

## SINGRAULI ACTION PLAN DISTT:- SONBHADRA

Progress as on 31.12.2014

### ISSUES REGARDING NTPC - SHAKTI NAGAR, DISTT. SONBHADRA

#### A – Short Term Action Points

Sl. No.	Action Points	Compliance Status	Time Target
1.	An action plan to achieve PM emission of 100mg/Nm <sup>3</sup>	Feasibility study completed. ESP will be retrofitted. Contract has been awarded on 14.11.2013 for retrofitting of ESPs. Work schedule 62 months. District Magistrate directed to complete work within the given time target.	Dec. 2015
2.	Provision of dry ash collection system.	<b>Stage-I</b> – Dry ash collection system is installed in two unit of 200 MW. Further, work has awarded in June'10 for DAES installation in all units of Stage-II.  <b>Stage-II</b> – (2x500 MW) Civil work for compressor house & Silo is in progress. Materials are being received at site. Reported to be completed by 31.12.14 District Magistrate directed to complete work within the given time target.	March, 2014
3.	On line opacity meter has been install in stack of all power plants of NTPC. The matter of linking data of CPCB/UPPCB Network will be carried out with in six months.	The Data have been linked with corporate office for further connection to CPCB Network, further data shall be linked to UPPCB for which arrangement required at UPPCB end in line with visit done at TNPCB by UPPCB & industries representative.	Complying
4.	Two (02) continuous Ambient Air Quality Monitoring Stations are commissioned and the same will be linked with CPCB/UPPCB network within six month.	AAQMS Data have been linked with CPCB Network. Further data shall be linked to UPPCB for which arrangement required at UPPCB.	Complying
5.	Hazardous Waste shall be treated and disposed properly.	HW Waste is being send to TSDF and sold to registered recyclers through MSTC.	Complied
6.	Proper Management of Bio-Medical Waste generated from Hospital of NTPC Units shall be ensured.	Complied.	Complied

## **ISSUES REGARDING NTPC - SHAKTI NAGAR, DISTT. SONBHADRA**

### **B – Long Term Action Points**

<b>Sl.No.</b>	<b>Action Points</b>	<b>Compliance Status</b>	<b>Time Target</b>
1	Road maps for 100% fly ash utilization by Dec., 2014.	NTPC mentioned difficulties 100% utilization by Dec., 2014. They stated that studies have shown it can be utilized in active over burden dump in Coal Mines. It was decided that NTPC will submit self contained proposal to MoEF and the Joint Secretary, MoEF will write letter to Ministry of Coal/Power in this regard.	Dec.,2014
2	Continuous operation and maintenance of APCS & oil spillage treatment.	Continuous operation & maintenance of APCS & Oil spillage treatment is being carried out regularly	Complying
3	Complete recirculation of new ash pond over flow to achieve zero discharge effluents shall be achieved by NTPC Shakti Nagar.	AWRS installation work of new ash pond is completed. Now it is working w.e.f. 04.12.2014	Complied
4	The possibility should also be explored for co-processing of oil bearing sludge in cement kilns.	The industries are carrying out co-processing of oil bearing sludge in their own boilers.	Complying

## ISSUES REGARDING NTPC - RIHAND, DISTT. SONBHADRA

### A – Short Term Action Points

Sl. No.	Action Points	Compliance Status	Time Target
1.	An action plan to achieve PM emission of 100mg/Nm <sup>3</sup>	Work awarded to M/s. Hitachi Plant Technologies Ltd., Japan on 01.03.2013. Work in progress.	Dec., 2015
2.	Provision of dry ash collection system.	Dry Ash Evacuation System (DAES) <b>Stage-I:-</b> Budget under approval. <b>Stage-II:-</b> 100% dry ash collection system is in operation for (2x500 MW) <b>stage-III:-</b> Provision is made for dry ash collection system.	March, 2014
3.	On line opacity meter has been install in stack of all power plants of NTPC. The matter of linking data of CPCB/UPPCB Network will be carried out within six months.	Possibility of linkage with CPCB network is being examined by NTPC Corporate IT department, keeping in view the feasibility & operational security of thermal power plant.	Complying
4.	Three (03) continuous Ambient Air Quality Monitoring Stations (Rihand) are commissioned and the same will be linked with CPCB/UPPCB network within six month.	AAQMS Data has already been linked with CPCB net work from 28.07.2010.	Complied
5.	Facilities shall be installed for control and treatment of Oil spillage.	Being Complied.	Complied
6.	Hazardous Waste shall be treated and disposed properly.	Complied. Hazardous Waste is being sold to registered recyclers through MSTC.	Complying
7.	Proper Management of Bio-Medical Waste generated from Hospital of NTPC Units shall be ensured.	Being Complied.	Complying
8.	Ensuring of 5 cycle recirculation of cooling water in NTPC Rihand TPP.	Optimized to 2.5.	Complied
9.	The possibility should also be explored for co-processing of oil bearing sludge in cement kilns.	The Industries have been asked to explore the possibility for co-processing of oil bearing sludge in cement kilns.	--

