



SPEED POST

## STATE POLLUTION CONTROL BOARD, ODISHA

[Department of Forest and Environment, Govt. of Odisha] A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012 Phone-2561909, Fax:2562822, 2560955

E-mail: paribesh1@ospcboard.org / Website: www.ospcboard.org

No. 5119

/ IND-I- CON- 2503

Dt. 31-03-2023

### **CONSENT ORDER**

Sub: Consent for Existing / New operation of the plant under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 and under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981.

Ref: Your online application ID No 4585848, dtd. 16.01.2023

Consent is hereby granted under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act, 1981 and rules framed there under to

Name of the Industry: M/s. MSP Sponge Iron Ltd.

At- Haldiaguna, PO – Gobardhan, Dist – Keonjhar – 758 013

Name of the Occupier & Designation; Mr. Pradip Kumar Dey, Director

Address: 16/s, Block - A, New Alipore, Kolkata-53

This consent order is valid for the period from 01.04.2023 to 31.03.2025

This consent order is valid for the product quantity, specified outlets, discharge quantity and quality, specified chimney/stack, emission quantity and quality of emissions as specified below. This consent is granted subject to the general and special conditions stipulated therein.

#### A. Details of Products Manufactured

| SI. No. | Product  | Quantity                      |
|---------|--|-------------------------------|
| 1)      | Sponge Iron – DRI Kiln (I, II, III & IV) 2 x 50 TPD & 2 x 40 TPD   | 67,500 TPA                    |
| 2)      | Rolling Mill (Oil Fired)   | 52,000 TPA                    |
| 3)      | Iron Ore Pellet Plant  | 7,50,000 TPA                  |
| 4)      | SMS Plant - Induction Furnace (3×5 T/Heat) with Continuous Casting Machine (3x6 Meters Radius 2 Strand) to produce Billets | 63,000 TPA                    |
| 5)      | Iron Ore Beneficiation Plant   | 1 MTPA                        |
| 6)      | Producer Gas Plant (Coal Based)  | 1×864 m³/hr<br>6 x 2850 m³/hr |



B. Discharge permitted through the following outlet subject to the standard

| Outlet<br>No. | Description of outlet                                  | Point of discharge                             | Quantity of discharge | Prescribed standa  |  | dard |  |
|---------------|--|--|-----------------------|--|--|------|--|
| 1.            | Domestic effluent<br>from canteen &<br>Office Building | Treated in<br>STP and<br>used in<br>plantation | No discharge          | pH - 6.5-9.0,<br>BOD - less than 30mg/l TSS - less<br>than 100mg/l and Fecal Coliform<br>(FC) MPN/100ml<1000 |  |      |  |
| 2             | Cooling water  | To be completely recycled                      | No discharge          |  |  |      |  |

C. Emission permitted through the following stack subject to the prescribed standard

| Chimney<br>/ Stack<br>No. | Description of Stack  | Stack<br>height<br>(m) | Quantity of emission (Nm³/hr) | Prescribed<br>Standard   |               |
|---------------------------|---|------------------------|-------------------------------|--------------------------|---------------|
| 1.                        | Common stack attached to ESP of                                 |                        |                               | PM<br>mg/Nm <sup>3</sup> | CO<br>Vol/Vol |
|                           | DRI Kiln – I & II   | 30                     | 60,000                        | 100                      | 1%            |
|                           | DRI Kiln –III & IV  | 30                     | 60,000                        | 100                      |               |
| 2.                        | Stack attached to bag filter of                                 |                        |                               |                          |               |
|                           | Producer Gas Plant (Coal Based)                                 | 18                     | 18,000                        | 100                      |               |
| 3.                        | Common Bag filter attached to DRI<br>Kiln – I,II, III & IV      |                        |                               |                          |               |
|                           | Raw Material Circuit  | 20                     | 15,000                        | 100                      |               |
|                           | Product House (Old)   | 20                     | 16,200                        | 100                      |               |
|                           | Product House (New) & Transfer House                            | 20                     | 11,500                        | 100                      |               |
|                           | Cooler discharge –I &II   | 20                     | 14,000                        | 100                      |               |
|                           | Cooler discharge –III &IV                                       | 20                     | 13,500                        | 100                      |               |
|                           | Coal Injection –I & II  | 20                     | 9,000                         | 100                      |               |
|                           | Coal Injection –III & IV  | 20                     | 9,000                         | 100                      |               |
| 4.                        | Stack attached to bag filter of Induction furnace –I & II       | 15                     | 12,000                        | 100                      |               |
| 5.                        | Stack attached to bag filter of Induction furnace –III          | 15                     | 12,000                        | 100                      |               |
| 6.                        | Stack attached to reheating furnace of Rolling Mill (oil fired) | 25                     |                               | 100                      |               |
| 7.                        | Stack attached to Producer Gas Plant (Coal based)               | 20                     |                               | 100                      |               |
| 8.                        | Stack attached to pellet plant (dryer)                          | 17                     | 18,000                        | 100                      |               |
| 9.                        | 9. Flux grinding section  |                        | 25,000                        | -                        | -             |
| 10.                       | Pulverized coal injection point                                 | 26.5                   | 33,000                        | 100                      |               |
| 11.                       | Main ESP (Travelling Grate)                                     | 50                     | 2,60,000                      | 100                      |               |



