JSW Energy (Barmer) Limited
Village & Post: Bhadresh, Post Box No. 30,
Distt: Barmer – 344001 (Rajasthan)
CIN: U31102MH1996PLC185098
Fax: +91 2982 229222
Website : www.jsw.in

Ref: JSWE(B)L/ENV/25-26/009 **Date: 10.06.2025**

To,

The Member Secretary
Rajasthan State Pollution Control Board
4-Institutional Area, Jhalana Doongari,
Jaipur – 302004

Sub: Compliance Report – Consent to Operate for 1080 MW Lignite based Power Plant at Village-Bhadresh, District Barmer.

Ref: Consent to Operate

1. Compliance to CTO for Unit 1 & 2, File No. **F(Tech)/Barmer (Barmer)/5153(1)/2023-2024/5821-5823**; Order No. **2023-2024/Power/3, Dt: 05/12/2023.**
2. Compliance to CTO for Unit 3 & 4, File No. **F(Tech)/Barmer (Barmer)/5153(1)/2023-2024/5925-5927**; Order No. **2023-2024/Power/4, Dt: 08/12/2023.**
3. Compliance to CTO for Unit 5 & 6, File No. **F(Tech)/Barmer (Barmer)/3(1)/2008-2009/6524-6526**; Order No. **2021-2022/CPM/8556**, Dt: **10/02/2022.**
4. Compliance to CTO for Unit 7 & 8, File No. **F(Tech)/Barmer (Barmer)/3(1)/2008-2009/6527-6529**; Order No. **2021-2022/CPM/8557**, Dt: **10/02/2022.**

Dear Sir,

With reference to Consent to Operate issued for Unit # 1-2, 3-4, 5-6 and 7-8 for operating 1080 MW (8 x 135 MW) Lignite Based Thermal Plant of M/s JSW ENERGY (BARMER) Ltd, Dist.- Barmer, Rajasthan, we herewith submit half-yearly compliance report, for the period pertaining to **October-2024 to March-2025,** for the conditions stipulated in the Consent to Operate issued for this Power Project. Analysis Data has uploaded on JSWEBL website - http://www.jsw.in/energy/about-barmer-plant.

We have taken up the operation activity at the Power Plant as per the conditions stipulated in this Consent to Operate.

Thanking you.

For JSW ENERGY (BARMER) Ltd.

Sharad Chandra Totla
GM (Operation & Maintenance)

Enclosed:

1. Compliance Report
2. Stack monitoring data **_Annexure-I**
3. CEMS Monitoring data **_Annexure-II**
4. AAQ Monitoring data **_Annexure-III**
5. Effluent water data **_Annexure-IV**
6. STP Treated water quality **_Annexure-V**
7. Last compliance report **_Annexure-VI**

C.C. The Regional Officer – RSPCB, Balotara.

Compliance to CTO for Unit 1 & 2

File No. F(Tech)/Barmer (Barmer)/5153(1)/2023-2024/5821-5823
Order No. 2023-2024/Power/3, Dt 05/12/2023

SN	Condition	Compliance
1	That this Consent to Operate is valid for a period from **01/01/2024 to 31/12/2028**	Units are operated during the stipulated period.
2	That this consent is granted for manufacturing / producing following products / by Products or carrying out the following activities or operation/processes or providing following services with capacities of 270 MW.	The 8 x 135 MW lignite-based Power project is designed with a total capacity of 1080 MW. As per this Consent, **Unit 1 & 2** is being operated to generate 270 MW of power.
3	That this consent to operate is for existing plant, process & capacity and separate consent to establish/operate is required to be taken for any addition/modification/alteration in process or change in capacity or change in fuel	Noted and shall be complied
4	That the quantity of effluent generation along with mode of disposal for the Treated effluent. a. Domestic 7.5 KLD b. Industrial -1750 KLD c. Discharge Out Side Premises - NIL	Quantity of waste water generation is not exceed the stipulated. Generated industrial effluent treated through ETP and reuse in process. There would be no discharge outside the plant premises. All treated domestic sewage is being used in green belt development.
5	That the sources of air emissions along with pollution control measures and the Emission standards for the prescribed parameters shall be: **DG Set 1000KVA** Acoustic Enclosure NOx 710ppm NMHC 100 mg/Nm³ Particulate Matter 75 mg/Nm³ CO 150 mg/Nm³ SO2 600 mg/Nm³ Particulate Matter 50 mg/Nm³ NOx 450 mg/Nm³ Hg compounds and its 0.03 mg/Nm³	Boiler System is designed with Circulating Fluidized Bed Technology – we are adding Lime along with Fuel firing. DG Sets are procured of designed to comply with Environmental Emission standard as stipulated. ESP is designed to comply with Stack Emission standard as stipulated.