## ISSUES REGARDING NTPC RIHAND NAGAR, DISTT. SONBHADRA

### B – Long Term Action Points

Sl. No.	Action Points	Compliance Status	Time Target
1.	Road maps for 100% fly ash utilization by 2014.	NTPC Rihand has already submitted time bound action plan to utilize 100% dry ash up to the year 2013-14. Guide line for 2014-15 is awaited.	Dec., 2014
2.	Continuous operation and maintenance of APCS & oil spillage treatment.	Continuous operation & maintenance of APCS & Oil spillage treatment is being carried out regularly.	Complying
3.	The possibility should also be explored for co-processing of oil bearing sludge in cement kilns.	The industries have been asked to explore the possibility for co-processing of oil bearing sludge in cement Klins.	--

## ISSUES REGARDING U.P.R. VIDYUT UTPADAN NIGAM LTD., OBRA, SONBHADRA.

### A - Short term action points

Sl.No.	Action Points	Compliance Status	Time Target
1.	Complete recycle of ash pond over flow.  The clear time should be given with date of complete regarding recycling of Ash pond overflow under refurbishment package. Details of plan should be provided.	Work is in progress (Obra)  Civil Work - 95% Completed. Mechanical - Completed. Electrical - 70% Completed. District Magistrate directed to complete work as earliest.	March, 2014
2.	Provision of dry ash collection system.	Provision of dry ash collection system in Unit Nos. 1, 2 & 9 has been made and fly ash is being lifted by M/s. J.P. Associates. Similarly provision for the dry fly ash collection system in unit Nos.10,11,12 & 13 of BTPS, Obra has been made.	April, 2014 for unit no. 10, 11,12 & 13 in phase manner as per the revised schedule of BHEL.
3.	High Oil spillage has been observed in the drain. Up-gradation of ETP shall be completed within 2 years by Obra TPS.	E.T.P. Construction work completed under commissioning. - All the Oil trap pit (11 nos.) have been constructed.	-
4.	Use of low sulphur auxiliary fuel in Obra TPP	Obra Thermal Power Station has been asked to use low sulphur auxiliary fuel.	-
5.	Installation of Opacity meters	Purchase order has been placed for installation of Opacity meter in unit no. 1 & 2 of ATPS and same shall be installed shortly. Opacity meter has been installed in unit No. 9 after R&M work. In the remaining units i.e. in units no. 10, 11, 12 & 13 of BTPS the opacity meter will be installed with the R&M work in phase.	April, 2014 for unit no. 10, 11, 12 & 13 in phase manner.

## **ISSUES REGARDING U.P.R. VIDYUT UTPADAN NIGAM LTD., OBRA, SONBHADRA**

### **B - Long term action points**

<b>Sl. No.</b>	<b>Action Points</b>	<b>Compliance Status</b>	<b>Time target</b>
1.	Installation and renovation of ESPs to achieve PM emission of 100 mg/NM <sup>3</sup>	The R & M work in Unit nos. 1, 2 & 9 has been completed and time bound "Action Plan" for Unit 10, 11, 12 & 13 has been submitted. The work order for installation of ESP's has already been placed with BHEL.	Dec., 2014
2.	Road map for 100% fly ash utilization by 2014.	M/s. J.P. Associates has already started the work for installation of dry ash extraction system for 5x200MW construction of compressor house/ switch gear room. Work of Laying of Pipe Line etc. shall be started as soon as erection of ESP's is completed in Obra TPS.	Dec., 2014
3.	To control fugitive emissions from ash dyke area, action plan may be prepared including the possibility of installation of high concentration slurry disposal systems.	ATPS has been granted approval by ETS and Tender specification is under progress for installation of dry ash collection. ATPS has submitted the time bound action plan.	Dec., 2014
4.	Complete recirculation of new ash pond over flow to achieve zero discharge	AWRS installed & under commissioning.	March, 2014

**ISSUES REGARDING U.P.R. VIDYUT UTPADAN NIGAM LTD., ANPARA, SONBHADRA.**

**A - Short term action points**

<b>Sl.No.</b>	<b>Action Points</b>	<b>Compliance Status</b>	<b>Time Target</b>
1.	Complete recycle of ash pond over flow.  The clear time should be given with date of complete regarding recycling of Ash pond overflow under refurbishment package. Details of plan should be provided.	Work going on and about 80% work completed. Electrical & Mechanical work will be started soon. District Magistrate directed to complete work as earliest.	December, 2014
2.	Provision of dry ash collection system.	<b>3x210 MW, ATPS, Anpara:-</b> Nigam have decided to install their own DFAES. For this invitation of EXPRESSION OF INTEREST from the firms using Ash is under process.  <b>2x500 MW, BTPS, Anpara:-</b> Dry Fly Ash collection system has already been provided. Tender for Ash collection under process.	December, 2015  December, 2014
3.	Installation of Opacity meters on all 5 stacks & data should be linked with CPCB/UPPCB network.	Opacity meter has been installed in four units ie 1,3,4 & 5 and in units No. 2, it could not be installed due to want of shut down which is expected to be installed shortly.	Oct, 2014.

