

ANDHRA PRADESH POLLUTION CONTROL BOARD D.No.33-26-14D/2, Near Sunrise Hospital, Pushpa Hotel Centre, Chalamalavari Street, Kasturibaipet, Vijayawada - 520 010 Phone. No.0866-2463200, Website : https://pcb.ap.gov.in/

RED CATEGORY RENEWAL OF CONSENT & AUTHORIZATION ORDER

Consent Order No : APPCB/KNL/ATP/17731/HO/CFO/2020- 14/12/2020

CONSENT is hereby granted for Operation under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof and Authorisation under Rule 6 of the Hazardous & Other Wastes (Management and Transboundary, Movement) Rules, 2016 and the rules and orders made there under (hereinafter referred to as 'the Acts', `the Rules') to:

M/s Sagar Cements (R) Limited, Gudipadu (V), Yadiki (M), Ananthapuramu District Email: vvprasad@sagarcements.in, environment-r@sagarcements.in

(Hereinafter referred to as 'the Applicant') authorizing to operate the industrial plant to discharge the effluents from the outlets and the quantity of emissions per hour from the chimneys as detailed below:

| Outlet No. | Outlet Description | Max Daily Discharge KLD | Point of Disposal |
|---------------|-----------------------|-------------------------------|---|
| | Domestic effluents | | After treatment in STP, 150 KLD shall be used on land for irrigation within the premises and 20 KLD shall be recycled into the process, duly meeting the Board's prescribed standards. |
| 2. | Service water | | On land for irrigation duly meeting the Board's prescribed standards. |

i) Out lets for discharge of effluents:

ii) Emissions from chimneys:

| Chimney No. | Description of Chimney |
|-------------|--|
| 1. | Attached to Raw mill / Kiln of capacity 2000 TPD |
| 2. | Attached to cooler of capacity 2500 TDP |
| 3. | Attached to Cement mill of capacity 150TPH |
| 4. | Attached to Coal mill of capacity 23 TPH |

iii) HAZARDOUS WASTE AUTHORISATION (FORM - II) [See Rule 6 (2)]:

M/s Sagar Cements Limited, Gudipadu (V), Yadiki (M), Ananthapuramu District is hereby granted an authorization to operate a facility for collection, reception, storage,

treatment, transport and disposal of Hazardous Wastes namely:

HAZARDOUS WASTES RECYCLING OPTION:

| | Name of the Hazardous waste | | Quantity of Hazardous waste | Disposal Option. |
|----|---|----------------------|-----------------------------------|---|
| 1. | Hi chrome grinding media from process | | | Shall be routed through M/s. Andhra Pradesh Environment Management Corporation Limited (APEMCL) so as to returned to the manufacturers |
| 2. | Used oil & waste grease | 5.1 of schedule-1 | | Shall be utilized as lubricant within the premises. |

NON- HAZARDOUS WASTE WITH DISPOSAL OPTION:

| SI No | | Quantity of waste(kg/day) | Disposal Option |
|----------|------------------------------------|------------------------------|--|
| | Process (Dust from Bag filters) | 5 TPD | Shall be reused in the process. |
| 2 | STP sludge | 2.0 TPA | Shall be utilized as manure within the premises. |
| 3 | Boiler Ash | 180 TPD | To Brick Manufacturers. |

This consent order is valid to manufacture the following products along with quantities only.

| S.No | Products | Capacity |
|------|----------|------------------|
| 1 | Clinker | 0.75 Million TPA |
| 2 | Cement* | 0.95 Million TPA |

*Cement of 0.95 MTPA is produced using clinker of 0.75 Million TPA and additives.