6	That the trade effluent shall be treated before disposal so as to conform to the Standards prescribed under the Environment (protection) Act-1986 for disposal into Inland surface water.	The trade effluent is being treated in ETP to comply with the stipulation. Regular monitoring is carried out covering the main parameters stipulated.
7	That the trade effluent shall be treated before disposal so as to conform to the Standards prescribed under the Environment (protection) Act-1986 for disposal into Inland surface water.	The trade effluent is being treated in ETP to comply with the stipulation. Regular monitoring is carried out covering the main parameters stipulated.
8	That the industry shall obtain all the necessary permissions from concern authority and district administration Barmer for operation of 270 MW lignite-based power plant.	Noted and being complied
9	That this consent to operate is being issued for production capacity of 2 x 135 MW **(Unit 1 & 2)** thermal power plant.	Noted
10	That the total project cost of unit 1 & 2 is Rs. 1661.97 Crore. The industry shall take/obtain modification in consent to operate after paying fee as applicable.	Noted.
11	That the Charter of Corporate Responsibility for Environment Protection specified for Thermal Power Plants shall be complied.	Being complied.
12	That the industry shall comply with all the standards as prescribed vide MOEF notification No. GSR 826(E) dated 16th Nov,2009 with respect of National Ambient Air Quality Standards.	Being complied.
13	That the unit shall provide and maintain adequate dust collection and extraction system to control fugitive dust emissions at lignite crusher, lignite transfer points and lignite handling and storage areas.	Dust extraction systems are provided at each transfer points of lignite conveyer belt, ash handling system and Bag filters are provided at strategic locations.
14	That the industry shall maintain opacity meter with each boiler stack to monitor the emission level of particulate matter. The monthly observation will be submitted to R.O office along with the reason/clarification for any recorded violation of the	Continuous emission monitors (CEMS) are installed to monitor the emission levels from stacks and same connected to state & central pollution control board service. Monthly CEMS report being submitted to RO office.

15	The Low NOx burners shall be installed at boiler feeding system. That the level of SPM within distance 3-10 M from dust generating source/plant shall not exceed to 600 mg/Nm| in ambient air.	Boiler system is designed on CFBC Technology in which having low NOx generation. Parameters (NOx) with in stipulated limits. Necessary measures are being taken to comply with the stipulation. All the locations are under monitoring
16	That for the control fugitive emission guidelines / code of practice as issued by CPCB will be followed.	Necessary measures are taken to comply with the stipulation.
17	That the project proponent shall undertake measures and ensure that no fugitive fly ash emissions take place at any point of time.	Necessary measures are taken to comply with the stipulation.
18	That no industrials effluent will be discharged from the factory premises in to a Stream or well or sewer or land and the effluent generated from power Plant shall be re-used in the process.	All the effluent is being used inside the plant premises for green belt, road dust suppression and Ash Pond Dust Suppression.
19	The domestic effluent shall be treated up to prescribed standards and shall be Used for plantation/green belt development within the premises.	Domestic Sewage is being treated and using for in house plantation/ green belt development.
20	Ash pond shall be lined with HDPE/LDPE lining or any suitable impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.	The ash pond is lined at the bottom with 0.5 mm thick HDPE geo-membrane, to avoid any leachate to the ground & Adequate safety measures are available to protect Ash dyke.
21	That the total fresh water requirement for unit-1 & 2 shall not exceed 21750.00 KLD (boiler/cooling-21000KLD + domestic – 22.5 KLD + industrial purpose- 600 KLD) which shall be met from IGNP Mohangarh.	Being complied.
22	That the trade effluent shall be treated in ETP comprising of CMB (Central Monitoring Basin) which has two basins of 4000 KLD capacity of each then through HRSCC (clarifier) of capacity 7440 KLD, followed by filters and eventually through RO system which is common for all the units.	Complied
23	That the domestic waste water shall be treated in STP of 100 KLD capacity which is common for all the units.	Being Complied & treated domestic sewage is being used in green belt development.

24	That no ground water shall be abstracted without prior permission from the State Board and the Central Ground Water Authority.	Being complied.
25	That suitable flow measuring devices/meters on the intake source of water, inlet and outlet effluent treatment / sewage treatment plant shall be installed and maintained. Daily record of water consumption, effluent generation and its Treatment and utilization shall be maintained.	Being complied.
26	That the industry shall undertake suitable measures for rain water harvesting for artificial recharge of ground water.	Rain Water Harvesting is conceptualized in the design of the Plant and a Rain Harvesting done.
27	The industry shall comply with the MoEF, Government of India, Notification date 14th September 1999 with till the date amendments relating to fly ash management and shall update the details regarding utilization of fly ash on fly ash portal of CPCB.	Ash is being utilized as per MOEF guidelines and generation & utilization data uploaded on monthly basis on CPCB fly ash Portal.
28	That the industry shall carryout SO2 & NOx monitoring within 3 months from State Board's lab so that the adequacy of pollution control measures & compliance of MoEF & CC notification dated 05.09.2022 can be adjudged.	Monitoring has been carried out from state board's lab on dated 07/03/2024, all parameters (SO2 & NOx) with in stipulated limits.
29	That the industry shall carry out waste water analysis of RO reject water from State Board's lab within 3 months so that possibility of direct water usage in ash quenching etc. from RO reject can be ascertained.	Monitoring has been carried out from state board's lab on dated 07/03/2024, Parameters with in stipulated limits.
30	That the unit shall submit details of solid waste generated from the plant to Regional Officer of the State Board, Balotra**.**	Being Complied
31	That the Thermal power plant shall meet the limits of Boiler as per the Notification dated 07.12.2015 and 05.09.2022 issued by the Ministry of Environment, Forest and Climate Change, Government of India.	Being Complied
32	That industry shall comply with the provisions of Hazardous & other Waste (Management & Transboundary movement) Rules, 2016 and record of daily hazardous waste generation and its disposal shall be maintained.	Being Complied
33	That the industry shall provide acoustic enclosure and adequate stack height of minimum 30 meters with one D.G. set of 1000 KVA (each).	Acoustic enclosure and adequate stack height Provided