## ISSUES REGARDING U.P.R. VIDYUT UTPADAN NIGAM LTD., ANPARA, SONBHADRA

### B - Long term action points

Sl. No.	Action Points	Compliance Status	Time target
1.	Installation & renovation of ESPs to achieve PM emission of 100 mg/NM <sup>3</sup>	M/s BHEL Ranipet was requested to submit its recommendations in view of performance evaluation test carried out for ESP of Unit no 4 & 5 in march- 12. Report from M/s BHEL has been obtained. Discussion on the report has been done with UPRVUN Ltd. Offer has been received from BHEL which is under process for negotiation & approval. M/s BHEL have carried conditional assessment, site survey & internal inspection of ESP of Unit no 1 in June- 12 for achieving the desired SPM level. The report by M/s BHEL has been submitted and will do the performance evaluation test soon. Similarly same action shall be taken for Unit no. 2 & 3. On the basis of report.	Dec., 2014
2.	Road map for 100% fly ash utilization by 2014.	<b>"B" – TPS (2x500 MW):-</b> M/s JP Associate has lifted the ash upto 14 <sup>th</sup> June, 2012 and after that firm has withdrawn themselves from the work. After this, a fresh tender had been floated for engaging a firm for complete O&M of DFAES and lifting of ash. But no firm participated and again tender has been floated. Best efforts are being done in this matter by the UPRVUN Ltd.	Dec., 2014
3.	To control fugitive emissions from ash dyke area, action plan may be prepared including the possibility of installation of high concentration slurry disposal systems.	ATPS has been granted approval by ETS and Tender specification is under progress for installation of dry ash collection. ATPS has submitted the time bound action plan.	-  Dec., 2014
4.	Complete recirculation of new ash pond over flow to achieve zero discharge	AWRS is under construction.	Jan., 2015



## **ISSUES REGARDING HINDLACO INDUSTRIES LTD. (CAPTIVE POWER PLANT)**

### **A - Short term action points**

<b>Sl.No.</b>	<b>Action Points</b>	<b>Compliance Status</b>	<b>Time Target</b>
1.	Installation of continuous Ambient Air Quality Monitoring Station in collaboration with M/s. LANCO Anpara Power Co.	Installation of online Ambient Air Quality Monitoring Station has been completed by M/s Environment S.A. India Pvt. Limited, its commissioning, sensor calibration and connectivity for data exchange/transmission works are under progress.	Complied
2.	Complete recycle of ash pond over flow.	Ash Water Recovery System (AWRS) has already been installed and effluents after treatment is recycled and reused in the process.	Complied
3.	Continuous operation and Maintenance of Air & Water Pollution Control System may be done.	All Air and water pollution control system are working well. For its performance results of ESP, STP, & ETP are being sent regularly.	Complied

## **ISSUES REGARDING HINDLACO INDUSTRIES LTD. (CAPTIVE POWER PLANT)**

### **B - Long term action points**

Sl.No.	Action Points	Compliance Status	Time Target
1.	<p>Road map for 100% fly ash utilization by 2014.</p> <p>Action plan for 100% fly ash utilization to be provided to CPCB</p>	<p>1. In the light of the provisions of ash utilization Notification dated 14.09.1999 amended as on date, HIL-RPD has started proactive approach for utilization of fly ash and developed infrastructure in phased manner.</p> <p>2. Fly ash off take for cement industries had gone to 21.1% in FY 2006-2007 from 0.5% in FY 2003-2004 due to conversion of wet ash disposal system into dry fly ash collection system and by installation of dry fly ash transportation system in the year 2004.</p> <p>3. Hindalco by further persuading the cement industries and transporters by having various meetings with them and also by improving the infrastructure increased the take of fly ash from 38.96% to 50.51% in FY 2008-2009 and FY 2009-2010 respectively.</p> <p>4. Hindalco has entered into Long Term Agreement with cement industries for lifting, disposal and unitization of fly ash for next five years with M/s. J.P. Cement, Prism Cement, Hyderabad Industries Ltd., Birla Corporation and other cement companies. This has resulted into utilization of fly ash for the month of July &amp; August 2010 of about 100%. On an average, about 70% fly ash generated in FY 2010-2011 has been disposed by Renusagar Power Division (RPD) and in order to dispose off 100% fly ash, RPD is developing a new fly ash loading point at its ash disposal yard by March 2011.</p> <p>5. RPD has installed an ash brick manufacturing unit within its premises for its captive consumption.</p> <p>6. RPD has also represented that for ensuring better and 100% utilization of fly ash.</p> <p style="margin-left: 20px;">i) The quantity of fly ash to be used by cement industries should be increased from 15%.</p> <p style="margin-left: 20px;">ii) Exhausted coal mines should be made available on compulsory basis to Thermal Power Plant for its refilling by fly ash.</p> <p style="margin-left: 20px;">iii) The Contractor for road construction should also be compulsory forced to use ash instead of earth soil.</p>	Dec., 2014
2.	Provision of dry ash collection system.	Dry Ash collection system has been installed in all the units and sent to Cement manufacturer.	Complied