The industry is permitted to use Petcoke (Imported / from refineries in India) - 6666.66 Tons/Month as feed stock or in the manufacturing process in the cement kiln.

| Pet coke quantity / month | Pet coke quantity / Annum | Sources of pet coke | | |
|------------------------------|------------------------------|---|--|--|
| 6666.66Tons | 79,999.92 Tons | Imported (or) from refineries in India | | |

1. The industry shall comply with the following conditions for import of Petcoke:

i. The industry shall directly import the pet coke and consignment shall be in the name of the industry for its own use only.

ii. Import of pet coke for the purpose of trading shall not be permitted.

iii. The industry shall furnish opening and closing stock of imported Petcoke along with quantity of Petcoke imported during the month and consumption during the month to the Board on monthly basis.

2. The Petcoke shall be used in the cement kiln only and it shall not be used for any other purpose.

This consent order is valid to use following additional alternate fuels in the Cement Kiln in addition to Coal (370 TPD) and Pet coke (6666.66 TPM):

Hazardous Waste use as a alternate fuel in the cement kiln

| | Name of the waste | | Quantity of waste(kg/da y) | source |
|---|----------------------|---------------------------------|----------------------------------|--|
| 1 | Carbon Black | | | Management Corporation Limited (APEMCL) so as |
| 2 | | 28.3 &36.2 of schedule- 1 | | to use as a alternate fuel in the industry's cement kiln. |

This order is subject to the provisions of `the Acts' and the Rules' and orders made thereunder and further subject to the terms and conditions incorporated in the schedule A, B & C enclosed to this order.

This combined order of consent & Hazardous Waste Authorisation should be valid for a period ending with the **30th day of September 2025**.

DR. B.MADHUSUDHANA RAO, JCEE(MSRB), O/o JOINT CHIEF ENVIRONMENTAL ENGINEER4-APPCB

M/s Sagar Cements (R) Limited, Gudipadu (V), Yadiki (M), Ananthapuramu District

Copy to:

- 1. The JCEE, Zonal Office, Kurnool for information and necessary action.
- 2. The Environmental Engineer, Regional Office, Ananthapuramu for information and necessary action.

SCHEDULE - A

- 1. Any up-set condition in any industrial plant / activity of the industry, which result in, increased effluent / emission discharge and/ or violation of standards stipulated in this order shall be informed to this Board, under intimation to the Collector and District Magistrate and take immediate action to bring down the discharge / emission below the limits.
- 2. The industry should carryout analysis of waste water discharges or emissions through chimneys for the parameters mentioned in this order on quarterly basis and submit to the Board.
- 3. All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991 should be followed as applicable.
- 4. The industry should put up two sign boards (6x4 ft. each) at publicly visible places at the main gate indicating the products, effluent discharge standards, air emission standards, hazardous waste quantities and validity of CFO and exhibit the CFO order at a prominent place in the factory premises.
- 5. Notwithstanding anything contained in this consent order, the Board hereby reserves the right and powers to review / revoke any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.
- 6. The industry shall ensure that there shall not be any change in the process technology, source & composition of raw materials and scope of working without

prior approval from the Board.

- 7. The applicant shall submit Environment statement in Form V before 30th September every year as per Rule No.14 of E(P) Rules, 1986 & amendments thereof.
- 8. The applicant should make applications through Online for renewal of Consent (under Water and Air Acts) and Authorization under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts and detailed compliance of CFO conditions for obtaining Consent & HW Authorization of the Board.
- 9. The industry should immediately submit the revised application for consent to this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions. Any change in the management shall be informed to the Board. The person authorized should not let out the premises / lend / sell / transfer their industrial premises without obtaining prior permission of the State Pollution Control Board.
- 10.Any person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules 1982, to Appellate authority constituted under Section 28 of the Water(Prevention and Control of Pollution) Act, 1974 and Section 31 of the Air(Prevention and Control of Pollution) Act, 1981.
- 11. The industry shall be liable to pay Environmental Compensation / Other Environmental Taxes, if any environmental damage caused to the surroundings, as fixed by the Collector & District Magistrate or any other competent authority as per the Rules in vogue.
- 12. The industry may explore the possibility of tapping the solar energy for their energy requirements.
- 13. The industry should educate the workers and nearby public of possible accidents and remedial measures.

