

Action Taken Report

In the Matter of

Original Application No.19/2022
'Anil Pratap Singh Vs Union of India &
Others'

w.r.to

Hon'ble National Green Tribunal Central Bench Bhopal
order dated 20th May, 2022

Date of Visit: 27th July, 2022
Location: Satna, MP

Action Taken Report in the matter of "Anil Pratap Singh V/s Union of India & Others"

Hon'ble NGT (CZ), Bhopal vide its order dated 20th May, 2022 in OA no. 19/2022 'Anil Pratap Singh Vs Union of India & Others' directed under Para 4 of summary as :-

4 In view of the joint committee report, we direct the State Pollution Control Board to ensure the implementation of the recommendations submitted by the joint committee and submit the action taken report on the next date of listing.

In view of the above direction Regional Officer, MPPCB Satna visited M/s Birla Corporation Limited, Satna during 27th July, 2022 to assess the factual status of implementation of the recommendations submitted by the joint committee.

The relevant issue also discussed with Sh. Sunil Kasture, EHS head of M/s Birla Corp. Ltd and other staff. The other officials present during the inspection are Shri Sh. GK Baiga, Jr. Scientist MPPCB.

The recommendations submitted by the joint committee are as given below:

1. Improvement in the housekeeping in Cement mill area, cooler ESP area, clinker silo area, railway siding area, cement dispatch area and remove all the dust spillages immediately.
2. As much as possible coal must be stored in dome storage and remaining all storage points may be use for intermediate storage. The raw material stored in shed must be covered from two or three sides and use of rubber curtains as per requirement may be placed.
3. At Ghurdang side minimum raw material may be stored and also avoid open storage and ensure all the APCD installed at transfer points should be functioned with optimum efficiency all the time.
4. Ensure periodic maintenance of all dust collection system installed at various material transfer points of gypsum and coal.
5. The capacity of the raw material storage shall be enhance if required especially coal and pet coke and all the coal should be kept in shed only.
6. The unit should provide rubber curtains at truck tippler, wagon unloading and gates of A-frame area to control fugitive emissions.

7. The damaged roof of A-frame area may be repair as soon as possible to contain the coal dust inside. 18
8. Additional Belt skirting to coal feeding shed at 27 MW CPP and water sprinkling or fogging system along the road from BVC coal wagon unloading point to coal storage shed and outside truck yard may be installed.
9. Special drive for plantation should be conducted in coming monsoon along outside the boundary wall from Ram Singh residence to Government School of Ghurdang, boundary wall at AFR Storage shed and truck parking yard area and any other relevant area with community participation.
10. The possibility of more co-incineration of polythene and AFR should be explore and to achieve the target as given by MPPCB.
11. The industry should comply the new emission norms all the time as notified by MoEF&CC.
12. The unit shall ensure proper calibration and periodic maintenance of all installed CEMS and maintain proper records w.r.t. calibration.

The factual status of implementation of the recommendations submitted by the joint committee as found during site visit on the above mentioned issues are as below:-

Recommendation 1 - Improvement in the housekeeping in Cement mill area, cooler ESP area, clinker silo area, railway siding area, cement dispatch area and remove all the dust spillages immediately..

(A) Status before the order of Hon'ble National Green Tribunal:

1. There were 3 Nos. Road sweeping machines for SCW, BVC and other common areas. In addition to this, there has a separate team for housekeeping, sweeping for Cement Mill Area, Cooler ESP Area, Clinker Silo Area, and other areas.
2. There were water spray system at wagon unloading point, coal crusher, and coal belt transfer points and coal feeding point at 27 MW Thermal Power Plant.
3. Storage facility for raw materials and finished products are
 - For storage of Laterite -25000 MT covered shed
 - For storage of Gypsum - 15000 MT covered shed
 - For storage of Limestone - 60000 MT linear covered shed and 60000 MT circular dome shed
 - For storage of Clinker - 3 nos. of clinker silos having capacity of 55000 MT at SCW and BVC and 23000 MT (at BVC and SCW units

- For storage of Cement - 8 nos. cement silos having capacity of 36000 MT.
- All material conveying belt conveyors were fully covered and dust collectors were installed at all transfer points.

