



Date: 24.04.2024

PCB ID: 41279

Ref No.: GRCD/GPCB/2024-25/01

To,

Ministry of Environment, Forest and Climate Change
Aaranya Bhavan, Gandhinagar.

Sub: Statutory compliance report along-with implementation report of "fly ash notification dated: 31.12.2021 & 30.12.2022" for the period of 1st April, 2023 to 31st March-2024.

Respected Sir,

This has reference to above subject matter, we are submitting **Statutory compliance report along-with implementation report** of "fly ash notification dated: 31.12.2021 & 30.12.2022" for the period of 1st April, 2023 to 31st March-2024.

Hope the same is in order.

Yours faithfully,
For M/s. Grasm Industries Limited (Chemical Div)


Authorized Signatory

CC to:

1. **Unit Head- Bharuch- GPCB, Gandhinagar – 382010, Gujarat.**
2. **Regional Officer - GPCB, GIDC Estate, Bharuch.**
3. **The Regional director, CPCB, Parivesh Bhawan, Aatmajyoti Ashram Rd, Opp. VMC Ward Office No. 10, Subhanpura, Vadodara, Gujarat 390023.**

Grasm Industries Limited
Unit : Chemical Division

Correspondence Plant & Address :

Plant : Plot No. 1, G.I.D.C. Estate,
Village : Vilayat, Tahsil : Vagra,
Dist. Bharuch 392 012 (Gujarat), India.

Ph. No. : 83470 08059

E-mail : grasmchem.vilayat@adityabirla.com

Website : www.grasmchem.com

CIN : L17124MP1947PLC000410

H.O. : Birla Aurora, 10th floor,
Dr. Annie Besant Road,
Worli, Mumbai - 400 030
Maharashtra, India.

FLY ASH ANNUAL COMPLIANCE REPORT 2023-2024 (1st April, 2023 to 31st March, 2024)

Sr. No.	Details	Compliance
1	Name of Power Plant	Captive Power Plant
2	Name of the Company	M/s. Grasim Industries Limited (Chemical Division)
3	District	Bharuch
4	State	Gujarat
5	Postal Address for communication	Plot No. 1, GIDC Industrial Estate, Tal: Vagra, Bharuch, Gujarat
6	E-Mail	Vikaskumar.valand@adityabirla.com
7	Power Plant installed capacity (MW)	141 MW
8	Plant Load Factor (PLF)	74.09%
9	No. of units generated (MWh)	Total (April,23-March,24): 22565.23 MWH
10	Total area under power plant (ha) (including area under ash ponds)	~50 acres
11	Quantity of coal consumption during reporting period (MT/Annum)	Total (April,23-March,24): 715460 MT/Annum
12	Average ash content in percentage (%)	10-16%
13	Quantity of current ash generation during reporting period (MT/Annum): Fly Ash (MT/Annum) Bottom Ash (MT/Annum)	Fly Ash (MT/Annum): 74113.47 Bottom Ash (MT/Annum): 13078.85
14	Capacity of dry fly ash storage silos(s) (MT/Annum)	600 MT (2 Silo of 300 MT each)
15	Details of utilisation of current ash generated during reporting period (a) Total quantity of current ash utilised (MTPA) during reporting period (b) Quantity of fly ash utilised (MTPA) i. Fly ash based products (bricks or blocks or tiles or fibre cement sheets or pipes or boards or panels) ii. Cement manufacturing iii. Ready mix concrete iv. Ash and Geo polymer based construction material v. Manufacturing of sintered or cold bonded ash aggregate vi. Construction of roads, road and fly over embankment vii. Construction of dams viii. Filling up of low lying area ix. Filling of mine voids x. Use in overburden dumps xi. Agriculture xii. Construction of shoreline protection structures in coastal districts xiii. Export of ash to other countries xiv. Others (please specify) (c) Quantity of bottom ash utilised (MTPA): i. Fly ash based products (bricks or blocks or tiles or fibre cement sheets or pipes or boards or panels) ii. Cement manufacturing	(a) Total quantity of current ash utilised (MTPA) during reporting period: 87241 MTPA (b) Quantity of ash utilised (MTPA) i. Fly ash based products (bricks or blocks or tiles or fibre cement sheets or pipes or boards or panels): 24257.9 MTPA ii. Cement manufacturing: 60183.2 MTPA iii. Construction of roads, road and fly over embankment: 2800 MTPA