34	That the Thermal power plant shall comply with water consumption limit as specified in the Notification dated 07/12/2015 issued by the Ministry of Environment, Forest and Climate Change (MoEF&CC).	Being Complied
35	That the industry shall carryout effluent sampling/stack monitoring/ambient air quality monitoring and submit quarterly analysis report from the State Board laboratory/ laboratory recognized by Ministry of Environment & Forests (MoE&F), Government of India.	Being Complied
36	That the industry shall ensure compliance of ambient air quality standard in respect of noise as prescribed under Environment (Protection) Act & Rules made therein.	Being Complied.
37	That the industry shall comply with the provisions of the Public Liability Insurance Act, 1991.	Being Complied.
38	That suitable measure for rain water harvesting for artificial recharge of ground water shall be taken.	Rain Water Harvesting is conceptualized in the design of the Plant and a Rain Harvesting Done.
39	That cemented roads shall be provided & maintained inside the premises to minimize the fugitive emissions due to vehicular movements.	Inside the premises all interconnected road has been constructed by Cemented & Bituminous and the same maintained well.
40	That the plantation in at least 33% of total area of the project in and around the cement plant shall be carried out & maintained	Being Complied
41	That this consent to operate shall be subject to compliance of any direction or order passed by NGT/Hon'ble Court of Law in the matter.	Noted – Being Complied.
42	That this revised consent letter shall supersede the earlier consent **letter no F(Tech)/Barmer (Barmer)/5153(1)/2023-2024/5800-5802 dated Dec 1 2023 5:20PM 42 Page 6**	Noted.
43	That, notwithstanding anything provided hereinabove, the state board shall have power and reserves the right, as contained under section 27(2) of the water Act and under section 21(6) of the Air Act to review anyone or all the conditions imposed here in above and to make such variation as it deemed fit for the purpose of **air act. & Water act.**	Being Complied

44	That the grant of this **consent to operate** is issued from the environmental angle only, and does not above absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with the conditions laid down in all other laws for the time- being in force, rests with the industry/unit/project proponent.	Noted, Being Complied
45	That the grant of this **Consent to Operate** shall not, in any way, adversely affect or jeopardize the legal proceeding, if any, instituted in the past or that could be instituted against you by the State Board for violation of the provisions of the Water Act and Air Act or the Rules made thereunder.	Noted, Being Complied
46	That the Project Proponent shall comply with provisions of the E-waste (Management) Rules, 2016 and ensure that e-waste generated by them is channelized through collection center or dealer of authorized producer or dismantler or recycler or through designated take back service provider of the producer to authorized dismantler or recycler.	Being Complied
47	That the Project Proponent shall maintain record of e-waste generated by them in Form-2 and make such records available for scrutiny by the board	Being Complied
48	That the Project Proponent shall file annual returns in Form-3, to the Board on or before the 30th day of June following the financial year to which that return relates	Being Complied
49	That the transportation of e-waste shall be carried out as per the manifest system whereby the transporter shall be required to carry a document (three copies) prepared by the sender, giving the details as per Form-6.	Being Complied

50	That the Project Proponent shall comply with provisions of the Batteries (Management and Handling) Rules, 2001 (as amended) and submit half yearly returns (as bulk consumer, importer, auctioneer, recycler as the case may be) to the State Board as provided under Rule 10 (2) (ii) of the Battery (Management and Handling) Rules, 2001 (as amended). In Case the Project Proponent is not a bulk consumer even then the used batteries shall be returned to the authorized dealers or recyclers only	Being Complied
51	That the record of batteries purchased and sold/ returned to registered dealers and/ or authorized recyclers shall be maintained and made available to the officers of the Board during inspections.	Being Complied

Compliance to CTO for Unit 3 & 4

File No. F(Tech)/Barmer (Barmer)/5153(1)/2023-2024/5925-5927
Order No. 2023-2024/Power/4, Dt 08/12/2023

SN	Condition	Compliance
1	That this Consent to Operate is valid for a period from **01/12/2023 to 30/11/2028**	Units are operated during the stipulated period.
2	That this consent is granted for manufacturing / producing following products / by Products or carrying out the following activities or operation/processes or providing following services with capacities of 270 MW.	The 8 x 135 MW lignite-based Power project is designed with a total capacity of 1080 MW. As per this Consent, **Unit 3 & 4** is being operated to generate 270 MW of power.
3	That this consent to operate is for existing plant, process & capacity and separate consent to establish/operate is required to be taken for any addition/modification/alteration in process or change in capacity or change in fuel	Noted and shall be complied
4	That the quantity of effluent generation along with mode of disposal for the Treated effluent. a. Domestic 7.5 KLD b. Industrial -1750 KLD c. Discharge Out Side Premises - NIL	Quantity of waste water generation is not exceed the stipulated. Generated industrial effluent treated through ETP and reuse in process. There would be no discharge outside the plant premises. All treated domestic sewage is being used in green belt development.
5	That the sources of air emissions along with pollution control measures and the Emission standards for the prescribed parameters shall be: **DG Set 1000KVA** Acoustic Enclosure NOx 710ppm NMHC 100 mg/Nm³ Particulate Matter 75 mg/Nm³ CO 150 mg/Nm³ SO2 600 mg/Nm³ Particulate Matter 50 mg/Nm³ NOx 450 mg/Nm³ Hg compounds and its 0.03 mg/Nm³	Boiler System is designed with Circulating Fluidized Bed Technology – we are adding Lime along with Fuel firing. DG Sets are procured of designed to comply with Environmental Emission standard as stipulated. ESP is designed to comply with Stack Emission standard as stipulated.