(B) Status of up-gradation after order of Hon'ble National Green Tribunal:

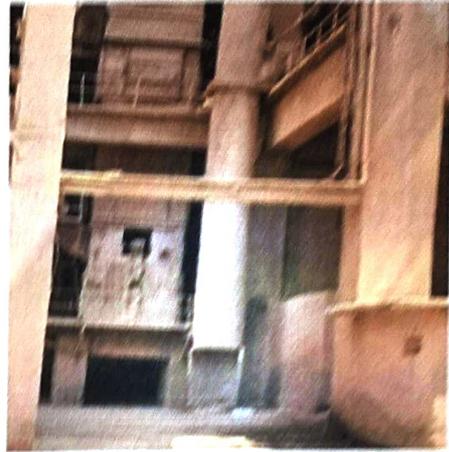
1. Industry has deployed one more Truck Mounted Road Sweeping machine. This additional truck mounted road sweeper is deployed for BVC Plant which is adjacent to Ghurdang area.
2. Industry has started RCC flooring around Coal Washery and Dome shape Coal Storage shed to reduce possible fugitive emissions during movement of vehicles. At present industry has concreted about 9000 Sq. meters area. Industry has informed that the remaining area laying between railway line and concreted area will be covered under plantation or fenced.
3. Industry has started collection of sweeping dust from elevated structures at one point and discharging it at ground through small hoppers attached with 150- 200 mm pipe, so as to control the fugitive emissions during discharging of dust from elevated structures.
4. Industry has extended the frequency of regular maintenance for control/cleaning of spillage material. It is also informed by the industry that maintenance of Conveyor belt, speed and material flow has re- adjusted to restrict spillage of material during transportation.

(C) Proposed Activities:

- 1 Industry has informed that for further improve on housekeeping and spillage control,
- 2 Regular Inspection of material transportation circuit shall be carried out at regular and more frequent intervals to identify any spillage of material and corrective action shall be taken to prevent the same.

Photographs:





2. As much as possible coal must be stored in dome storage and remaining all storage points may be use for intermediate storage. The raw material stored in shed must be covered from two or three sides and use of rubber curtains as per requirement may be placed.

(A) Status before the order of Hon'ble National Green Tribunal:

- Circular dome shed - 20000 MT
- SCW covered coal yard – 20000 MT
- BVC Covered Coal yard - 20000 MT
- 27 MW TPP covered coal yard – 9000 MT
- Belt curtains had provided for 27 MW TPP coal storage shed and A- frame yard entry towards Ghurdang side.

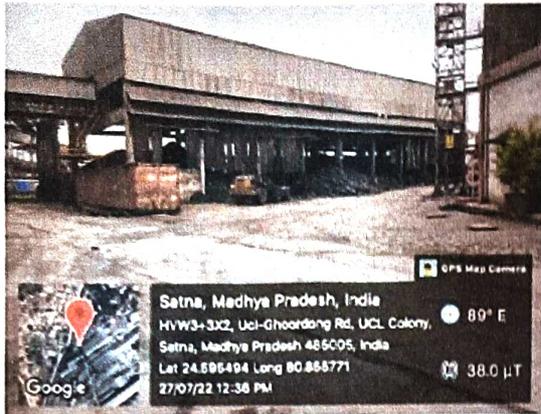
(B) Status of up-gradation after order of Hon'ble National Green Tribunal:

- Additional belt curtains has facilitated for 27 MW coal handling area.
- Water sprinkling system has installed for Coal feeding and handling system at 27 MW TPP

C) Proposed Activities

- Industry has proposed to install a Mist based Water fogging system at 27 MW CPP Coal handling area to minimize fugitive emissions by December 2022.

Photographs of up-gradations:



3) At Ghurdang side minimum raw material may be stored and also avoid open storage and ensure all the APCD installed at transfer points should be functioned with optimum efficiency all the time.