#### D. <u>Disposal of solid waste permitted in the following manner</u>

| SI.No. | Type of Solid<br>waste                  | Quantity<br>generated | Quantity<br>to be<br>reused<br>on site | Quantity to be reused off site |              | Description of disposal site.  |
|--------|---|-----------------------|--|--------------------------------|--------------|--|
| 1.     | Dolochar                                | 16875<br>TPM          | Nil                                    |                                | 16875<br>TPM | To be dumped at designated dump site inside plant premises and used for NH construction                      |
| 2.     | Dust from<br>APC Devices<br>of DRI Kiln | 15840<br>TPM          |  |                                | 15840        | To be dumped at designated dump site inside plant premises and used for NH construction                      |
| 3.     | Tailings and PGP Ash                    |                       |  |                                |              | To be disposed of in existing solid waste disposal site inside plant premises.                               |
| 3.     | Induction<br>furnace Slag               | 555 TPM               |  |                                | 555 TPM      | To be dumped at designated dump site inside plant premises and used for low land filling and NH construction |

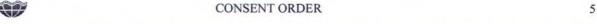
#### E. GENERAL CONDITIONS FOR ALL UNITS

- 1. The consent is given by the Board in consideration of the particulars given in the application. Any change or alternation or deviation made in actual practice from the particulars furnished in the application will also be the ground liable for review/variation/revocation of the consent order under section 27 of the Act of Water (Prevention & Control of Pollution) Act, 1974 and section 21 of Air (Prevention & Control of Pollution) Act, 1981 and to make such variations as deemed fit for the purpose of the Acts.
- The industry would immediately submit revised application for consent to operate to this Board in the event of any change in the quantity and quality of raw material / and products / manufacturing process or quantity /quality of the effluent rate of emission / air pollution control equipment / system etc.
- 3. The applicant shall not change or alter either the quality or quantity or the rate of discharge or temperature or the route of discharge without the previous written permission of the Board.
- 4. The application shall comply with and carry out the directives/orders issued by the Board in this consent order and at all subsequent times without any negligence on his part. In case of non-compliance of any order/directives issued at any time and/or violation of the terms and conditions of this consent order, the applicant shall be liable for legal action as per the provisions of the Law/Act.
- The applicant shall make an application for grant of fresh consent at least 90 days before the date of expiry of this consent order.
- 6. The issuance of this consent does not convey any property right in either real or personal property or any exclusive privileges nor does it authorize any injury to private property or any invasion of personal rights,



- nor any infringement of Central, State laws or regulation.
- 7. This consent does not authorize or approve the construction of any physical structure or facilities or the undertaking of any work in any natural water course.
- 8. The applicant shall display this consent granted to him in a prominent place for perusal of the public and inspecting officers of this Board.
- 9. An inspection book shall be opened and made available to Board's Officers during their visit to the factory.
- 10. The applicant shall furnish to the visiting officer of the Board any information regarding the construction, installation or operation of the plant or of effluent treatment system / air pollution control system / stack monitoring system any other particulars as may be pertinent to preventing and controlling pollution of Water / Air
- 11. Meters must be affixed at the entrance of the water supply connection so that such meters are easily accessible for inspection and maintenance and for other purposes of the Act provided that the place where it is affixed shall in no case be at a point before which water has been taped by the consumer for utilization for any purposes whatsoever.
- Separate meters with necessary pipe-line for assessing the quantity of water used for each of the purposes mentioned below:
- a) Industrial cooling, spraying in mine pits or boiler feed,
- b) Domestic purpose
- c) Process
- 13. The applicant shall display suitable caution board at places where the effluent is entering into any water-body or any other place to be indicated by the Board, indicating therein that the area into which the effluents are being discharged is not fit for the domestic use/bathing.
- 14. Storm water shall not be allowed to mix with the trade and/or domestic effluent on the upstream of the terminal manholes where the flow measuring devices will be installed.
- 15. The applicant shall maintain good house-keeping both within the factory and the premises. All pipes, valves, sewers and drains shall be leak-proof. Floor washing shall be admitted into the effluent collection system only and shall not be allowed to find their way in storm drains or open areas.
- 16. The applicant shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by him to achieve with the term(s) and conditions of the consent.
- 17. Care should be taken to keep the anaerobic lagoons, if any, biologically active and not utilized as mere stagnation ponds. The anaerobic lagoons should be fed with the required nutrients for effective digestion. Lagoons should be constructed with sides and bottom made impervious.
- 18. The utilization of treated effluent on factory's own land, if any, should be completed and there should be no possibility of the effluent gaining access into any drainage channel or other water courses either directly or by overflow.
- The effluent disposal on land, if any, should be done without creating any nuisance to the surroundings or inundation of the lands at any time.
- 20. If at any time the disposal of treated effluent on land becomes incomplete or unsatisfactory or create any problem or becomes a matter of dispute, the industry must adopt alternate satisfactory treatment and disposal measures.
- 21. The sludge generated from treatment units shall be dried in sludge drying beds and the drained liquid shall be taken to equalization tank of treatment plant.
- 22. The effluent treatment units and disposal measures shall become operative at the time of commencement of production.
- 23. The applicant shall provide port holes for sampling the emissions and access platform for carrying out stack sampling and provide electrical outlet points and other arrangements for chimneys/stacks and other sources of emissions so as to collect samples of emission by the Board or the applicant at any time in accordance with the provision of the Act or Rules made therein.
- 24. The applicant shall provide all facilities and render required assistance to the Board staff for collection of samples / stack monitoring / inspection.
- 25. The applicant shall not change or alter either the quality or quantity or rate of emission or install, replace or alter the air pollution control equipment or change the raw material or manufacturing process resulting in any change in quality and/or quantity of emissions, without the previous written permission of the Board.
- 26. No control equipments or chimney shall be altered or replaced or as the case may be erected or re-erected except with the previous approval of the Board.
- 27. The liquid effluent arising out of the operation of the air pollution control equipment shall be treated in the