## ISSUES REGARDING HINDLACO INDUSTRIES LTD. (ALUMINUM DIVISION)

### A - Short term action points

Sl. No.	Action Points	Compliance Status	Time Target
1.	Up gradation / retrofitting in baking furnace	Retrofitting Job of Baking Furnaces No.3 & 4 has been completed and stabilized. Industry has installed. A new Baking furnace in place of old Baking Furnace 1&2 to achieve desired results.	Complied
2.	To achieve of PM emission (< 50mg/Nm <sup>3</sup> ) should be carried out by March, 2011.  Action Plan with clear time line should be chalked out in respect of furnace No. 3 & 4 to achieve the PM emission (< 50mg/Nm <sup>3</sup> ).	Industry has completed retrofitting work of furnace 3&4 (PM 86 – 96 mg/Nm <sup>3</sup> ) and stabilized except in case of furnace No. 5 (PM 36 – 46 mg/Nm <sup>3</sup> ). Industry has installed a new backing furnace No. 6 in place of backing furnace No. 1 & 2 to achieve PM emission < 50 mg/Nm <sup>3</sup> .  --	-
3.	Installation of one continuous Ambient Air Quality Monitoring Station should be installed in collaboration with Adity Birla Chemicals Limited & Hi- Tech Carbon Limited.  Time frame for commissioning of CAAQMS to be submitted.	Continuous Ambient Air monitoring equipment Opsis, Sweden has already been installed at Renukeshwar Mandir, Renukoot jointly with M/s Hi-Tech Carbon and M/s Aditya Birla Chemicals (Kanoria Chemicals Limited) on March 30, 2011. System is operational and data is available at Site. Real time data transmission to CPCB server has been established.	Complied
4.	Monitoring of Fluoride in all Stack.	On – line monitoring of PM and F performed in all pot – line stacks is in place.	Complied
5.	Monitoring of Fluoride emission in pot room and roof top.	Periodic monitoring by LVS undertaken for fugitive and roof top emission. Fluoride emission monitoring system is already in operation and data is being reported to Regulatory Authorities (Ministry Central And State) regularly.	Complied

6.	Monitoring of PAH and HC in Anode Baking stack.	PAH and HC monitoring conducted by certified lab once in a year.	Complied
7.	<p>Monitoring of Ground water (at least two locations) near the Red mud Pond, for Fe, F, CN &amp; reporting of data to CPCB &amp; UPPCB.</p> <p>Proper interpretation/ analysis of data pertaining to ground water monitoring, be made and if accordingly Action Plan to be prepared for remediation</p>	<p>Three Piezo wells are identified by CGWB Officials at Hindalco establishment. Half yearly monitoring is being done by certified lab regularly. M/s IITR, Lucknow will collect samples in the month of November/ December, 2013</p>	Complied

## ISSUES REGARDING HINDLACO INDUSTRY LTD. (ALUMINUM DIVISION)

### B - Long term action points

<b>Sl.No.</b>	<b>Action Points</b>	<b>Compliance Status</b>	<b>Time Target</b>
1.	Utilization of Red Mud.	There is no economical process for utilization of Red Mud world-wide till date. Currently red-mud is disposed as 60-70% solids and partially utilized in soil conditioning/plantation. Till now the industry is using red mud for reclaiming land by filling and developing plantation called "Sanjeevani Project" in patches on used disposal sites. Proposal from Aluminium Association of India is still awaited. At present Dala Cement Factory is using Red Mud <b>150-200 TPD</b> in manufacturing of cement.	