SCHEDULE - B

- 1. The industry shall comply with the following conditions within stipulated time, failing which the bank guarantee of Rs. 5 lakhs submitted by the industry will be forfeited without any notice:
- i. The industry has not provided automatic water sprinkler system all along the roads to minimize the dust emission as per the CFO. <u>The industry shall install automatic</u> water sprinkler system within 3 months i.e., before 01.03.2021.
- ii. The raw materials storage shed to store materials like coal, red mud, gypsum, iron ore is insufficient and the materials are kept in open. <u>The industry shall construct</u> sheds for storage of raw materials within 6 months i.e., before 01.06.2021 and shall not store the raw material and clinker in open.

WATER POLLUTION:

2. The source of water is borewell. The industry should take steps to reduce water consumption to the extent possible and consumption should NOT exceed the quantities mentioned below:

| S.no | Purpose | Quantity |
|------|---------------------------|----------|
| 1. | Cooling (Cement Process) | 500 KLD |
| 2. | Domestic (Plant & Colony) | 200 KLD |
| | Total: | 700 KLD |

- 3. Separate flow meters with totalisers to necessary pipe-line shall be provided for assessing the quantity of water used for each of the purposes mentioned above.
- 4. The industry shall comply the following effluent standards based on the disposal points permitted:

| Outlet No. | Parameter | Limiting standards |
|---------------|--|-----------------------|
| 1 | рН | 5.5 - 9.0 |
| | Total Suspended solids | <100 mg/l |
| | BOD | 30 mg/l |
| | Oil and Grease | 10 mg/l |
| | Fecal coliform (FC) (Most Probable Number per 100 milliliter, MPN/100 ml) | < 1000 |

| Outlet No. | Parameter | Limiting standards |
|----------------|------------------------|--------------------|
| 2 | рН | 5.5 - 9.0 |
| | Total Suspended solids | <100 mg/l |
| BOD | | 30 mg/l |
| Oil and Grease | | 10 mg/l |
| | | |

- 5. The industry shall construct separate storm water drains and provide rain water harvesting structures on the available up-stream portion of the plant to recharge ground water.
- 6. The industry shall not wash the freighted vehicles within the industry premises.
- 7. The industry should not discharge any waste water within or outside the premises under any circumstances.

AIR POLLUTION:

8. The industry shall not contain constituents in excess of the prescribed limits mentioned below, as notified by the MoEF&CC, GoI vide G.S.R. No. 612 (E), dated 25.08.2014 and G.S.R. No. 497 (E), dated 10.05.2016.

| Chimney No. | Parameter | Emission Standards | |
|-------------|---|------------------------|--|
| 1 to 4 | Particulate Matter (PM) * | 30 mg/Nm ³ | |
| | SO ₂ ** | 100 mg/Nm ³ | |
| | NO _X | 800 mg/Nm ³ | |
| | * The norms of SO2 & NOx shall be applicable to kiln only | | |
| | ** Assuming pyritic sulphur to the limestone is less than 0.25 $\%$ | | |

* Particulate Matter from Rotary Kiln based plants - raw mill, kiln and pre-calciner system put together shall not exceed 0.125 Kg/tonne of clinker.

 The industry shall comply with ambient air quality standards of PM10 (Particulate Matter size less than 10mm) - 100 mg/ m3; PM2.5 (Particulate Matter size less than 2.5 mm) - 60 mg/ m3; SO2 - 80 mg/ m3; NOx - 80 mg/m3, outside the factory premises at the periphery of the industry.

Standards for other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No.B-29016/20/90/PCI-I, dated 18.11.2009.