(A) Status before the order of Hon'ble National Green Tribunal:

- The Alternate Fuel Materials like plastic bags, rags of tarpaulin, Rice husk and municipal plastic waste is stored in 12000 M3 capacity fully covered shed.
- Some Municipal Plastic waste material was stored outside the shed.
- 3 Nos Air Pollution Control Devices (APCD) have installed at transfer points.
- AFR material transporting belt conveyors have fully covered.

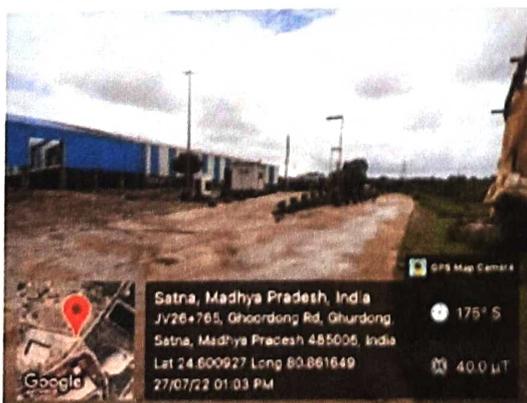
(B) Status of up-gradation after order of Hon'ble National Green Tribunal:

- Housekeeping and proper storage of AFR material has ensured.
- No material stored in open space.

(C) Proposed Activities

- Industry has assured for about 2500 Nos. of plantation along the boundary wall of Ghurdang AFR area before September 2022.

Photographs of up-gradation:



4) Ensure periodic maintenance of all dust collection system installed at various material transfer points of gypsum and coal.

- Industry has assured for Regular and Periodic maintenance of all dust collection systems installed at various transfer points of Gypsum and Coal. In addition to this industry has informed that few Nozzles have been replaced for proper and effective dust suppression at Coal Conveyer Belts.

(A) Status of up-gradation after order of Hon'ble National Green Tribunal:

- Industry has informed that he will install mist based water fogging system before December 2022 at coal handling area of 27 MW TPP to minimize fugitive dust emissions.

5) The capacity of the raw material storage shall be enhanced if required especially coal and pet coke and all the coal should be kept in shed only.

(A) Status before the order of Hon'ble National Green Tribunal:

- Storage of Laterite: 25000 MT covered shed
- Storage of Gypsum: 15000 MT covered shed.
- Storage of Limestone:
 - 60000 MT linear covered shed and
 - 60000 MT circular dome shed
- Storage of Clinker:
 - 3 Nos of clinker silos 55000 MT (Total) and
 - 23000 MT covered clinker storage yard at BVC and SCW units.
- Storage of Cement: 8 nos. of cement silos - total capacity of 36000 MT.
- Storage of Coal:
 - 20000 MT circular dome,
 - 20000 MT in SCW covered coal yard,
 - 20000 MT in BVC covered coal yard
 - 9000 MT in covered coal shed in 27 MW Thermal Power Plant.

In both SCW and BVC plant, Raw material, Coal and Petcoke is stored in covered shed and silos.

Industry has informed that the present storage capacities of shed/silos for storage of raw material/coal and Petcoke is sufficient. However, in future if required separate shed/silo will be constructed for raw material/coal/Petcoke storage.

B) Improvement Status of upgradation after order of Hon'ble National Green Tribunal:

- Side sheeting of Laterite shed is done to avoid fugitive emissions during laterite handling. The material stored inside the shed was shifted outside for fixing of side sheets. Therefore industry has started shifting outside stored material to laterite shed and assured the complete shifting by end of August 2022.
- Industry has informed that currently there is no need of additional Coal/Petcoke Storage. Also ensured that Coal and Petcoke shall be stored in covered shed.

Photographs of up-gradation:



6) The unit should provide rubber curtains at truck tippler, wagon unloading and gates of A-frame area to control fugitive emissions.

(A) Status before the order of Hon'ble National Green Tribunal:

The unit has provided belt curtains at following locations to restrict spreading fugitive emissions during regular operations:

- Laterite unloading hopper
- Fly ash unloading truck tippler
- 27 MW TPP coal storage shed and
- A- frame yard entry towards Ghurdang side.