manner to the meet the prescribed standards by the Board in accordance with the provisions of Water (Prevention and Control of Pollution) Act, 1974 (as amended).

- 28. The stack and ambient monitoring system installed by the applicant shall be opened for inspection to this Board at any time.
- 29. There shall not be any episodal discharge / emission from the premises under normal circumstances.
- 30. In case of such episodal discharge/emissions, the industry shall take immediate action to bring down the discharge / emission within the limits prescribed by the Board. If situation commands, operation of the plant shall be stopped to bring down such discharge / emissions. Report of such accidental discharge /emission shall be brought to the notice of the Board within 24 hours of occurrence.
- 31. The applicant shall keep the premises of the industrial plant and air pollution control equipment clean and make all hoods, pipes, valves, stacks/chimneys leak proof. The air pollution control equipments, location, inspection chambers, sampling port holes shall be made easily accessible at all times.
- 32. Any upset condition in any of the plant/plants of the factory which is likely to result in increased effluent discharge/emission of air pollutants and / or result in violation of the standards mentioned above shall be reported to the Headquarters and Regional Office of the Board by fax / speed post within 24 hours of its occurence.
- 33. The industry has to ensure that minimum three varieties of indigenous species of trees are planted at the density of not less than 1000 trees per acre. The trees may be planted along boundaries of the industries or industrial premises. This plantation is stipulated over and above the bulk plantation of trees in that area.
- 34. The solid waste such as sweeping, wastage packages, empty containers residues, sludge including that from air pollution control equipments collected within the premises of the industrial plants shall be disposed off scientifically to the satisfaction of the Board, so as no to cause fugitive emission, dust problems through leaching etc., of any kind.
- 35. All solid wastes arising in the premises shall be properly classified and disposed off to the satisfaction of the Board by :
  - i) Land fill in case of inert material, care being taken to ensure that the material does not give rise to leachate which may percolate into ground water or carried away with storm run-off.
  - ii) Controlled incineration, wherever possible in case of combustible organic material.
  - iii) Composting, in case of bio-degradable material.

OPISHA

- 36. Any toxic material shall be detoxicated if possible, otherwise be sealed in steel drums and buried in protected areas after obtaining approval of this Board in writing. The detoxication or sealing and burying shall be carried out in the presence of Board's authorized persons only. Letter of authorization shall be obtained for handling and disposal of hazardous wastes.
- 37. If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above requires variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard, vary all or any of such condition and thereupon the applicant shall be bound to comply with the conditions so varied.
- 38. The applicant, his/heirs/legal representatives or assignees shall have no claim whatsoever to the condition or renewal of this consent after the expiry period of this consent.
- 39. The Board reserves the right to review, impose additional conditions or condition, revoke change or alter the terms and conditions of this consent.
- 40 Notwithstanding anything contained in this conditional letter of consent, the Board hereby reserves to it the right and power under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 to review any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Act by the Board.
- 41. The conditions imposed as above shall continue to be in force until revoked under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 and section 21 A of Air (Prevention & Control of Pollution) Act, 1981.
- 42. The industry shall comply to all the conditions stipulated under Charter on Corporate Responsibility for Environmental Protection (CREP) guidelines in a time bound manner as envisaged there in. (if applicable)
- 43. The industry shall comply to the conditions stipulated in CTE order issued by ODISHA State Pollution Control Board.
- 44. The industry shall abide by E(P) Act, 1986 and Rules framed there-under
- 45. In case the consent fee is revised upward or the fees paid is found to be inadequate for any reasons during this period, the industry shall pay the differential fees to the Board (for the remaining years) to keep the consent order in force. If they fail to pay the adequate amount within the period stipulated by the Board the consent order will be revoked without prior notice.
- 46. The Board reserves the right to revoke/refuse consent to operate at any time during period for which



consent is granted in case any violation is observed and to modify/ stipulate additional conditions as deemed appropriate

# GENERAL CONDITIONS FOR UNITS WITH INVESTMENT OF MORE THAN Rs 50 CRORES, AND 17 CATEGORIES OF HIGHLY POLLUTING INDUSTRIES (RED A).

