IA. II (T) : April, 2015 to September, 2015

Period of Compliance Report

General Conditions:

Sr.		Conditions	Compliance Status		
No. 2.	The environmental clearance for the above project is hereby accorded subject to				
	implen	nentation of following terms and conditions: All the conditions stipulated by Uttar Pradesh Pollution Control Board vide their letter No. G–22276/C–2/ NOC/ 3257/2003 dt. 12/09/2003 should be strictly implemented.	Complied with.		
	11)	COC he land is regulared and is directly in	No extra land had been acquired.		
	III)	Coal requirement is estimated a 1000 TPD having calorific value of 2950 K.Cal/kg with 41% ash content and 0.25% sulphur content. Copy of coal linkage approval from S.L.C. should be submitted immediately after receipt of the same. In case of change in calorific values, ash and sulphur contents of coal, Ministry's approval for the same has to be sought before starting the construction work of the power plant.	Complied with.		
	IV)	Stack height of 88 m height shall be provided with continuous online monitoring equipment. Exit velocity of 14.08 m/sec. should be maintained.	Complied with.		
	V)	High efficiency Electrostatic Precipitator (ESP) having efficiency of 99.8% be installed to limit outlet SPM emission 100 mg/Nm ³ .	Complied with.		
	VI)	Ash generation would be 84 t/day of bottom ash and 324 t/day of fly ash. Ash generated should be used in a phased manner as per provisions of the notification on Fly Ash Utilization issued by the Ministry in September, 1999 and its subsequent amendments. By the end of 9 th year full fly ash utilization should be ensured.	Industries during April, 2015 to September, 2015. Please see attached Annexure – XI.		

	Conditions	Compliance Status
VII)	Water requirement should not exceed 6150 m³/day and this will be met through recycling of domestic and industrial effluents. There would not be any extra water withdrawal for this plant.	Complied With.
VIII)	Central Groundwater Authority/Board shall be consulted for finalization of appropriate water harvesting technology within a period of four months from the date of clearance.	As per advice of CGWB Authority, rain water-harvesting structure should not be adopted because it may enhance the condition of water logging.
IX)	Regular monitoring of water quality including heavy metals should be undertaken around ash pond and the project area to ascertain the change in the water quality, if any, due to leaching of contaminants from ash disposal area.	Half yearly monitoring of water quality including heavy metals is being carried out around ash pond and the project area to ascertain the change in the water quality. M/s. IITR, Lucknow had collected samples in the month of May, 2015. The results are attached as Annexure – D.
X)	Noise level should be limited to 75 dB (A) and regular maintenance of equipment be undertaken. For people working in the area of generator and other high noise area, earplug should be provided.	Complied with.
XI)	Greenbelt should be developed in about 1.25 ha. around the ash dyke area and available space in the township. Tree density of 1500 – 2000 trees per ha. should be maintained.	Complied with.
XII)	Regular monitoring of the air quality should be carried out in and around the power plant and records be maintained. Periodic six monthly reports should be submitted to this Ministry.	The air quality is being monitors regularly and reported to regulatory authorities. Complied with.
XIII)	For controlling fugitive dust, regular sprinkling of water in vulnerable areas of the plant should be ensured.	Water sprinkling is being done regularly at identified areas. Complied with.
XIV)	There would be no discharge of wastewater / liquid effluent from the plant.	There is no discharge of wastewater from the plant.
XV)	All other mitigative measures shall be taken as enumerated in Chapter 5 of the EIA report.	All other mitigative measures are being taken as enumerated in Chapter 5 of the EIA report.

Sr. No.	Conditions	Compliance Status
3.	The Ministry reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry.	Noted
4.	The environmental clearance accorded shall be valid for a period of 5 years for construction/ operation of the power plant. In case, if the project authorities fails to do so within this stipulated period, this environmental clearance shall stand lapsed automatically.	Noted
5.	In case of any deviation or alteration in the project proposed from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition (s) imposed and to add additional environmental protection measures required, if any.	Noted
6.	The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986. Hazardous Waste (Management & Handling) Rules, 1989 and its amendments the Public Liability Insurance Act, 1991 and its amendments, the Environment Impact Assessment Notification of January, 1994 and its amendments.	