6	That the trade effluent shall be treated before disposal so as to conform to the Standards prescribed under the Environment (protection) Act-1986 for disposal into Inland surface water.	The trade effluent is being treated in ETP to comply with the stipulation. Regular monitoring is carried out covering the main parameters stipulated.
7	That the trade effluent shall be treated before disposal so as to conform to the Standards prescribed under the Environment (protection) Act-1986 for disposal into Inland surface water.	The trade effluent is being treated in ETP to comply with the stipulation. Regular monitoring is carried out covering the main parameters stipulated.
8	That the industry shall obtain all the necessary permissions from concern authority and district administration Barmer for operation of 270 MW lignite-based power plant.	Noted and being complied
9	That this consent to operate is being issued for production capacity of 2 x 135 MW **(Unit 3 & 4)** thermal power plant.	Noted
10	That the total project cost of **unit 3 & 4 is Rs. 1384.98 Crore**. The industry shall take/obtain modification in consent to operate after paying fee as applicable.	Noted.
11	That the industry shall comply with all the conditions as imposed by MOEF, Government of India vide its office letter no. F. No. J-13011/58/2006-IA II (I) dated 20/07/2007 while issuing EC to your project and also amendment made vide letter dated 19.11.2009 thereafter.	Being complied.
12	That the Charter of Corporate Responsibility for Environment Protection specified for Thermal Power Plants shall be complied.	Being complied.
13	That the industry shall comply with all the standards as prescribed vide MOEF notification No. GSR 826(E) dated 16th Nov,2009 with respect of National Ambient Air Quality Standards.	Being complied.
14	That the unit shall provide and maintain adequate dust collection and extraction system to control fugitive dust emissions at lignite crusher, lignite transfer points and lignite handling and storage areas.	Dust extraction systems are provided at each transfer points of lignite conveyer belt, ash handling system and Bag filters are provided at strategic locations.

15	That the industry shall maintain opacity meter with each boiler stack to monitor the emission level of particulate matter. The monthly observation will be submitted to R.O office along with the reason/clarification for any recorded violation of the	Continuous emission monitors (CEMS) are installed to monitor the emission levels from stacks and same connected to state & central pollution control board service. Monthly CEMS report being submitted to RO office.
16	The Low NOx burners shall be installed at boiler feeding system. That the level of SPM within distance 3-10 M from dust generating source/plant shall not exceed to 600 mg/Nm| in ambient air.	Boiler system is designed on CFBC Technology in which having low NOx generation. Parameters (NOx) with in stipulated limits. Necessary measures are being taken to comply with the stipulation. All the locations are under monitoring
17	That for the control fugitive emission guidelines / code of practice as issued by CPCB will be followed.	Necessary measures are taken to comply with the stipulation.
18	That the project proponent shall undertake measures and ensure that no fugitive fly ash emissions take place at any point of time.	Necessary measures are taken to comply with the stipulation.
19	That no industrials effluent will be discharged from the factory premises in to a Stream or well or sewer or land and the effluent generated from power Plant shall be re-used in the process.	All the effluent is being used inside the plant premises for green belt, road dust suppression and Ash Pond Dust Suppression.
20	The domestic effluent shall be treated up to prescribed standards and shall be Used for plantation/green belt development within the premises.	Domestic Sewage is being treated and using for in house plantation/ green belt development.
21	Ash pond shall be lined with HDPE/LDPE lining or any suitable impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.	The ash pond is lined at the bottom with 0.5 mm thick HDPE geo-membrane, to avoid any leachate to the ground & Adequate safety measures are available to protect Ash dyke.
22	That the total fresh water requirement for unit-3 & 4 shall not exceed 21750.00 KLD (boiler/cooling-21000KLD + domestic – 22.5 KLD + industrial purpose- 600 KLD) which shall be met from IGNP Mohangarh.	Being complied.
23	That no ground water shall be abstracted without prior permission from the State Board and the Central Ground Water Authority.	Being complied.