- 1. The applicant shall analyse the effluent / emissions and Ambient Air Quality every month through approved laboratory for the parameters indicated in TABLE- 'B', 'C' & Part -'B' as mentioned in this order and shall furnish the report thereof to the Board on monthly basis.
- 2. The following information shall be forwarded to the Member Secretary on or before 10<sup>th</sup> of every month.
- Performance / progress of the treatment plant.
- Monthly statement of daily discharge of domestic and/or trade effluent.
- 3. Non-compliance with effluent limitations
- a) If for any reason the applicant does not comply with or is unable to comply with any effluent limitations specified in this consent, the applicant shall immediately notify the consent issuing authority by telephone and provide the consent issuing authority with the following information in writing within 5 days of such notification.
- i) Causes of non-compliance
- A description of the non-compliance discharge including its impact on the receiving waters.
- ii) Anticipated time of continuance of non-compliance if expected to continue or if such condition has been corrected the duration or period of non-compliance.
- iii) Steps taken by the applicant to reduce and eliminate the non-complying discharge and
- iv) Steps to be taken by the applicant too prevent the condition of non-compliance.
- b) The applicant shall take all reasonable steps to minimize any adverse impact to natural waters resulting from non-compliance with any effluent limitation specified in this consent including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.
- c) Nothing in this consent shall be construed to relieve the applicant from civil or criminal penalties for non-compliance whether or not such non-compliance is due to factors beyond his control, such as break-down, electric failure, accident or natural disaster.
- 4. Proper housekeeping shall be maintained inside the factory premises including process areas by a dedicated team.
- 5. The industry must constitute a team of responsible and technically qualified personnel who will ensure continuous operation of all pollution control devices round the clock (including night hours) and should be in a position to explain the status of operation of the pollution control measures to the inspecting officers of the Board at any point of time. The name of these persons with their contact telephone numbers shall be intimated to the concerned Regional Officer and Head Office of the Board and in case of any change in the team it shall be intimated to the Board immediately.
- 6. The industry shall engage dedicated qualified manpower to ensure continuous and effective operation of online stack / Ambient Air Quality / Effluent monitoring stations for maintenance of database, real time data transfer to SPCB server, data analysis and co-ordination with concerned personnel of process units for taking corrective measures in case of non-compliances and to respond to the instructions of SPCB in this matter.
- 7. All employees of the industry including officers, staff, workers, contract workers involved in operation/maintenance/ supervision of process area, pollution control areas, raw material and waste handling areas shall undergo short term training at least twice in a year in the field of pollution control and environment protection to create awareness and develop green skill. The report on the activities along with details and photographs shall be submitted to the Board on annual basis by end of June for previous financial year.
- ISO auditing reports of the industry in the field of environment shall be submitted to the Board every year on annual basis.
- 9. The environmental cell shall be established and upgraded effectively to guide, monitor the pollution control and environmental protection activities inside the industries on day to day basis to ensure that the conditions stipulated in the consent to establish/operate order of the SPCB and conditions imposed in EC and provisions of various environmental acts and rules are complied with and the report returns, compliances are submitted to the Board in due time.
- 10. Adequate numbers of scientific / technical persons having qualification in environmental engineering/ environmental science from recognized institution/ university must be engaged or appointed along with other interdisciplinary qualified persons to effectively implement and monitor different areas of environment management and regulatory compliances including air pollution control, water pollution control, online monitoring, real time data transmission, management of solid waste, hazardous waste, E-waste, plastic waste etc. The Head of the environmental cell should be a senior level official, who will directly report to the plant head to ensure that



environmental management is performed effectively to ensure compliance to the environmental norms on priority basis

11. Energy consumption data of different pollution control devices like ESP/ Bag filter/ Scrubber/ Cyclone/ Gas cleaning plant/ Fume treatment plant/ ETP/STP/Flow meters (treated effluent recycling) shall be collected online on real time centralized platform/ dashboard with data storage facility and generate tamperproof monthly / periodic reports, which shall be analysed by Energy Auditor, certified by Bureau of Energy Efficiency and accordingly the Energy Management / preventive maintenance of Pollution Control equipment shall be adopted. The energy management of process and pollution control devices shall be practiced to record the progressive achievements to minimize energy consumption in order to reduce greenhouse gas emission.

12. The post EIA monitoring schedule should be strictly followed for different parameters around the plant for the units is covered under EIA notification. The industry shall also conduct noise level study in the core zone and

buffer zone of the industry and submit 6 monthly report to the Board.