	<ul style="list-style-type: none"> iii. Ready mix concrete iv. Ash and Geo-polymer based construction material v. Manufacturing of sintered or cold bonded ash aggregate vi. Construction of roads, road and flyover embankment vii. Construction of dams viii. Filling up of low lying area ix. Filling of mine voids x. Use in overburden dumps xi. Agriculture xii. Construction of shoreline protection structures in coastal districts xiii. Export of ash to other countries xiv. Others (please specify) <p>Total quantity of current ash unutilised (MTPA) during reporting period</p>	
16	Percentage utilisation of current ash generated during reporting period (%)	100%
17	<p>Details of disposal of ash in ash ponds</p> <ul style="list-style-type: none"> (a) Total quantity of ash disposed in ash pond(s) (MT) as on 31st March (excluding reporting period) (b) Quantity of ash disposed in ash pond(s) during reporting period (MT) (c) Total quantity of water consumption for slurry discharge into ash ponds during reporting period (m³) (d) Total number of ash ponds: <ul style="list-style-type: none"> i. Active ii. Exhausted (yet to be reclaimed) iii. Reclaimed (e) Total area under ash ponds (ha) 	Not Available
18	<p>Individual ash pond details</p> <p>Ash pond-1,2, etc (please provide below mentioned details separately, if number of ash ponds is more than one)</p> <ul style="list-style-type: none"> (a) Status: Under construction or Active or Exhausted or Reclaimed (b) Date of start of ash disposal in ash pond (DD/MM/YYYY or MM/YYYY) (c) Date of stoppage of ash disposal in ash pond after completing its capacity (DD/MM/YYYY or MM/YYYY) (Not applicable for active ash ponds) (d) area (hectares) (e) dyke height (m) (f) volume (m³): (g) quantity of ash disposed as on 31st March (Metric Tons): (h) available volume in percentage (per cent) and quantity of ash can be further disposed (Metric Tons): (i) expected life of ash pond (number of years and months): (j) co-ordinates (Lat and Long) (please specify minimum 4 co-ordinates) 	Not Available

	(k) type of lining carried in ash pond: HDPE lining or LDPE lining or clay lining or No lining (l) mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD) (m) Ratio of ash: water in slurry mix (1:____): (n) Ash water recycling system (AWRS) installed and functioning: Yes or No (o) Quantity of wastewater from ash pond discharged into land or water body (m3): (p) Last date when the dyke stability study was conducted and name of the organisation who conducted the study: (q) Last date when the audit was conducted and name of the organisation who conducted the audit:	Not Available																
19	Quantity of legacy ash utilised (MTPA): (a) Fly ash based products (bricks or blocks or tiles or fibre cement sheets or pipes or boards or panels): (b) Cement manufacturing: (c) Ready mix concrete: (d) Ash and Geo-polymer based construction material: (e) Manufacturing of sintered or cold bonded ash aggregate: (f) Construction of roads, road and flyover embankment: (g) Construction of dams: (h) Filling up of low lying area: (i) Filling of mine voids: (j) Use in overburden dumps: (k) Agriculture: (l) Construction of shoreline protection structures in coastal districts; (m) Export of ash to other countries: (n) Others (please specify):	Not Available																
20	Summary <table border="1"> <thead> <tr> <th>Details</th><th>Quantity generated (MTP)</th><th>Quantity utilised (MTP) and (%)</th><th>Balance Quantity (MTP)</th></tr> </thead> <tbody> <tr> <td>Current ash during reporting period</td><td>87192.3</td><td>87192.3 (100%)</td><td>0.00</td></tr> <tr> <td>Legacy Ash</td><td>48.7</td><td>48.7 (100%)</td><td>0.00</td></tr> <tr> <td>Total</td><td>87241.00</td><td>87241.00 (100%)</td><td>0.00</td></tr> </tbody> </table>	Details	Quantity generated (MTP)	Quantity utilised (MTP) and (%)	Balance Quantity (MTP)	Current ash during reporting period	87192.3	87192.3 (100%)	0.00	Legacy Ash	48.7	48.7 (100%)	0.00	Total	87241.00	87241.00 (100%)	0.00	
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21	Any other information: Soft copy of the annual compliance report, and shape files of power plant and ash ponds may be e-mailed to:- moefcccoalash@gov.in	Soft copy of Annual compliance report copy will be shared on or before 30/05/2024 through email to moefcccoalash@gov.in.																
22	Signature of Authorised Signatory																	