		Conditions	Compliance Status	
	XVI)		Necessary action have been already taken.	
	XVII)	A separate environment monitoring cell with suitable qualified staff should be set up for implementation of the stipulated environmental safeguards.	A separate environment monitoring cell with suitable qualified staff is in place for implementation of the stipulated environmental safeguards.	
	XVIII)	Half yearly report on the status of implementation of the stipulated conditions and environmental safeguards should be submitted to this Ministry/ Regional Office / CPCB / SPCB.	Reports are being submitted regularly to the Ministry /Regional Office/ CPCB/ SPCB.	
	XIX)	Regional Office of the Ministry of Environment and Forests located at Lucknow will monitor the implementation of the stipulated conditions. Completed set of Environmental Impact Assessment Report and Environment Management Plan should be forwarded to the Regional Office for their used during monitoring.	Reports have been already submitted to Ministry.	
	XX)		e n s	
	XXI)	Full cooperation should be extended to Scientists Officers from the Ministry / Regional Office of the Ministry at Lucknow / the CPCB / the SPCB who would be monitoring the compliance of environmental status.	E EVICINGE TO CALLET	

Project Code: UP-132-333-2012

Name of the Project

: Modernization and expansion of existing Alumina Refinery (660

KTPA to 900 KTPA) and Smelter Plant (356 KTPA to 472 KTPA) at

Renukoot, District Sonebhadra in Uttar Pradesh.

Clearance Letter No.

J-11011/929/2008 - IA - II (I)

Period of Compliance

: April, 2015 to September, 2015

Report

SPECIFIC CONDITIONS .

SI.	Description :	Compliance Status
No	Description	
i.	The gaseous emissions (PM ₁₀ , SO ₂ , NO _x , PAH, HC, VOCs and Fluoride) from various process units shall conform to the standards prescribed by the concerned authorities from time to time. The UPPCB may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time, the emission levels shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. The particulate emissions from the bake oven plant shall not exceed 50 mg/Nm ³ .	Complied with. The monitoring report are regularly submitted alongwith six monthly compliance report to MoEF/CPCB/SPCB.
ii.	The poly-aromatic hydrocarbons (PAH) from the carbon plant (anode bake oven) shall not exceed 2 mg/Nm³. The data on PAH shall be monitored quarterly and report submitted regularly to the Ministry / Regional Office at Lucknow and UPPCB.	We have awarded environmental monitoring job to M/s IITR, Lucknow on October 06,2015. They will so monitoring in the month of December, 2015
iii.	Fluoride consumption should be less than 10 kg/ton of Aluminium produced as specified in the CREP guidelines.	Complied with.
iv	Fugitive Fluoride emissions from the pot room and in the forage around the smelter complex shall be monitored and data submitted regularly to the Ministry's Regional Office at Lucknow and UPPCB. Further dry scrubbing system to control the emissions from the pot lines should be provided.	submitted to MoEF, Regional Office alongwith six monthly compliance
٧.	The proponent shall upload the status of compliance of the stipulated environmental clearance conditions, including monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and SPCB. The criteria pollutant namely, PM ₁₀ , SO ₂ , NOx (Ambient levels as well as stack emissions) or critical sectoral parameters indicated for the project shall be monitored and displayed at the convenient location near the main gate of the company in the public domain.	

SI. No	Description	Compliance Status
vî.	Electrostatic precipitator(s) shall be provided to kiln and boiler stacks to control gaseous emissions within 50 mg/Nm³. The height of the stacks shall be as per the CPCB guidelines. Gaseous emissions shall be regularly monitored and records maintained and reports submitted to this Ministry including its Regional Office at Lucknow / CPCB and UPCB six monthly.	Complied with. Monitoring reports are being sent alongwith six monthly progress report.
vii.	Total water requirement after expansion from downstream of Rihand River shall not exceed 45,000 m³/day. Oily wastewater shall be treated in API separator and routed to reclamation pond for recycling. All the treated wastewater shall be treated in ETP and recycled. Closed circuit system with zero discharge concept shall be adopted to control water pollution. No wastewater shall be discharged outside the plant. The domestic wastewater shall be treated in the sewage treatment plant and treated wastewater conforming to the standards for land application shall be reused for green belt development within the plant premises.	The treated effluent waste water and domestic waste water confirms the prescribed standards. The water consumption is well below 45000kl/day. Complied with
VIII.	Red mud shall be stored in the red mud pond only designed as per the CPCB guidelines with proper leachate collection system and ground water all around the red mud disposal area shall be monitored regularly and report submitted to the UPPCB/CPCB and Regional Office of the Ministry at Lucknow. Efforts shall also be made to find out productive uses of red mud in brick and ceramic products etc. proper care shall be taken to ensure no run off or seepage from the red mud disposal site to natural drainage. Sewage sludge shall be used as manure within the premises.	Complied with. We stored red mud as 65-70% solids as per CPCB guidelines surrounded by earthen dam. We have supplied red mud approx 27000 MT as on 9/11/2015 to M/s. J.P. Cement, Dala to be used as additive in raw mix in the year 2015-16. STP sludge is being used as manure in the plantation.
ix.	Green belt shall be developed in 33% area to mitigate the effects of fugitive emissions as per the CPCB guidelines.	We have lush greenery surrounding of plant and colony. The plantation has been done regularly through Horticulture/ CSR Dept. in nearby areas.
X.	Anode butts generated from the pots shall be cleaned and recycled to the Anode Plant. The spent pot lining generated from the smelter should be properly treated in spent pot lining treatment plant to remove fluoride and cyanide and disposed off to the Cement/Steel plants and as minimum as possible to secured landfill. The location and design of the landfill site should be approved by the UPPCB as per Hazardous Waste (Management, Handling & Transboundry Movement) Rules 2008. Leachate collection facilities should be provided to the secured landfill facility (SLF). The dross shall be recycled in the cast house.	We have a patented process in which fluorine values are recovered from SPL and remaining carbon residue is being burnt in Boiler.