#### F. SPECIAL CONDITIONS:

- The industry shall comply the conditions stipulated in CTE order issued vide letter No. 20799, dtd. 27.12.2021 and certificate on No Increase in Pollution load issued vide letter No. 13532, dtd. 03.09.2021.
- The industry shall enhance the production of sponge iron by reducing the coal consumption and increasing the iron ore feeding in the existing DRI kilns. The bulk density of iron ore and coal and the creation of extra vacant space, additional iron ore shall be fed with lower intake of coal (high grade) leading to produce additional 13,500 TPA (25%) of DRI.
- The industry shall enhance the production of iron ore pellet by increasing all raw materials feeding rate by 1.25 times.
- 4. The industry shall achieve the enhanced SMS production by reducing the raw material i.e., sponge iron and increasing the other materials like scrap, pig iron, slag crushed material, Ferro Alloys and Pet Coke and changing the charge mix with increasing heats from 10 heats to 12 heats / day with spare crucible attached to all induction furnaces.
- The industry shall achieve the enhance production of Rolling Mill by increasing the operating days from 330 days to 350 days and increasing the working hours from 12 hours to 14 hours in a day.
- 6. All the air pollution control devices like ESPs / GCPs / Bag filters installed at various process units shall be maintained, operated efficiently and continuously so that particulate matter emission from the stack shall meet the prescribed standard of the Board as indicated in 'Table-C'. The industry shall ensure continuous and effective operation of all the APC devices through preventive maintenance.
- 7. All the potential fugitive dust generating areas of all the process units shall be covered with the adequate suction points. Fume generated from the induction furnaces shall be collected through adequately designed swiveling hoods. The collected dust / fumes shall be treated in the GCPs / Bag filters/ Scrubbers.
- 8. There shall be no leakage of flue gas through the emergency caps, slip rings or any other process areas of DRI kilns except during exigencies.
- 9. All the online continuous stack emission monitoring systems (CEMS) for measurement of particulate matter and gaseous pollutants shall be operated effectively & uninterruptedly and real time monitoring data so generated shall be transmitted directly to RT-DAS server of the Board without passing through any local PC or server.



- 10. The installed HD IP camera shall be operated continuously so that video streaming shows in server of the Board on interruptedly.
- 11. The industry shall strictly follow the guidelines for continuous Emission Monitoring Systems dtd. August, 2018 for PM and other gaseous pollutants.
- 12. The industry shall ensure tamper proof real time transmission of online monitoring data to the server of CPCB and SPCB and maintain the health of the analyzers and data connectivity through valid AMC.
- 13. The Pneumatic Dust Handling system installed at the hoppers of all the ESPs and bag filters shall be operated continuously and effectively so that no fugitive dust nuisance is created.
- 14. Telescopic chute shall be installed at the bottom of hoppers/silo wherever applicable to prevent emission of fugitive dust during material transfer/unloading.
- 15. Iron ore and coal used in the plant shall be stored under covered shed. Material storage area of the plant, approach roads shall be covered with adequate sprinkling facility. The water sprinkling system shall be kept operational all the time to avoid any fugitive dust nuisance.
- 16. Dust suppression facilities by provision of adequate water sprinkling shall be made at the active dumping area and roads to prevent dust nuisance in the area.
- 17. Good housekeeping practice shall be followed to improve the work environment inside the CCM plant.
- 18. The industry shall comply with all the stipulations contained in the Gazette Notification of Govt. of India vide No. 155, dtd. 31.03.2012 (copy enclosed). For emission standard, the details of 'Table-C' of this order is applicable.
- 19. The performance evaluation of ESP, bag filter, air pollution control devices, online CEMS, AAQMS & surveillance cameras shall conducted by reputed institute like NIT / IIT and annual report shall be submitted to the Board by end of June for the previous financial year.
- 20. The digital display board installed at the main gate shall be of minimum size of 6ft x 4ft as stipulated by CPCB with provision of display of real time data online analysers (CEMS, CAAQMS & CEQMS), so that the public can visualize the actual emission and the values of parameters displayed at the gate. Outdoor LED video screens should be preferred for digital display of environmental parameters, CTO and authorization conditions and awareness clippings on environment at the main gate, colony area and process area.
- 21. Online analysers for measuring flow, temperature and velocity of flue gas shall be installed at the stacks and integrated with online CEMS data.
- 22. Online CO / Ammonia/ Chlorine and such other gas monitoring system shall be installed in every process area where such toxic gas are expected to be generated and in the plant premises along with alarm system to avoid accidental hazards due to gas leakage.
- 23. Accumulation of dust and other solid waste in the work zone and non-dumping areas inside the factory premises shall be avoided. The work zone shall be properly cleaned either manually or mechanically every day and the dust so collected shall be disposed off in the designated dump site.
- 24. The approach roads and all the internal roads shall be fully concreted / blacktopped. All the roads shall be cleaned periodically to avoid accumulation of dust. Adequate sprinkling



facility, preferably by fixed water sprinklers shall be provided alongside all the internal roads to prevent generation of fugitive dust during vehicular movement.