## ISSUES REGARDING ADITYA BIRLA CHEMICALS (INDIA) LIMITED, RENUKOOT

### A - Short term action points

Sl. No.	Action Points	Compliance Status	Time Target
1.	Treatment of brine sludge to reduce mercury concentration in the leach ate to less than 0.1 mg/L.	With changeover from mercury cell to membrane cell technology the possibility of mercury brine sludge completely eliminated.	Completed
2.	Quantification of brine sludge generation and submission of reports to CPCB and SPCB.		
3.	Reduction in mercury emission to less than 2 gm/T of the product.  Action Plan to achieve the Mercury emission standards (2 gm/T of product) should be submitted in detail with clear time line.	With changeover from mercury cell to membrane cell technology the possibility of mercury release to environment completely eliminated.	Completed
4.	Installation of online mercury analyzer and individual flow meters for quantification of effluent discharge from cell house, brine plant, chlorine handling and HCL plant.  Facts to be verified by UPPCB	With changeover from mercury cell to membrane cell technology the possibility of mercury bearing effluents completely eliminated. Accordingly the On Line Mercury Analyser is not required.	Completed
5.	Complete recycling of effluent from the plant.	With changeover from mercury cell to membrane cell technology the possibility of mercury bearing effluents completely eliminated. Accordingly recycling of mercury bearing effluents are not required.	Completed
6.	Monitoring of groundwater for at least two locations (Hg, Res. Cl, OCPs and general parameters) near sludge/HW disposal area and reporting of data to CPCB and SPCB.	The sampling and analysis of borewells have been awarded to IITR, Lucknow and reports submitted.	Completed

7.	Installation of new boilers with adequate APCS.	Boilers of both 25MW power plant are equipped with ESPs. Fly-ash brick plant produces 10 lakh brick/y & rest, ash delivered to cement mfr. New boiler with adequate APCS, commissioned, the old boilers phased out.	Completed
8.	Adequate measures for proper utilization of fly ash to be taken.		Completed
9.	Reduction of Hg conc. In Cell House Ventilation gas to 1 g/T.  Clear Action Plan should be given regarding reduction of Mercury concentration in Cell House ventilation gas to 1g/T with proper time line	With changeover from mercury cell to membrane cell technology the treatment of cell room ventilation gas is not required.	Completed
10.	Monitoring of HCL furnace stack for HCL and send reports to CPCB and SPCB.	With changeover from mercury cell to membrane cell technology the treatment of cell room ventilation gas is not required.	Completed
11.	Establishment of two AAQMS for Hg, RSPM, SPM, Sox & NOx.  Date of completion to be specified. Chlorine monitoring also to be included. Reference of revised AAQM standards notified in 2009 be taken.	On line ambient air monitoring equipment has been installed on 30.03.2011 for parameters PM 10, PM 2.5, SO2, NO2, Chlorine, Mercury & Hydrogen fluoride near Renukeshwar Temple Renukoot in collaboration with M/s. Hi-Tech Carbon & M/s. Hindalco Industries Ltd.	Completed
12.	Monitoring ambient air quality as per decision of meeting held on 18.1.10 and reporting data to CPCB and SPCB.	The data is available in our office. Data transfer to be done jointly with CPCB & SPCB.	Completed

## **ISSUES REGARDING ADITYA BIRLA CHEMICALS (INDIA) LIMITED, RENUKOOT**

### **B - Long term action points**

Sl.No.	Action Points	Compliance Status	Time Target
1.	Action Plan for complete changeover to Membrane Cell Process. The process should be completed by December, 2011. There are some operational issues. CPCB should study the EIA clearance given by MoEF to the unit and if need be, move for its revision. The CPCB shall take Bank Guarantee of suitable amount from the Unit for the compliance.	Stopped permanently the mercury cell caustic soda plant on 22 <sup>nd</sup> September, 2011 and installed 145 TPD caustic soda membrane cell plant.  Thus completed the changeover process well ahead of deadline 2012 as stipulated in environmental clearance letter.	Completed
2.	Reduction in mercury consumption to less than 50 gm/T of the product.	With changeover from mercury cell to membrane cell technology the treatment of cell room ventilation gas is not required.	Completed
3.	The Industry should ensure removal and safe disposal of Hazardous waste stored in the Industry premises to the TSDF in time bound manner.  Clear time bound road map should be given by the industry for removal and safe disposal of Hazardous Waste stored in industrial premises.	Sent entire 632 MT fresh brine sludge to TSDF Ramky Kanpur.  Hazardous Used Oil being sent to TSDF Bharat Oil & Waste Management Ltd., Kanpur.	Completed

**Note:-** Industries has permanently stopped mercury cell based caustic soda plant and confirmed to UPPCB, Lucknow vide our letter No. ABCIL/ ENV/11-12/152 dtd. 22 September, 2011.