24	That the domestic waste water shall be treated in STP of 100 KLD capacity which is common for all the units.	Noted & treated domestic sewage is being used in green belt development.
25	That suitable flow measuring devices/meters on the intake source of water, inlet and outlet effluent treatment / sewage treatment plant shall be installed and maintained. Daily record of water consumption, effluent generation and its Treatment and utilization shall be maintained.	Being complied.
26	That the trade effluent shall be treated in ETP comprising of CMB (Central Monitoring Basin) which has two basins of 4000 KLD capacity of each then through HRSCC (clarifier) of capacity 7440 KLD, followed by filters and eventually through RO system which is common for all the units.	Noted.
27	That the domestic waste water shall be treated in STP of 100 KLD capacity which is common for all the units.	Noted & treated domestic sewage is being used in green belt development.
28	That the industry shall undertake suitable measures for rain water harvesting for artificial recharge of ground water.	Rain Water Harvesting is conceptualized in the design of the Plant and a Rain Harvesting done.
29	The industry shall comply with the MoEF, Government of India, Notification date 14th September 1999 with till the date amendments relating to fly ash management and shall update the details regarding utilization of fly ash on fly ash portal of CPCB.	Ash is being utilized as per MOEF guidelines and generation & utilization data uploaded on monthly basis on CPCB fly ash Portal.
30	That the unit shall install flow meters at inlet and outlet of STP and at outlet of ETP.	Being complied
31	That the unit shall submit details of solid waste generated from the plant to Regional Officer of the State Board, Balotra.	Being Complied
32	That the industry shall maintain Online Continuous Emission Monitoring System (OCEMS) (for stack and liquid) with proper connectivity with State Board OCEMS portal/CPCB server.	Continuous emission monitors (CEMS) are installed to monitor the emission levels from stacks & liquid and same connected to state & central pollution control board service.

33	That the Thermal power plant shall meet the limits of Boiler as per the Notification dated 07.12.2015 and 05.09.2022 issued by the Ministry of Environment, Forest and Climate Change, Government of India.	Being Complied
34	That the industry shall maintain online continuous monitoring system at stack attached to boiler to monitor the emission level of particulate matter (PM), SO2, NOx, Hg along with for effluents and connectivity of the same shall be ensured with RSPCB/CPCB server whenever plant is operated.	Continuous emission monitors (CEMS) are installed to monitor the emission levels from stacks & liquid and same connected to state & central pollution control board service.
35	That industry shall comply with the provisions of Hazardous & other Waste (Management & Transboundary movement) Rules, 2016 and record of daily hazardous waste generation and its disposal shall be maintained.	Being Complied
36	That the industry shall provide acoustic enclosure and adequate stack height of minimum 30 meters with one D.G. set of 1000 KVA (each).	Acoustic enclosure and adequate stack height Provided
37	That the Thermal power plant shall comply with water consumption limit as specified in the Notification dated 07/12/2015 issued by the Ministry of Environment, Forest and Climate Change (MoEF&CC).	Being Complied
38	That the industry shall carryout effluent sampling/stack monitoring/ambient air quality monitoring and submit quarterly analysis report from the State Board laboratory/ laboratory recognized by Ministry of Environment & Forests (MoE&F), Government of India.	Being Complied
39	That the industry shall ensure compliance of ambient air quality standard in respect of noise as prescribed under Environment (Protection) Act & Rules made therein.	Being Complied.
40	That the industry shall comply with the provisions of the Public Liability Insurance Act, 1991.	Being Complied.
41	That suitable measure for rain water harvesting for artificial recharge of ground water shall be taken.	Rain Water Harvesting is conceptualized in the design of the Plant and a Rain Harvesting done.

42	That cemented roads shall be provided & maintained inside the premises to minimize the fugitive emissions due to vehicular movements.	Inside the premises all interconnected road has been constructed by Cemented & Bituminous and the same maintained well.
43	That the plantation in at least 33% of total area of the project in and around the cement plant shall be carried out & maintained	Being Complied
44	That this consent to operate shall be subject to compliance of any direction or order passed by NGT/Hon'ble Court of Law in the matter.	Noted – Being Complied.
45	That the industry shall carryout SO2 & NOx monitoring within 1 month from Board's lab so the adequacy of pollution control measures & compliance of MoEF & CC notification dated 05.09.2022 can be checked. That the industry shall carry out waste water analysis of RO reject water from Board's lab within 1 month so that direct water usage in ash quenching etc from RO reject can be ascertained.	Monitoring has been carried out from Board's lab on dated 07/03/2024, all parameters (SO2, NOx & ETP) with in stipulated limits.
46	That the industry shall carry out waste water analysis of RO reject water from Board's lab within 1 month so that direct water usage in ash quenching etc from RO reject can be ascertained.	Monitoring has been carried out from Board's lab on dated 07/03/2024, Parameters with in stipulated limits.
47	That the industry shall apply for CTO renewal before 2 months from the expiry of this consent.	Noted, shall be complied
48	That, notwithstanding anything provided hereinabove, the state board shall have power and reserves the right, as contained under section 27(2) of the water Act and under section 21(6) of the Air Act to review anyone or all the conditions imposed here in above and to make such variation as it deemed fit for the purpose of **air act. & Water act.**	Being Complied
49	That the grant of this **consent to operate** is issued from the environmental angle only, and does not above absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with the conditions laid down in all other laws for the time- being in force, rests with the industry/unit/project proponent.	Noted, Being complied