- 25. D.G. sets should be acoustically enclosed with anti-vibration measures and equipped with A.M.F. (Auto Mains Failure Device) for auto changeover of power supply from grid to D.G. in the event of power failure. The AMF Panel should preferably be PLC (Programmable Logic Control) based. Dedicated D.G. sets of adequate capacity shall be installed to ensure adequate standby power supply to run all pollution control devices of the plant in the event of power failure.
- 26. The industry shall put up sign Boards at appropriate places with nomenclature of the stacks in consultation with Regional Officer of the Board. It shall install electronic display Board in front of main gate to display the monitoring data, prescribed standard for public information.
- 27. The ambient air quality shall confirm to the National Ambient Air Quality standard as per the notification of MoEF, Govt. of India, dated 16 Nov 2009 (Annexed).

#### WATER POLLUTION CONTROL

- Under no circumstances there shall be discharge of any effluent to outside the factory premises. Wastewater generated from the ETP outlet of producer gas plants shall be reused. Water used for cooling purposes shall also be fully recycled.
- The existing STP shall meet the prescribed standards prescribed by MoEF & CC vide notification G.S.R 1265(E) dtd.13th October 2017 as follows; pH - 6.5-9.0, BOD - less than 30mg/l TSS - less than 100mg/l and Fecal Coliform (FC):MPN/100ml<1000.</li>
- The runoff water from the whole factory premises including solid waste dumping area shall be collected through dedicated garland drains and shall be adequately treated by a series of settling tanks of appropriate capacity so as to meet the prescribed standard of the Board before discharge to outside / reused.
- 4. Mill scales generated from CCM shall be stored in designated area inside the factory premises and finally disposed to outside party.
- The industry shall operate mechanical wheel washing system with treatment facilities for wash water at the exit gate.
- The performance evaluation of ETP, STP, online CEQMS & Web cameras, flow meter shall conducted by reputed institute like NIT / IIT and annual report shall be submitted to the Board by end of June for previous financial year.
- 7. Flow meter and level sensors with telemetry system should be installed in the bore wells as stipulated by Central Ground Water Authority/ Water Resources Department.
- 8. The industry shall conduct surface run off management study and develop rain water harvesting structures and surface runoff treatment systems inside the premises.
- 9. Dumping of solid waste shall be made at designated locations in a systematic manner with proper engineering applications by providing proper slope, angle, berms, height, toe wall, retaining wall and road network. The active dumping area shall be kept at minimum. The exhausted dump area shall be technically reclaimed by spreading a layer of soil with proper compaction and consolidation. Biological reclamation of the same shall be made by planting saplings of appropriate species. Adequate provision for watering of plants and protection of trees shall be made.
- 10. Domestic solid waste generated from colony, canteen, office complex etc. shall be processed through mechanically operated waste converters with facility for recovery of useful products like oil/ gas/ carbon/ metal/ compost etc. The products to be used by the industry or sold and the inorganic residues is to be used for captive consumption/ sold / disposed in sanitary landfill developed inside the premises.



- 11. The industry shall have adequate space at point of time for waste disposal at least for a period of next year. Before using any new patch of land / site for solid waste dumping, the industry shall obtain prior consent to establish of the Board.
- 12. Consent to operate is subject to availability of all other statutory clearances required under relevant Acts / Rules and fulfillment of required procedural formalities.

#### G. Additional Conditions:

- a) The unit shall not operate Wire Rod Mill till obtaining prior CTO from the Board.
- b) 03 nos. of Earthen Settling Ponds provided for beneficiation plant, Pellet plant and PGP plant for storage of wash effluent from above areas shall be made concreted/ HDPE lined to prevent any contamination to the ground water with facilities for 100% recycling within 06 months.
- c) The Effluent Treatment Plant (ETP) for PGP shall be upgraded before reuse of treated effluent within 03 months.
- d) The industry shall provide dry fog system at Pellet Plant Screen Building to control fugitive emission within 02 months.
- e) The internal roads of the plant connecting to SMS to Iron Stack Yard (300 m approx), Road adjacent to Kiln IV (200m) shall be concreted / black topped within 06 months.
- f) The unit shall provide toe wall and spill collection system at tailings storage area to avoid wash out during rain within 03 months.
- g) The unit shall provide Telescopic chute at the bottom of hoppers/silo within 03 months.
- h) The unit shall explore diversion drain all along North West side (up heal) direction for diversion of runoff from the hill area to prevent entry of rain water to the plant.
- The unit shall not use furnace oil as fuel in the Rolling Mill as per the Fuel Policy of Govt. Odisha.

The occupier must comply with the conditions stipulated in section A, B, C, D, E, F & G keep this consent order valid.