**NORTHERN COAL FIELDS LTD. MINE UNITS (BINA, KAKRI, KHADIA, DHUDICHUA & KRISHNASHILA)**

**A - Short term action points**

Sl. No.	Action Points	Compliance Status	Time Target
1.	Coal characterization in terms of ash, fluoride and mercury and submission of results to CPCB and SPCB.	The coal samples are regularly analyzed. As per the results submitted of CMPDI Ash – 33%; F BDL; Hg 0.01 – 0.09 PPM.	Complied
2.	Monitoring of effluent and noise for compliance of standards and reporting of data to CPCB and SPCB.	Monitoring effluent & noise is being done by CMPDI fortnightly.	Complied
3.	Action Plan needs improvement.	The following points are being included in the action plan:- 1.Thick Green belt already made through UP Forest Deptt. 2. All the OB generated dumped in decoaled are in internal dump. 3. All permanent service roads are metalled, temporary haul roads are WBM.	Complied
4.	Recycling plan for achieving zero discharge for NCL should be prepared and submitted by December 2010, and implementation by December 2011.	Time bound Recycling plan for achieving zero discharge for NCL has been prepared.	-
5.	Monitoring of effluent, reaching Rihand reservoir should also be done and if found polluted its impact on reservoir should be assessed and remedial measures be taken accordingly.	The monitoring is being carried out by UPPCB. The industry has been directed to submit time bound programmed to achieve Zero discharge. In any case the effluent is being discharged in Rihand reservoir after confirming the prescribed standards.	-
6.	Action plan for bio-remediation of OB dumps should be prepared by March 2011.	Biological reclamation of OB dump is being done by plantation of plants through U.P.Forest Deptt.	complying

7.	Possibility of installation of coal conveyance system through closed conveyor belts should be assessed to control fugitive emissions due to hauling of coal.	The Coal Handling Plant (CHP) already installed and efficiently having closed conveyor belts to control fugitive emissions due to hauling of coal.	Complying
8.	Establishment of AAQMS (at least 2) for monitoring SO <sub>x</sub> , NO <sub>x</sub> , RSPM and SPM and reporting the data to CPCB and SPCB.	Four No. of AAQMS established for monitoring of SO <sub>x</sub> , NO <sub>x</sub> , RSPM and SPM and reporting data to CPCB and SPCB	Complying

**ISSUES REGARDING NORTHERN COAL FIELDS LTD. MINE UNITS (BINA, KAKRI, KHADIA, DHUDICHUA & KRISHNASHILA)**

**B - Long term action points**

Sl.No.	Action Points	Compliance Status	Time Target
1.	Ensuring supply of washed coal to the power plant/users away from the pithead.	Pleaded difficulty in terms of cost/economics factor. The issue may be taken up at higher/ corporate level.	-
2.	Regarding supply of washed coal to the power plant, NCL mentioned difficulty and referred this case to corporate level. In view of this situation, possibility may be explored for establishment of common washery to be owned by thermal power plants sourcing coal from NCL.	The power plants of Singrauli Area situated in District Sonbhadra (U.P.) have been asked to explore the possibility for establishment of common washery to be owned by thermal power plants sourcing coal from NCL. The power plants mentioned problems in using washed coal on the basis of designing of plants.	-
3.	Strengthening of Internal Environmental management.	The Industry has been directed to strengthen of Internal Environmental management.	-

## **ISSUES REGARDING HI-TECH CARBON (HC)**

### **A - Short term action points**

<b>Sl.No.</b>	<b>Action Points</b>	<b>Compliance Status</b>	<b>Time Target</b>
1.	Regular monitoring of Sox, NOx, RSPM, SPM in stack emission and submission of data to CPCB and SPCB.	System for monitoring is in place. Data submission is regular.	Complying
2.	Ambient Air Quality Monitoring.	Continuous Ambient Air monitoring equipment Opsis, Sweden has already been installed at Renukeshwar Mandir, Renukoot jointly with M/s Hindalco Industries Ltd. (Aluminum Division) and M/s Aditya Birla Chemicals (Kanoria Chemicals Limited) on March 30, 2011. System is operational and data is available at Site. Real time data transmission to CPCB server has been established.	Complied
3.	Establishment of AAQMS for RSPM, SPM, SOx & NOx.	As above.	Complied
4.	Monitoring ambient air quality and reporting data to CPCB and SPCB.	As above.	Complied
5.	Monitoring of effluent for compliance of standards and reporting of data to CPCB and SPCB.	As above.	Complied
6.	Operation and maintenance protocol of pollution control devices like Bag filters should also be included in action plan as action plan includes only monitoring part	The industry has been directed to comply operation and maintenance protocol of pollution control devices like Bag filters.	Complying