Noise Levels: Day time (6 AM to 10 PM) - 75 dB (A)

Night time (10 PM to 6 AM) - 70 dB (A)

- 10.The industry shall comply with emission limits for DG sets of capacity upto 800 KW as per the Notification G.S.R.520 (E), dated 01.07.2003 under the Environment (Protection) Amendment Rules, 2003 and G.S.R.448(E), dated 12.07.2004 under the Environment (Protection) Second Amendment Rules, 2004. In case of DG sets of capacity more than 800 KW shall comply with emission limits as per the Notification G.S.R.489 (E), dated 09.07.2002 at serial no.96, under the Environment (Protection) Act, 1986.
- 11. The industry shall provide concrete roads in the plant and water shall be sprinkled on the roads periodically to control the fugitive dust emissions. Vacuum / pneumatic dust collection system shall be used for cleaning the internal roads.
- 12. The industry shall provide vehicle mounted mechanical sweeper for regular cleaning of dust on the roads, plant floors and other dust areas in the premises
- 13. The industry shall maintain the mechanized dust suppression system (MDSS) to control fugitive emissions effectively to control the dust emissions. The mechanized dust suppression system should be operated continuously to ensure compliance of AAQ standards consistently.
- 14. The industry shall maintain adequate dust collection and extraction system to control fugitive emissions at various material transfer points & the dust collected from pollution control equipments shall be recycled back into the process.
- 15. The industry shall maintain and submit the records of daily operating hours of kiln, ESP and reasons for ESP tripping to RO on monthly basis.
- 16. The Bag house shall be designed such that 25% of additional capacity is available as spare to meet the emergency requirements.
- 17.A sampling port with removable dummy of not less than 15 cm diameter shall be provided in the stack at a distance of 8 times the diameter of the stack from the nearest constraint such as bends etc. A platform with suitable ladder shall be provided below 1 meter of sampling port to accommodate three persons with instruments. A 15 AMP 250 V plug point shall be provided on the platform.
- 18. The industry shall maintain interlocking system for air pollution control equipment and raw material feeding system to regulate the feeding of raw material into the kiln, so that feeding of raw material would be stop in case of failure of air pollution control equipment.
- 19. The industry shall provide and maintain continuous stack emission monitoring system for all the major stacks and the data generated shall be networked with APPCB and CPCB for web display as per CPCB directions.
- 20. The industry shall ensure the online continuous monitoring systems provided by the industry are properly programmed and linked to the PLC so as to indicate representative values, particularly during the failure or non operation of the pollution control systems.
- 21. The industry shall ensure regular maintenance and operation of on-line stack monitoring systems and CAAQM stations with the tamper proof mechanism and having facilities for online calibration.
- 22. The noise levels in and around the plant shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures, etc., on all sources of noise generation.

GENERAL:

23. The industry shall not increase the capacity beyond the permitted capacity

mentioned in this order, without obtaining CFE & CFO of the Board.

- 24. The industry shall not store the fuels, raw materials and wastes in open area. They shall be transported / receive in covered conditions to control fugitive emissions & odour nuisance.
- 25.All the bag filter dust, raw material dust, coal dust, clinker dust and cement dust from pollution control devices shall be 100% recycled and reused in the process and used for cement manufacturing.
- 26.The industry shall maintain the following records and the same shall be made available to the inspecting officers of the Board:
- a. Daily production details.
- b. Quantity of Effluents generated, treated, recycled/reused and disposed.
- c. Log Books for pollution control systems.
- d. Characteristics of effluents and emissions.
- e. Hazardous/non hazardous solid waste generated, received, used as alternative raw material, used as alternative fuel and disposed.
- f. Inspection book.
- g. Manifest copies of effluents / hazardous waste.
- 27. The industry shall implement the Fly ash notification. 2009 and its amendments thereof.
- 28. The industry shall store fly ash in silos and hall be conveyed through pneumatic conveyor for utilization in cement manufacture.
- 29. The industry shall furnish details of fly ash brought from the nearby Coal based Thermal Plants on quantity of fly ash consumed per each ton of product, inventory of fly ash at on-site along with details of measures implemented to mitigate fugitive emissions at various transfers to the RO for every three months.
- 30. The industry shall regularly operate the Sewage Treatment Plant for treatment of domestic effluents and shall comply the standards before utilizing the treated waste water for onland for irrigation.
- 31.Solid waste from sewage treatment plant (STP) shall be used as manure. No solid waste shall be disposed off from the cement plant.
- 32. The industry shall maintain the records on the clinker production, utilized for cement production and stocks maintained at on site and should submit consolidated reports to the Regional Office of the Board.
- 33. The industry shall maintain 33% of the green belt with tall growing trees in the industry premises.
- 34. The industry shall comply with standards and directions issued by CPCB / MoEF&CC as and when notifications are issued.
- 35.The industry shall comply with all the conditions stipulated in the Environmental Clearance dt.26.02.2010 and 03.05.2019 and CFE order dated 09.08.2010.
- 36. The industry shall comply with all the directions issued by the Board from time to time.