GRASIM INDUSTRIES LIMITED

Chemical Division Vilayat

Address; Plot No. 1, GIDC, Vilayat, Tal.- Vagra, Dist.-Bharuch, Gujarat

Fly Ash Generation and Utilization Report FY-2023 (Apr-23 to Mar-24)

Compliance report of 141 MW CPP

Months	Opening balance (MT)	Generation (MT)	Fly Ash Utilization (MT)				Closing Stock (MT)
			Bricks/Road Manufacturers	Cement Manufactures	Reclamation, Road (Project)	Total Utilization	
Apr-23	48.70	6651.00	2074.44	3563.00	0.00	5637.44	1062.26
May-23	1062.26	6354.00	1562.53	4953.78	0.00	6516.31	899.95
Jun-23	899.95	5374.00	708.10	4690.10	0.00	5398.20	875.75
Jul-23	875.75	6003.00	1288.67	3255.37	1600.00	6144.04	734.71
Aug-23	734.71	9193.00	2958.62	5163.49	1200.00	9322.11	605.60
Sep-23	605.60	8187.00	2915.70	5271.63	0.00	8187.33	605.27
Oct-23	605.27	9245.00	3625.19	5619.80	0.00	9244.99	605.28
Nov-23	605.28	6273.45	1177.49	5395.96	0.00	6573.45	305.28
Dec-23	305.28	10427.04	3056.43	7675.89	0.00	10732.32	0.00
Jan-24	0.00	8269.19	2712.36	5556.83	0.00	8269.19	0.00
Feb-24	0.00	4144.23	849.42	3294.81	0.00	4144.23	0.00
Mar-24	0.00	7071.41	1328.91	5742.50	0.00	7071.41	0.00
Total		87192.3	24257.9	60183.2	2800.0	87241.0	

*Implementation report for fly ash notification dated: 31.12.2021 &
30.12.2022*

Sr. No.	Points	Implementation details
A. Responsibilities of thermal power plants to dispose fly ash and bottom ash.—		
1.	Every coal or lignite based thermal power plant (including captive or co-generating stations or both) shall be primarily responsible to ensure 100 per cent utilisation of ash (fly ash, and bottom ash) generated by it in an eco-friendly manner as given in sub-paragraph (2);	Being complied Generated quantity of fly ash and bottom ash is being sent to Cement & Fly ash brick Manufacturer.
2.	The ash generated from coal or lignite based thermal power plants shall be utilised only for the following eco-friendly purposes, namely:- (i) Fly ash based products viz. bricks, blocks, tiles, fibre cement sheets, pipes, boards, panels; (ii) Cement manufacturing, ready mix concrete; (iii) Construction of road and fly over embankment, Ash and Geo-polymer based construction material; (iv) Construction of dam; (v) Filling up of low lying area; (vi) Filling of mine voids; (vii) Manufacturing of sintered or cold bonded ash aggregate; (viii) Agriculture in a controlled manner based on soil testing; (ix) Construction of shoreline protection structures in coastal districts; 14 THE GAZETTE OF INDIA : EXTRAORDINARY [PART II—SEC. 3(ii)] (x) Export of ash to other countries; (xi) Any other eco-friendly purpose as notified from time to time.	Being complied Generated quantity of fly ash and bottom ash is being sent to Cement & Fly ash brick Manufacturer.
3.	A committee shall be constituted under the chairmanship of Chairman, Central Pollution Control Board (CPCB) and having representatives from Ministry of Environment, Forest and Climate Change (MoEFCC), Ministry of Power, Ministry of Mines, Ministry of Coal, Ministry of Road Transport and Highways, Department of Agricultural Research and Education, Institute of Road Congress, National Council for Cement and Building Materials, to examine and review and recommend the eco-friendly ways of utilisation of ash and make inclusion or exclusion or modification in the list of such ways as mentioned in Subparagraph (2) based on technological developments and requests received from stakeholders. The committee may invite State Pollution Control Board or Pollution Control Committee, operators of thermal power plants and mines, cement plants and other stakeholders as and when required for this purpose. Based on the recommendations of the Committee, Ministry of Environment, Forest and Climate Change (MoEFCC) may publish such eco-friendly purpose.	Noted