To,

The Director, M/s. MSP Sponge Iron Limited, At - Haldiaguna, Po – Gobardhan, Dist – Keonjhar – 758 013

Encl: As above

MEMBER SECRETARY

STATE POLLUTION CONTROL BOARD, ODISHA

Memo No. 5120

\_\_/Dt. 31-03 2023

Copy forwarded to;

- Regional Officer, State Pollution Control Board, Keonjhar
- ii) District Collector , Keonjhar
- iii) D.F.O, Keonjhar
- iv) Director of Mines, Odisha, Bhubaneswar
- v) Director Factories & Boiler, Bhubaneswar
- vi) Consent Register / HWM Cell, Bhubaneswar

CHIEF ENV. ENGINEER

STATE POLLUTION CONTROL BOARD, ODISHA



# General Standards for discharge of environment pollutants PART-A: EFFLUENTS

| Si.No.                     | Parameters  | Standards  |                  |                     |  |
|----------------------------|---|--|------------------|---------------------|--|
|                            |   | inland surface   | Public<br>sewers | Land for irrigation | Marine Costal Areas  |
|                            |   | (a)  | (b)              | (c)                 | (d)  |
| 1.                         | Colour & odour  | Colourless/Odou<br>rless as far as<br>practible            |                  | See 6 of<br>Annex-1 | See 6 of Annex-1   |
| 2. Suspended Solids (mg/l) |   | 100  | 600              | 200                 | For process wastewater – 100 b. For cooling water effluent 10% above total suspended matter of influent. |
| 3.                         | Particular size of SS                                       | Shall pass 850   |                  |                     |  |
| 5.                         | pH value  | 5.5 to 9.0   | 5.5 to 9.0       | 5.5 to 9.0          | 5.5 to 9.0   |
| 6. Temperature             |   | Shall not exceed 5°C above the receiving water temperature |                  |                     | Shall not exceed 5°C above the receiving water temperature   |
| 7.                         | Oil & Grease mg/l max.                                      | 10   | 20               | 10                  | 20   |
| 8.                         | Total residual chlorine                                     | 1.0  |                  |                     | 1.0  |
| 9.                         | Ammonical nitrogen (as N) mg/l max.                         | 50   | 50               |                     | 50   |
| 10.                        | Total Kajeldahl nitrogen (as NH <sub>3</sub> ) mg/1 max.    | 100  |                  |                     | 100  |
| 11.                        | Free ammonia (as NH <sub>3</sub> ) mg/1 max.                | 5.0  |                  |                     | 5.0  |
| 12.                        | Biochemical Oxygen<br>Demand (5 days at<br>(20°C) mg/1 max. | 30   | 350              | 100                 | 100  |
| 13.                        | Chemical Oxygen<br>Demand, mg/1 max.                        | 250  |                  |                     | 250  |
| 14.                        | Arsenic (as As) mg/1 max.                                   | 0.2  | 0.2              | 0.2                 | 0.2  |
| 15.                        | Mercury (as Hg) mg/1 max.                                   | 0.01   | 0.01             |                     | 0.001  |
| 16.                        | Lead (as pb) mg/1 max.                                      | 01.  | 1.0              |                     | 2.0  |





| 17. | Cardmium (as Cd) mg/1 max.   | 2.0   | 1.0  |  | 2.0   |
|-----|--|---|--|--|---|
| 18. | Hexavalent Chromium (as Cr + 6) mg/l max.                              | 0.1   | 2.0  |  | 1.0   |
| 19. | Total Chromium (as Cr) mg/l max.                                       | 2.0   | 2.0  |  | 2.0   |
| 20. | Copper (as Cu) mg/l max.   | 3.0   | 3.0  | *** quy quy *** quy *** quy quy AA                               | 3.0   |
| 21. | Zinc (as Zn) mg/l max.   | 5.0   | 15   | ****   | 15  |
| 22. | Selenium (as Sc) mg/l<br>max.  | 0.05  | 0.05   |  | 0.05  |
| 23. | Nickel (as Nil) mg/l max.  | 3.0   | 3.0  |  | 5.0   |
| 24. | Cyanide (as CN) mg/l max.  | 0.2   | 2.0  | 0.2  | 0.02  |
| 25. | Fluoride ( as F) mg/l<br>max.  | 2.0   | 15   |  | 15  |
| 26. | Dissolved Phosphates (as P) mg/l max.                                  | 5.0   |  | *******  |   |
| 27. | Sulphide (as S) mg/l max.  | 2.0   |  | ~~~~   | 5.0   |
| 28. | Phennolic compounds as (C <sub>6</sub> H <sub>5</sub> OH) mg/l max.    | 1.0   | 5.0  |  | 5.0   |
| 29. | Radioactive materials a. Alpha emitter micro curle/ml. b. Beta emitter | 10 <sup>7</sup>   | 10 <sup>7</sup>  | 10 <sup>8</sup>  | 10 <sup>7</sup>   |
|     | micro curle/ml.  |   |  |  |   |
| 30. | Bio-assay test   | 90% survival of<br>fish after 96<br>hours in 100%<br>effluent | 90% survival<br>of fish after<br>96 hours in<br>100%<br>effluent | 90% survival<br>of fish after<br>96 hours in<br>100%<br>effluent | 90% survival of fish after<br>96 hours in 100% effluent |
| 31  | Manganese (as Mn)  | 2 mg/l  | 2 mg/i   | 40000000   | 2 mg/l  |
| 32. | Iron (Fe)  | 3 mg/l  | 3 mg/l   |  | 3 mg/l  |
| 33. | Vanadium (as V)  | 0.2 mg/l  | 0.2 mg/l   |  | 0.2 mg/l  |
| 34. | Nitrate Nitrogen   | 10 mg/l   |  |  | 20 mg/l   |