SI.	Description	Compliance Status
lo i.	Occupational Health Surveillance of the workers	We have a separate OHS with a MBBS doctor for doing health check
	maintained as per the Factories Act.	up of workers in continuous basis. We follow the recommendations of
cii.	The recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Aluminium sector should be strictly implemented.	CREP.
xiii.	The company shall comply with all the commitment made during public hearing/public consultation held on 24th July,2009.	We have taken actions on issues which was raised during public hearing.
xiv.	At least 5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Lucknow. Implementation of such program shall be ensured accordingly in a time bound manner.	
XV.	Decision shall be made for the housing of construction	construction workers.
xv	The company shall submit within three months the policy towards Corporate Environment Responsibility which should inter-alia address (i) Standard operating process/procedure to being into focus any infringement / deviation / violation of environmental or forest norms conditions, (ii) Hierarchical system or Administration order of the company to deal with environment issues and ensuring compliance to the environment clearance conditions and (iii) System of reporting non compliance / violation environmental norms to the Board of Directors of the company and/or stakeholders.	nt s / ve tal tal of he

	RAL CONDITIONS: Description	Compliance Status
lo	the therities must strictly adhere to the	All statutory guidelines stated by UPCCB are well complied.
i.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	We agree that no expansion shall be done without prior approval of MoEF.
III.	The gaseous emission from various process units shall conform to the land/mass based standards notified by this Ministry on 19 th May, 1993 and standards prescribed from to time. The State Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location.	All emission is monitored as prescribed and it has been submitted to SPCB/CPCB/ MoEF.
iv.	At least four ambient air quality monitoring satiations should be established in the downward direction as well as where maximum ground level concentration of PM10, SO2 and NOx are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Lucknow and the SPCB / CPCB once in six months.	compliance report. Please see attached Annexure – VII.
٧.	Industrial wastewater shall be properly collected treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 th May, 1993 and 31 st December, 1993 or as amended form time to time. The treated wastewater shall be utilized for plantation purpose.	process use.
vi.	The overall noise levels in and around the plant area shall 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 (nighttime)	are provided to mitigate the impact.
vii	the develop surface water harvesting	er at this location.
vii	The project proponent shall also comply with all the environmental protection measures and safeguard recommended in the EIA / EMP and public hearing reports. Further, the company must undertake social economic development activities in the surrounding villages like community development programme educational programmes, drinking water supply a health care etc.	dept is working for developing social life of nearby villages.

SI. No		Compliance Status
ix.	Requisite amount shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation scheduled for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Lucknow. The funds so provided shall not be diverted for any other purpose.	has been earmarked separately.
X.	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.	i i i i i i i i i i i i i i i i i i i
xi.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF at Lucknow. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM10, SO ₂ , NOx (ambient levels as well as stack emissions) or critical sectoral parameters, such as fluoride emission indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Complied with.
di.	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Lucknow / CPCB / SPCB shall monitor the stipulated conditions	We are regularly submitted six monthly compliance report.
iii.	submitted by the project arranged to be	The Environment statement for each financial year is regularly submitted to SPCB as prescribed.

SI. No	Description	Compliance Status
XiV.	The project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in. This shall 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 the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional Office at Lucknow.	Complied with.
XV.	Project authorities shall inform the Regional Office as well as the Ministry the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Noted.
10.	The Ministry may revoke or suspended the clearance, if implementation of any of the above conditions is not satisfactory.	Noted.
11.	The ministry reserves the right to stipulated additional conditions if found necessary. The company in a time bound manner shall implemented these conditions.	Noted.
12.	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Waste (Management, Handling and Transboundry Movement) Rules, 2008 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.	