*Implementation report for fly ash notification dated: 31.12.2021 &
30.12.2022*

4.	Every coal or lignite based thermal power plant shall be responsible to utilise 100 per cent ash (fly ash and bottom ash) generated during that year, however, in no case shall utilisation fall below 80 per cent in any year, and the thermal power plant shall achieve average ash utilisation of 100 per cent in a three years cycle	Being complied Unit is engaged in 100% utilization of generated quantity of fly ash.
5.	<p>The unutilised accumulated ash i.e. legacy ash, which is stored before <u>1st April, 2022</u>, shall be utilised progressively by the thermal power plants in such a manner that the utilization of legacy ash shall be completed fully within ten years from the date of publication of this notification and this will be over and above the utilisation targets prescribed for ash generation through current operations of that particular year.</p> <p>Provided further that the legacy ash utilisation shall not be required where ash pond or dyke has stabilised and the reclamation has taken place with greenbelt or plantation and the concerned State Pollution Control Board shall certify in this regard. Stabilisation and reclamation of an ash pond or dyke including certification by State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall be carried out within a year from the date of publication of this notification. The ash remaining in all other ash ponds or dykes shall be utilised in progressive manner as per the mentioned timelines in notification.</p>	Noted No legacy fly ash is being stored by unit. Unit is in-compliance with 100% fly ash utilization.
6.	<p>Any new as well as operational thermal power plant may be permitted operational ash pond or dyke for temporary storage of ash within an area of 0.1 hectare per Mega Watt (MW). Technical specifications of operational as well as stabilized and reclaimed ash ponds or dykes shall be as per the guidelines of the Central Pollution Control Board (CPCB) made in consultation with the Central Electricity Authority (CEA) and these guidelines shall also lay down a procedure for annual certification of the operational as well as stabilized and reclaimed ash pond or dyke on its safety, environment pollution, available volume, mode of disposal, water consumption or conservation in disposal, ash water recycling and green belt, etc. and shall be put in place within three months from the date of publication of this notification:</p> <p>Provided that up to two operational ash ponds or dykes for thermal power plants commissioned before 31st December, 2021, having installed capacity less than or equal to 1600 MW, and up to four operational ash ponds or dykes for thermal power plants having installed capacity more than 1600 MW, having multiple lagoons, within the specified area from the existing ash ponds or dykes, may be</p>	Not applicable This clause is not applicable for unit.