SPECIAL CONDITIONS:

- 1. The industry shall furnish opening and closing stock of Pet Coke along with quantity of Pet Coke consumption during the month to the Board on quarterly basis.
- 2. VOC meters with real time data transmission facility through internet of things (IoT) shall be installed near the hazardous waste storage area & blending and mixing area and link to the servers of APPCB, within 3 months.
- 3. The industry shall prepare a safety report and carry out an independent safety audit

report of the respective industrial activities including chemical storages / isolated storages by an expert not associated with such industrial activity as required under Rule 10 of MSIHC Rules, 1989 and get it approved by the Factories Dept., and submit the compliance along with copy of the safety report, safety audit report and safety certificate at concerned Regional Office, APPCB.

- 4. The industries and isolated storages that are storing hazardous chemicals less than the threshold quantities mentioned under MSIHC Rules, 1989 shall submit safety certificate to the concerned Regional Office, APPCB
- 5. The industry shall submit a copy of the NOC issued by the Andhra Pradesh State Disaster Response and Fire Service Dept., (APSDRFSD) at concerned Regional Office, APPCB

<u>SCHEDULE - C</u>

[See rule 6(2)]

[CONDITIONS OF AUTHORISATION FOR OCCUPIER OR OPERATOR HANDLING HAZARDOUS WASTES]

1. The following acceptance criteria shall be followed for utilization of Hazardous waste in the rotary kiln.

Specification of HW for use as Alternative raw material:

| Parameter | Limit |
|--|------------|
| Volatile Organic Hydrocarbon | < 5000 ppm |
| Total Organic Carbon(TOC) | < 1000 ppm |
| $CaO+Sio_2+A_{12}O_3+Fe_2O_3+SO_3(in Ash)$ | > 80% |
| Chloride | < 1.5% |
| Sulphur | < 1.5% |
| PCB/PCT(ppm) | < 5.0 |
| Heavy Metals (ppm) | |
| Hg | < 10 |
| Cd+Ti+Hg | < 100 |
| As+Co+Ni+Se+Te+Sb+Cr+Sn+Pb+V | < 10000 |

Specification of HW for use as Energy recovery:

| Parameter | Limit |
|-----------------------------------|----------------|
| Calorific Value As received basis | >2500 k Cal/Kg |
| Ash | |
| -Liquid | < 5% |
| -Solid | < 20% |
| Chloride | < 1.5 % |
| Halogens (F+Br+I) | < 1.0 % |
| Sulphur | < 1.5 % |
| PCB/PCT (ppm) | < 50 |
| Heavy Metals (ppm) | |
| Hg | < 10 |
| Cd+Tl+Hg | < 100 |
| As+Co+Ni+Se+Te+Sb+Cr+Sn+Pb+V | < 2500 |
| рН | 4 To 12 |
| Viscosity (cSt) for liquid | <100 |