50	That the grant of this **Consent to Operate** shall not, in any way, adversely affect or jeopardize the legal proceeding, if any, instituted in the past or that could be instituted against you by the State Board for violation of the provisions of the Water Act and Air Act or the Rules made thereunder.	Noted, Being Complied
51	That the Project Proponent shall comply with provisions of the E-waste (Management) Rules, 2016 and ensure that e-waste generated by them is channelized through collection center or dealer of authorized producer or dismantler or recycler or through designated take back service provider of the producer to authorized dismantler or recycler.	Being Complied
52	That the Project Proponent shall maintain record of e-waste generated by them in Form-2 and make such records available for scrutiny by the board	Being Complied
53	That the Project Proponent shall file annual returns in Form-3, to the Board on or before the 30th day of June following the financial year to which that return relates	Being Complied
54	That the transportation of e-waste shall be carried out as per the manifest system whereby the transporter shall be required to carry a document (three copies) prepared by the sender, giving the details as per Form-6.	Being Complied
55	That the Project Proponent shall comply with provisions of the Batteries (Management and Handling) Rules, 2001 (as amended) and submit half yearly returns (as bulk consumer, importer, auctioneer, recycler as the case may be) to the State Board as provided under Rule 10 (2) (ii) of the Battery (Management and Handling) Rules, 2001 (as amended). In Case the Project Proponent is not a bulk consumer even then the used batteries shall be returned to the authorized dealers or recyclers only	Being Complied
56	That the record of batteries purchased and sold/ returned to registered dealers and/ or authorized recyclers shall be maintained and made available to the officers of the Board during inspections.	Being Complied

Compliance to CTO for Unit 5 & 6

File No. F(Tech)/Barmer (Barmer)/3(1)/2008-2009/6524-6526
Order No. 2021-2022/CPM/8556, Dt: 10/02/2022

SN	Condition	Compliance
1	That this Consent to Operate is valid for a period from **01/11/2021 to 31/10/2026**	Units are operated during the stipulated period.
2	That this consent is granted for manufacturing / producing following products / by Products or carrying out the following activities or operation/processes or providing following services with capacities of 270 MW.	The 8 x 135 MW lignite-based Power project is designed with a total capacity of 1080 MW. As per this Consent, **Unit 5 & 6** is being operated to generate 270 MW of power.
3	That this consent to operate is for existing plant, process & capacity and separate consent to establish/operate is required to be taken for any addition/modification/alteration in process or change in capacity or change in fuel	Noted and shall be complied
4	That the quantity of effluent generation and disposal along with mode of disposal for the Treated effluent. a. Domestic 75 KLD b. Industrial 9800 KLD c. Discharge Out Side Premises - NIL	Quantity of waste water generation is not exceed the stipulated. There would be no discharge outside the plant premises. All treated domestic sewage is being used in green belt development.
5	That the sources of air emissions along with pollution control measures and the Emission standards for the prescribed parameters shall be: SO2 600 mg/Nm³ Particulate Matter 50 mg/Nm³ NOx 450 mg/Nm³ Hg compounds and its 0.03 mg/Nm³ DG Set -1000KVA Acoustic Enclosure NOx 710 ppm NMHC100 mg/Nm³ Particulate Matter 75 mg/Nm³ CO 150 mg/Nm³	Boiler System is designed with Circulating Fluidized Bed Technology – we are adding Lime along with Fuel firing. ESP is designed to comply with Stack Emission standard as stipulated. DG Sets are procured of designed to comply with Environmental Emission standard as stipulated

6	That the domestic sewage shall be treated before disposal so as to conform to the Standards prescribed by the Board as notified under the Environment (protection) Act-1986 for disposal on Land for irrigation. The main parameters for regular monitoring.	Domestic Sewage is being treated and used for green belt development irrigation.
7	That the trade effluent shall be treated before disposal so as to conform to the Standards prescribed under the Environment (protection) Act-1986 for disposal into Inland surface water.	The trade effluent is being treated in ETP to comply with the stipulation. Regular monitoring is carried out covering the main parameters stipulated.
8	That the industry shall obtain all the necessary permissions from concern authority and district administration Barmer for operation of 270 MW lignite coal based.	Noted – Being Complied.
9	That this consent to operate is being issued for production capacity of 2 x 135 MW (Unit 5 & 6) thermal plant	Noted – Being Complied.
10	That the total project cost of **unit 5 & 6 is Rs. 1362.89 Crore.** The industry shall take/obtain modification in consent to operate after paying fee as applicable.	Noted – Being Complied for Unit 5 & 6.
11	That the industry shall comply with all the conditions imposed by MoEF, Governments of India vide its office letter no.F.No. J-13011/58/2006- IAII(I)dated20/07/2007 while issuing EC to your project & also amendment made vide letter dated 19.11.2009 thereafter.	Being complied.
12	That all the conditions imposed vide CPCB letter noB-33014/07/2017-2018/IPC-II/TPP/15934 dated 11.12.2017 shall be complied in future in letter & sprit.	Being Complied.
13	That That all the conditions imposed vide letter no F (HDF)/Barmer (Barmer)/12(1)/2017-2018/1223-1225 dated 25/06/2019 shall be complied.	Being Complied.
14	That the charter of Corporate Responsibility for Environment Protection specified for power plants shall be complied	Being Complied.
15	That the Industry will comply with the standards as prescribed vide MOEF notification No. GSR 826(E) dated 16th November 2009 with respect to National Ambient Air Quality Standards.	Being Complied.