#### 13

#### CONSENT ORDER



#### PART -B - NATIONAL AMBIENT AIR QUALITY STANDARDS

| Sl. | Pollutants   | Time Weighed | Concentrate of Ambient Air                         |  |  |  |  |  |
|-----|--|--------------|--|--|--|--|--|--|
| No. |  | Average      | Industrial<br>Residential, Rural<br>and other Area | Ecologically Sensitive Area (notified by Central Government) | Methods of Measurement   |  |  |  |
| (1) | (2)  | (3)          | (4)  | (5)  | (6)  |  |  |  |
| 1.  | Sulphur Dioxide (SO <sub>2</sub> ),<br>µg/m <sup>3</sup>               | Annual *     | 50   | 20   | -Improved west and Gaeke   |  |  |  |
|     | μg/ III  | 24 Hours **  | 80   | 80   | - Ultraviolet fluorescence   |  |  |  |
| 2.  | Nitrogen Dioxide<br>(NO <sub>2</sub> ), μg/m <sup>3</sup>              | Annual *     | 40   | 30   | - Modified Jacob & Hochheiser<br>(Na-Arsenite)   |  |  |  |
|     | (),   6, -   | 24 Hours **  | 80   | 80   | - Chemiluminescence  |  |  |  |
| 3.  | Particulate Matter (size less than 10μm) or                            | Annual *     | 60   | 60   | -Gravimetric<br>- TOEM   |  |  |  |
|     | $PM_{10}\mu g/m^3$   | 24 Hours **  | 100  | 100  | - Beta Attenuation   |  |  |  |
| 4.  | Particulate Matter (size less than 2.5µm) or                           | Annual *     | 40   | 40   | -Gravimetric<br>- TOEM   |  |  |  |
|     | $PM_{2.5} \mu g/m^3$   | 24 Hours **  | 60   | 60   | - Beta Attenuation   |  |  |  |
| 5.  | Ozone (O <sub>3</sub> ) µg/m <sup>3</sup>                              | 8 Hours **   | 100  | 100  | - UV Photometric<br>- Chemiluminescence  |  |  |  |
|     |  | 1 Hours **   | 180  | 180  | - Chemical Method  |  |  |  |
| 6.  | Lead (Pb) μg/m <sup>3</sup>  | Annual *     | 0.50   | 0.50   | -AAS/ICP method after<br>sampling on EMP 2000 or   |  |  |  |
|     |  | 24 Hours **  | 1.0  | 1.0  | equivalent filter paper ED-XRF using Teflon filter   |  |  |  |
| 7.  | Carbon Monoxide<br>(CO) mg/m³  | 8 Hours **   | 02   | 02   | - Non Dispersive Infra Red<br>(NDIR)   |  |  |  |
|     |  | 1 Hours **   | 04   | 04   | Spectroscopy   |  |  |  |
| 8.  | Ammonia (N11 <sub>3</sub> )<br>μg/m <sup>3</sup>                       | Annual*      | 100  | 100  | -Chemiluminescence<br>- Indophenol Blue Method   |  |  |  |
|     |  | 24 Hours**   | 400  | 400  |  |  |  |  |
| 9.  | Benzene (C <sub>6</sub> H <sub>6</sub> ) μg/m <sup>3</sup>             | Annul *      | 05   | 05   | <ul> <li>-Gas Chromatography based continuous analyzer</li> <li>- Adsorption and Desorption followed by GC analysis</li> </ul> |  |  |  |
| 10. | Benzo (a) Pyrene<br>(BaP)-Particulate phase<br>only, ng/m <sup>3</sup> | Annual*      | 01   | 01   | -Solvent extraction followed by HPLC/GC analysis   |  |  |  |
| 11. | Arsenic (As), ng/m³  | Annual*      | 06   | 06   | -AAS/ICP method after<br>sampling on EPM 2000 or<br>equivalent filter paper  |  |  |  |
| 12. | Nickel (Ni),ng/m³  | Annual*      | 20   | 20   | -AAS/ICP method after<br>sampling on EPM 2000 or<br>equivalent filter paper  |  |  |  |

<sup>\*\*</sup> Annual arithmetic mean of minimum I04 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

<sup>\*\* 24</sup> hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year, 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.