| Flash Point (Deg Centigrade) (for liquid) | >60 | |
|--|-----|--|

- 2. The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
- 3. The authorisation shall be produced for inspection at the request of an officer authorised by the State Pollution Control Board.
- 4. The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.
- 5. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.
- 6. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
- 7. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty".
- 8. It is the duty of the authorised person to take prior permission of the State Pollution Control Board to close down the facility.
- 9. An application for the renewal of an authorisation shall be made as laid down under these Rules.
- 10.Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
- 11.Only the permitted alternate fuels should be used for the co-processing.
- 12. The industry should follow the guidelines for labeling, transportation, storage and disposal of hazardous waste.
- 13. The wastes of high calorific value have to be always fed into the high temperature combustion zones of the Kiln system. Such waste containing stable toxic components should be fed to the main burner to ensure complete combustion in the high temperature and long retention time.
- 14. The industry shall verify the compatibility of the different wastes before blending the waste.
- 15. The industry shall take all safety measures to prevent accidents while handling the hazardous wastes.
- 16. The industry shall take all precautionary measures to prevent odour nuisance and spillages while handling the hazardous wastes.
- 17. The industry shall provide dyke walls for storage tanks / areas to contain spillages.
- 18. The industry shall submit the emission monitoring reports to all the critical parameters, as per the CPCB guidelines for co-processing of hazardous wastes through NABL accredited laboratory.

Specific Conditions:

- 19. The industry shall enter an agreement with the generator to receive of utilizable waste for co-processing.
- 20. The industry shall comply with the provisions of HWM Rules, 2016 in terms of interstate transport of Hazardous Waste and manifest document prescribed Under

Rule 18 and 19 of the HWM Rules, 2016.

- 21. The industry shall not store hazardous waste for more than 90 days as per the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
- 22. The cement plant shall take the hazardous wastes only from the authorized generator through APEMCL.
- 23.Cement industry shall provide adequate covered storage area for the hazardous waste in accordance with hazardous waste Rules and guidelines for storage of hazardous waste. The occupier shall also ensure that there is no leaching of any pollutant.
- 24. The industry shall accept the hazardous waste/ other wastes as a raw material and alternative fuel for co-processing in cement kiln through online manifest system as per Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016.
- 25. The industry shall carryout pre-processing and co-processing of wastes as per the guidelines of CPCB and Standard Operating Procedures (SOPs) specified in the guidelines.
- 26.A log book shall be maintained for the quantity of waste received from generators, storage details & co-processed and same shall be submitted to RO, APPCB on monthly basis.
- 27. The actual quantity of hazardous waste co-processed monthly shall be reported by cement plant and hazardous waste generator to RO, APPCB.
- 28.The industry shall store Used / Waste Oil and Used Lead Acid Batteries in a secured way in their premises till its disposal to the manufacturers / dealers on buyback basis.
- 29. The industry shall receipt the hazardous waste through vehicle fitted with authorized GPS tracking system.
- 30. The industry shall accept the waste through 7 copy online manifest system from generators and a copy shall be submitted to concerned Regional Office of APPCB. The driver who transports Hazardous Waste should be well acquainted about the procedure to be followed in case of an emergency during transit. The transporter should carry a Transport Emergency (TREM) Card.
- 31. The industry shall maintain proper records for Hazardous and Other Wastes stated in Authorisation in Form-3 i.e., quantity of Incinerable waste, land disposal waste, recyclable waste etc., and file annual returns in Form-4 as per Rule 20 (2) of the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
- 32.In case of any violations in the conditions stipulated, the permission can be withdrawn at any time.

The industry shall submit Half yearly compliance reports to all the stipulated conditions in Environmental Clearance (EC), Consent for Establishment (CFE) and Consent for Operation (CFO) through website i.e., https://pcb.ap.gov.in by 1st of January and 1st July of every year. The first half yearly compliance reports shall be furnished by the industry and second half yearly compliance reports shall be the audited through NABL accredited third party.

DR. B.MADHUSUDHANA RAO, JCEE(MSRB), O/o JOINT CHIEF ENVIRONMENTAL ENGINEER4-APPCB To

M/s Sagar Cements (R) Limited,

Gudipadu (V), Yadiki (M),

Ananthapuramu District