16	That the industry shall provide & maintain adequate dust collection and Extraction system to control fugitive dust emission at coal crusher and coal Transfer points and coal handling and storage areas.	Dust Extraction & suppression Systems have been implemented at required location in lignite handling location. And road coal dust collector (mobile) unit is engaged at coal yard and nearby area to collect the same.
17	That the particulate emissions from stack of various sections of power plant shall Not exceed 50 mg/NM3	ESP is designed to comply with Stack Emission standard as stipulated with continuous emission monitoring system is being installed for the monitoring of flue emissions (As per MOEF issued a notification G.S.R. 243(E)-Environment (Protection) Amendment Rules, 2021 dated 31-03-2021. Our plant falls under Category C and the timeline provided by MOEF for this Category has been provided as 31th Dec 2024 to comply PM emission limits as per new norms).
18	That the industry shall maintain opacity meter with each boiler stack to monitor the emission level of particulate matter. The monthly observation will be submitted to R.O. Office along with the reason / clarification for any recorded violation of the prescribed standards.	Being Complied.
19	The Low NOx burners shall be installed at boiler feeding system.	Boiler system is designed on CFBC Technology in which having low NOx generation. Parameters (NOx) with in stipulated limits.
20	That the level of SPM within distance 3 -10 M from dust generating source/plant Shall not exceed to 600 mg/NM3 in ambient air.	Necessary measures are being taken to comply with the stipulation. All the locations are under monitoring.
21	That for the control fugitive emission guidelines / code of practice as issued by CPCB will be followed.	Necessary measures is taken to comply with the stipulation.
22	That the project proponent shall undertake measures and ensure that no fugitive fly ash emissions take place at any point of time.	Necessary measures is taken to comply with the stipulation.
23	That no industrials effluent will be discharged from the factory premises in to a Stream or well or sewer or land and the effluent generated from captive power Plant shall be used for ash quenching control of fugitive emission and plantation.	All the effluent is being used inside the plant premises for green belt, road dust suppression and Ash Pond Dust Suppression.
24	That the industrial effluents generated from R.O. rejects, DM plant & cooling tower shall be neutralized & be used for plantation, horticulture and ash quenching purpose. No industrial effluent will be discharged inside or outside the factory premises into a stream or well or sewer or on land.	That the industrial effluent generated from D.M. rejects & cooling Tower is being used for cooling proposes after taking it into Water circulation tank.

25	The domestic effluent shall be treated up to prescribed standards and shall be Used for plantation/green belt development within the premises.	Domestic Sewage is being treated and using for in house plantation/ green belt development.
26	Ash pond shall be lined with HDPE/LDPE lining or any suitable impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.	The ash pond is lined at the bottom with 0.5 mm thick HDPE geo-membrane, to avoid any leachate to the ground & Adequate safety measures are available to protect Ash dyke.
27	That the total fresh water requirement for unit-V & VI shall not exceed 21750.00 KLD (boiler/cooling-21000KLD + domestic -150KLD + industrial purpose- 600 KLD) which shall be met from ground water i.e., IGNP Mohangarh.	Being complied.
28	That no ground water shall be abstracted without prior permission from the State Board and the Central Ground Water Authority.	Being complied.
29	That suitable flow measuring devices/meters on the intake source of water, inlet and outlet effluent treatment / sewage treatment plant shall be installed and maintained. Daily record of water consumption, effluent generation and its Treatment and utilization shall be maintained.	Being Complied.
30	That the industry shall undertake suitable measures for rain water harvesting for artificial recharge of ground water.	Rain Water Harvesting is conceptualized in the design of the Plant and a Rain Harvesting done
31	The industry shall comply with the MOEF, Government of India, Notification date: 14th September 1999 with till the date amendments relating to fly ash Management and shall provide relevant details to the state Board, MoEF, Government of India. and as per the Notification dated 25/01/2016 issued by MoEF & CC, the industry shall upload on their website the details of stock of each type of ash available with them and thereafter shall update the stock position at least once a Month. The industry shall also ensure compliance of the other provisions of the aforesaid Notification.	Ash is being utilized as per MOEF guidelines and reported.
32	That the unit shall install flow meters at inlet and outlet of STP and at outlet of ETP.	Being Complied
33	That the unit shall submit details of solid waste generated from the plant to Regional Officer of the State Board, Balotra.	Being Complied