## ISSUES REGARDING STONE CRUSHERS IN SINGRAULI AREA DISTRICT SONEBHADRA

### A - Short term action points

Sl.No.	Action Points	Compliance Status	Time Target
1.	Installation and proper operation of dry dust collection system, dust containment-cum-suppression system, Wind breaking walls and noise containment system.	<ul style="list-style-type: none"> <li>• To implement the provision of EPA, the UPPCB has taken strict action and issued closure orders to 26 units.</li> <li>• Random inspection and air monitoring is being carried out by the UPPCB.</li> </ul> <p><b>At present some stone crushers are closed due to non availability of raw materials &amp; funds.</b></p>	Complying
2.	As per the minutes of the review meeting for status of Singrauli Action Plan held on 18.09.10, during summer months (2 months) when water scarcity exists, stone crushing shall be stopped. Only those units having dry scrubbing facilities shall be allowed for operation during the summer months.	<ul style="list-style-type: none"> <li>• Expert committee of members has been established by CPCB.</li> <li>• Field visit of Expert committee members has been done on 13-14 July, 2011.</li> <li>• Final comments and suggestion provided from the expert committee has been received.</li> </ul> <p><b>Directions have been issued to all Stone Crushers for the compliance.</b></p>	Complying
3.	UPPCB should ensure compliance of pollution control arrangement guidelines issued by CPCB for stone crushers and time bound action plan should be prepared	<p>UPPCB is ensuring compliance of pollution control arrangement guidelines issued by CPCB for stone crushers and as per the decision of review meeting for status of Singrauli Action Plan.</p> <ul style="list-style-type: none"> <li>• Tree plantation &amp; Construction of C.C. Road inside the Stone Crusher area is in progress.</li> <li>• Construction of Varanasi-Shaktinagar Road is in progress, reported to be completed by Aug., 2015.</li> </ul>	Complying

**ISSUES REGARDING DALLA CEMENT FACTORY, DALLA IN SINGRAULI AREA DISTT. SONEBHADRA**

**A - Short term action points**

Sl.No.	Action Points	Compliance Status	Time Target
1.	Installation of continuous Stack and AAQ monitoring stations.	Equipments of On-line ambient Monitoring station are Installed and Commissioned. Generated data to be linked to CPCB website shortly. Opacity meters are installed at all stacks for continuous monitoring of emission of dust concentration. Generated data to be linked to UPPCB/CPCB website shortly.	Complying
2.	Proper implementation of Mine Management Plan.	Are being complied.	Complying
3.	The present plan pertains regarding installation of continuous stack & AAQ monitoring stations only whereas important environmental issues like control of fugitive emissions, stack emissions, efficacy of pollution control devices etc. should also be addressed	<p>1. To control fugitive emissions, following activities are being carried out as follows:-</p> <ul style="list-style-type: none"> <li>- Bag filters are installed at all transfer points like Lime Stone crushing plant, Lime stone stock pile, transport gantry, Raw Material Hopper, Raw Mill, Raw Mill Silo, Kiln Feed, Preheater, Clinker Silo, transport, Coal feeding, Coal Storage, transport, Coal Mill Coal Feeding, coal Storage Transport, Cement Silo, packing plant, Fly Ash storage, Cement Mill, Coal Handling plant, Bunker and Fly ash silo.</li> <li>- 100% concrete road has been made.</li> <li>- Automatic Road sweeping machine is deployed</li> <li>- Treated water of STP is being sprinkling on haul Roads.</li> <li>- Water fogging system on conveyer Belt</li> <li>- Plantation work is under progress.</li> </ul> <p>2. To control the stack emission, efficient Air Pollution Control System (APCS) devices like ESPs, Reverse Air Bag House and Bag filters has already been installed at all process Duct which is designed for &lt; 50 mg/Nm<sup>3</sup>.</p>	Complying

## Issues regarding the Government of U.P. and Central

### A - Short term action points

<b>Sl. No.</b>	<b>Action Points</b>	<b>Compliance Status</b>	<b>Time Target</b>
1.	To ban the use of recycled plastic bags.	The State Govt. has imposed ban the use of recycled plastic of below 40 microns in the radius of 200 meters from the River bank.	Complying
2.	Safe Drinking Water Supply should be provided in the affected villages Govindpur, Myorepur, Labhari, Kamaridar, Garbandha, Kushmha and Renukoot etc.	In the compliance of the order passed by Hon'ble National Green Tribunal, U.P. Jal Nigam & all Industries situated in Critically Polluted area is supplying Safe Drinking Water to 45 effected villages in Distt- Sonbhadra	Complying