(B) Improvement Status of up-gradation after order of Hon'ble National Green Tribunal:

- New Water sprinkling system has installed for coal feeding system for 27 MW TPP

(C) Proposed Activities

- Industry has proposed a new Mist based Water Fogging System and additional Belt Skirts will be provided at Coal handling plant of 27 MW TPP before December 2022.

Photographs of up-gradation:



7) The damaged roof of A-frame area may be repair as soon as possible to contain the coal dust inside.

- Industry has informed that the damaged portion of A Frame currently used for Clinker Storage shall be completely demolished by march 2023.
- The construction of a new environment friendly system of Clinker silo having capacity - 50,000 MT shall be started from April 2023 & shall be completed by October 2024.
- Industry has taken up installation of new Coal Conveying system equipped with the required bag filters to address fugitive emission issues and the installation work shall be completed by March 2023.

Photographs of current status:



8) Additional Belt skirting to coal feeding shed at 27 MW CPP and water sprinkling or fogging system along the road from BVC coal wagon unloading point to coal storage shed and outside truck yard may be installed.

- Industry has provided additional belt curtains for Coal shed of 27 MW TPP. Photographs attached at recommendation Point No. 2
- Industry has provided a new water sprinkling system at coal feeding point of 27 MW TPP to reduce the fugitive emission.
- Industry has also proposed to install a Mist based Water Fogging system at coal feeding point of 27 MW TPP to further reduce fugitive emission by December 2022.
- Industry has informed that the design and drawing has finalized for installation of new water sprinkling system along the road from coal wagon unloading point to Coal storage shed of 27 MW TPP and the same will be installed by the end of March 2023.

9) Special drive for plantation should be conducted in coming monsoon along outside the boundary wall from Ram Singh residence to Government School of Ghurdang, boundary wall at AFR Storage shed and truck parking yard area and any other relevant area with community participation.

- Industry has carried out 50 Nos. of plantation of various local species along the outside boundary of the plant towards the Ghurdang Road, on “5th June 2022 - World Environment Day” in presence of Commissioner- Nagar Nigam, Satna and local representatives and residents of Ghurdang village.
- Industry has informed that there is a proposal of 2500 Nos. plantation of fast growing species during the current year monsoon season along the outside boundary of the plant towards the Ghurdang Road with involvement of local residents.
- Industry has an additional proposal of 2500 Nos. of fast growing species tree plantation during the current year monsoon season at the area like truck parking and AFR shed.
- Therefore, there shall be total 5000 Nos. plantation by November 2022.
- Maintenance will be ensured by deploying agency for maintenance of tress.

Photographs of plantation:



10) The possibility of more co-incineration of polythene and AFR should be explore and to achieve the target as given by MPPCB.

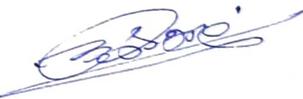
- Industry has already co-processed 1989.56 MT plastic wastes received from MSW Processing Facility Rewa during FY 2021-22.
- Industry has assured to explore the possibility of more co-incineration of polythene, AFR and other wastes material during the year 2022-23.
- Industry has informed that the up-gradation of existing facility shall be taken up to achieve additional 25 to 30% of Total substitution rate (TSR).
- The proposed up-gradation shall be completed by July 2023 and he shall be able to increase the use of RDF up to 3000 MT/Year.

11) The industry should comply the new emission norms all the time as notified by MoEF & CC.

- Industry has assured for strictly compliance and shall maintain the new emission norms all the time as notified by MoEF & CC.

12) The unit shall ensure proper calibration and periodic maintenance of all installed CEMS and maintain proper records w.r.t. calibration.

- Industry has assured for proper calibration and Periodic Maintenance of all CEMS and shall maintain proper records with respective calibration.
- Industry has planning for centralization of all CEMS and CAAQMS system with auto-calibration facility by December 2022.



(K P Soni)
Regional Officer, MPPCB,
Satna