*Implementation report for fly ash notification dated: 31.12.2021 &
30.12.2022*

	<p>designated with clear demarcation along with coordinates, and shall inform to Central Pollution Control Board (CPCB) and concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) by 31st March, 2023:</p> <p>Provided further that one ash pond or dyke shall be permitted in case of new thermal power plants or expansion of existing thermal power plants commissioned on or after 31st December, 2021, which shall inform the details of demarcation along with coordinates to Central Pollution Control Board (CPCB) and concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) within 3 months from the date of commissioning of thermal power plant or by 31st March, 2023, whichever is later:</p> <p>Provided also that coal and lignite based thermal power plants shall not be allowed to further establish or designate any new operational ash pond or dyke: Provided also that specification of 0.1 hectare per Mega Watt (MW) of an operational ash pond or dyke shall not be applicable for the thermal power plants commissioned before 03rd November, 2009.”.</p>	
7.	Every coal or lignite based thermal power plant shall ensure that loading, unloading, transport, storage and disposal of ash is done in an environmentally sound manner and that all precautions to prevent air and water pollution are taken and status in this regard shall be reported to the concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) in Annexure attached to this notification.	Being complied
8.	Every coal or lignite based thermal power plant shall install dedicated silos for storage of dry fly ash silos for at least sixteen hours of ash based on installed capacity and it shall be reported upon to the concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) in the Annexure and shall be inspected by Central Pollution Control Board (CPCB) or State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) from time to time.	Complied Unit has installed dedicated silo for storage of generated quantity of ash.
9.	Every coal or lignite based thermal power plant (including captive or co-generating stations or both) shall provide real time data on daily basis of availability of ash with Thermal Power Plant (TPP), by providing link to Central Pollution Control Board's web portal or mobile phone App for the benefit of actual user(s).	Noted Web-link for real time data connectivity is developed and circulate publically recently. We will explore possibility for real-time uploading data.
10.	Statutory obligation of 100 per cent utilisation of ash shall be treated as a change in law, wherever applicable.	Noted

*Implementation report for fly ash notification dated: 31.12.2021 &
30.12.2022*

B. For the purpose of utilisation of ash, the subsequent sub-paras shall apply.—		
5. (ii)	Thermal power plants or mines shall not wait for disposal of ash till the identification is done by the above mentioned committee, to meet the utilisation targets mandated as above.	Being complied Unit is engaged in 100% utilization of generated quantity of fly ash.
6.	Filling of low lying areas with ash shall be carried out with prior permission of the State Pollution Control Board or Pollution Control Committee for approved projects, and in accordance with guidelines laid down by Central Pollution Control Board (CPCB) and the State Pollution Control Board or Pollution Control Committee (PCC) shall publish approved sites, location, area and permitted quantity annually on its website.	Noted Unit will take prior permission in case of filling low lying area in future.
E. Enforcement, Monitoring, Audit and Reporting.—		
2. (i)	Thermal power plant shall upload monthly information regarding ash generation and utilization by 5 th of the next month on the web portal. Annual Implementation report (for the period of 1 st April to 31 st march) providing information about the compliance of provisions in this notification shall be submitted by 30 th day of April, every year to the CPCB, concerned SPCB, CEA and concerned integrated regional office of MOEFCC by the coal or lignite based thermal power plants.	Complied Monthly information regarding Ash generation & Utilization is being uploaded on the web portal every month. Annual Implementation report is being submitted every year before 30 th day of April.
2. (ii)	All other user agencies shall submit consumption or utilisation or disposal of ash and use of ash based products as mandated in this notification in the compliance report of Environmental Clearance (EC) issued by Ministry of Environment, Forest and Climate Change or State Level Environment Impact Assessment Authority (SEIAA) or Consent to Operate (CTO) issued by State Pollution Control Board (SPCB) or Pollution Control Committee (PCC), whichever is applicable.	
5.	The compliance audit for ash disposal by the thermal power plants and the user agency shall be conducted by auditors, authorised by Central Pollution Control Board (CPCB) and audit report shall be submitted to Central Pollution Control Board (CPCB) and concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) by 30 th November every year. Central Pollution Control Board (CPCB) and concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) shall initiate action against non-compliant thermal power plants within fifteen days of receipt of audit report.	Complied The Compliance Audit has been conducted every year by auditors, authorised by Central Pollution Control Board (CPCB) and the Audit report has been submitted to Central Pollution Control Board (CPCB) and concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) by 30 th November every year.