## Issues regarding the Government of U.P. and Central

### B - Long term action points

Sl.No.	Action Points	Compliance Status	Time Target
1.	Construction of Varanasi-Shaktinagar Highway and Roads in the Stone Crusher area of Dala	Under construction and construction started by the State Highway Authority U.P. for 2 to 4/6 Lane construction under process. Construction work will be completed by August, 2015.	March, 2014
2.	Development of M.S.W. Municipal solid Wastes sites to be done by local bodies.	Project proposal is under preparation and installation of MSW facilities will be carried out after approval of Govt. of India.	-
3.	Supply of LPG Gas to resident of Villages to avoid the de-forestation.	Concerned agencies have been requested to submit the proposal.	-
4.	District Sonbhadra of U.P. is power hub of India and the electric supply is in very poor condition. The steps are required to strengthen the electric supply to the residence of Distt. Sonbhadra.	State Govt. has been requested to allow the Distt. Sonbhadra as 24 hour electric supply zone.	-
5.	To shift the Stone Crusher Units situated along Road side in Dala, Distt. Sonbhadra to suitable site.	The suitable site is not available so the Distt. Administration has decided to construct 12' High Wall along the road side of Varanasi-Shaktinagar Highway in the Stone Crusher area of Dala.	-
6.	Treatment facility for Bio-Medical Waste	The Govt. Hospitals are the members of CBWTF Varanasi (SNG) and Pvt. Hospitals are member of CBWTF (CPC) Varanasi. The Factory's Hospitals have installed their own facility.	Complying
7.	Remedial Action Plan for de-siltation of Rihand Reservoir and other water bodies.	The State Irrigation department has been asked to submit the detailed project report for de-siltation of Rihand Reservoir.	-
8.	In-situ bio-remediation of sewage	All the local bodies of the area have been requested to install the STP in their respective area.	March, 2015
9.	Present status and future plan for green belt development as per the norms fixed in the Master Plan of the area.	More than 50% area of Distt. Sonbhadra is covered under Forest, Gardens and shrubs. It has been decided to strengthen Green belt in Stone Crusher Area by Shaktinagar Special Area Development Authority & Forest Department.	-
10.	Action plan for promotion of Bio-compost and Bio-Fertilizer alongwith the chemical fertilizer to minimize unutilized chemical fertilizer run-off into the natural water resources through Govt. policy.	Approx. 20,000 MT Chemical fertilizer have been utilized per year. The Agriculture Deptt., Govt. of U.P. has been requested to formulate the policy for promotion of Bio-compost and Bio-Fertilizer alongwith the chemical fertilizer to minimize unutilized chemical fertilizer run-off into the natural water resources.	-



## Issues regarding U.P. Pollution Control Board

### A - Short term action points

Sl. No.	Action Points	Compliance Status	Time Target
1.	Regular monitoring of surface water sources and Ground water.	UPPCB is regularly monitoring of surface water sources and Ground water.	Complying
2.	Regular monitoring of Industrial E.T.P. and APCS.	Quarterly inspection and sampling is being carried out by UPPCB.	Complying
3.	Details of Public awareness and training programme.	UPPCB is organizing the Public awareness programmes with the cooperation of Director Environment of U.P. Govt. under ' <b>District Plan</b> '. The officials of UPPCB are participating in the Training Programmes organised by CPCB/Other Environmental Agencies/Abroad through MoEF.	Complying
4.	As per letter dt. 20.12.2010 of CPCB regarding Monthly monitoring Committee of Action Plan in Chairmanship of District Magistrate.	The Committee have been notified vide letter No. 25/Singrauli Action Plan/2011 dt. 07.01.2011 in Chairmanship of The District Magistrate, Sonbhadra for critically polluted area. Discussions & progress reports is sending time to time.	Complying

## Issues regarding U.P. Pollution Control Board

### B - Long term action points

Sl.No.	Action Points	Compliance Status	Time Target
1.	To install Automatic Ambient Air Quality monitoring stations at sensitive places in the area.	The Financial assistance from CPCB has not yet been received as the decided in the Review meeting of Singrauli Action Plan held on 18.01.2010.	-
2.	To shift the Stone Crusher Units situated along Road side in Dala, Distt. Sonbhadra to suitable site with the help of State Govt./Central Govt	The suitable site is not available so the Distt. Administration has decided to construct 15' High Wall along the road side of Varanasi-Shaktinagar Highway in the Stone Crusher area of Dala.	-
3.	Action plan for GIS-GPS system for pollution sources monitoring.	GIS-GPS system for pollution sources monitoring will be installed with financial assistance of CPCB.	-
4.	GIS-GPS based tracking system for transportation of hazardous waste.	GIS-GPS based tracking system for transportation of hazardous waste will be installed with financial assistance of CPCB.	-
5.	Action point/strategy for health impact assessment.	The work of detailed health impact study will be awarded to the expert agency by the Board very soon.	-

The meeting ended with thanks to chair :-

**Regional Officer**  
U.P. Pollution Control Board,  
Sonbhadra.

**District Magistrate**  
Sonbhadra