34	That the Thermal power plant shall meet the limits of Boiler (specified in condition no.5), as per the Notification dated 07.12.2015 issued by the Ministry of Environment, Forest and Climate Change, Government of India.	Being Complied
35	That industry shall comply with the provisions of Hazardous & other Waste (Management & Transboundary movement) Rules, 2016 and record of daily hazardous waste generation and its disposal shall be maintained.	Being Complied
36	That the industry shall provide acoustic enclosure and adequate stack height of minimum 30 meters with one D.G. set of 1000 KVA.	Acoustic enclosure and adequate stack height Provided
37	That the Thermal power plant shall comply with water consumption limit as specified in the Notification dated 07/12/2015 issued by the Ministry of Environment, Forest and Climate Change (MoEF&CC).	Being Complied
38	That the industry shall carryout effluent sampling/stack monitoring/ambient air quality monitoring and submit quarterly analysis report from the State Board laboratory/ laboratory recognized by Ministry of Environment & Forests (MoE&F), Government of India.	Being Complied
39	That the industry shall comply with the standards as prescribed vide MOEF notification no. GSR 826(E) dated 16th November, 2009 with respect to National Ambient Air Quality.	Being Complied
40	That the industry shall ensure compliance of ambient air quality standard in respect of noise as prescribed under Environment (Protection) Act & Rules made therein.	Being Complied.
41	That the industry shall comply with the provisions of the Public Liability Insurance Act, 1991.	Being Complied.
42	That the industry shall complete all the works in the stipulated time as per your commitment letter dated 1.2.2022, failing which bank guarantee of Rs.20,000/- shall be forfeited without further notice in the matter.	JSWE(B)L received The BG from RSPCB as we have completed all the works within stipulated time.
43	That the industry shall undertake suitable measures for rain water harvesting for artificial recharge of ground water.	Rain Water Harvesting is conceptualized in the design of the Plant and a Rain Harvesting done.

44	That cemented roads shall be provided & maintained inside the premises to minimize the fugitive emissions due to vehicular movements.	Inside the premises all interconnected road has been constructed by Cemented & Bituminous and the same maintained well.
45	That the plantation in at least 33% of total area of the project in and around the cement plant shall be carried out & maintained	Being Complied
46	That this consent to operate shall be subject to compliance of any direction or order passed by NGT/Hon'ble Court of Law in the matter.	Noted – Being Complied.
48	That, notwithstanding anything provided hereinabove, the state board shall have power and reserves the right, as contained under section 27(2) of the water Act and under section 21(6) of the Air Act to review anyone or all the conditions imposed here in above and to make such variation as it deemed fit for the purpose of air act. & Water act	Being Complied
49	That the grant of this consent to operate is issued from the environmental angle only, and does not above absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with the conditions laid down in all other laws for the time- being in force, rests with the industry/unit/project proponent.	Being Complied
50	That the Project Proponent shall comply with provisions of the E-waste (Management) Rules, 2016 and ensure that e-waste generated by them is channelized through collection center or dealer of authorized producer or dismantler or recycler or through designated take back service provider of the producer to authorized dismantler or recycler.	Being Complied
51	That the Project Proponent shall maintain record of e-waste generated by them in Form-2 and make such records available for scrutiny by the board	Being Complied
52	That the Project Proponent shall file annual returns in Form-3, to the Board on or before the 30th day of June following the financial year to which that return relates	Being Complied

53	That the transportation of e-waste shall be carried out as per the manifest system whereby the transporter shall be required to carry a document (three copies) prepared by the sender, giving the details as per Form-6.	Being Complied
54	That the Project Proponent shall comply with provisions of the Batteries (Management and Handling) Rules, 2001 (as amended) and submit half yearly returns (as bulk consumer, importer, auctioneer, recycler as the case may be) to the State Board as provided under Rule 10 (2) (ii) of the Battery (Management and Handling) Rules, 2001 (as amended). In	Being Complied
55	That the record of batteries purchased and sold/ returned to registered dealers and/ or authorized recyclers shall be maintained and made available to the officers of the Board during inspections.	Being Complied

Compliance to CTO for Unit 7 & 8

File No. F(Tech)/Barmer (Barmer)/3(1)/2008-2009/6527-6529
Order No. 2021-2022/CPM/8557, Dt: 10/02/2022

SN	Condition	Compliance
1	That this Consent to Operate is valid for a period from **01/11/2021 to 31/10/2026**	Units are operated during the stipulated period.
2	That this consent is granted for manufacturing / producing following products / by Products or carrying out the following activities or operation/processes or providing following services with capacities of 270 MW.	The 8 x 135 MW lignite-based Power project is designed with a total capacity of 1080 MW. As per this Consent, **Unit 7 & 8** is being operated to generate 270 MW of power.
3	That this consent to operate is for existing plant, process & capacity and separate consent to establish/operate is required to be taken for any addition/modification/alteration in process or change in capacity or change in fuel	Noted and shall be complied
4	That the quantity of effluent generation and disposal along with mode of disposal for the Treated effluent. a. Domestic 75 KLD b. Industrial 9800 KLD c. Discharge Out Side Premises - NIL	Quantity of waste water generation is not exceed the stipulated. There would be no discharge outside the plant premises. All treated domestic sewage is being used in green belt development.
5	That the sources of air emissions along with pollution control measures and the Emission standards for the prescribed parameters shall be: SO2 600 mg/Nm³ Particulate Matter 50 mg/Nm³ NOx 450 mg/Nm³ Hg compounds and its 0.03 mg/Nm³ DG Set -1000KVA Acoustic Enclosure NOx 710 ppm NMHC100 mg/Nm³ Particulate Matter 75 mg/Nm³ CO 150 mg/Nm³	Boiler System is designed with Circulating Fluidized Bed Technology – we are adding Lime along with Fuel firing. ESP is designed to comply with Stack Emission standard as stipulated. DG Sets are procured of designed to comply with Environmental Emission standard as stipulated

6	That the domestic sewage shall be treated before disposal so as to conform to the Standards prescribed by the Board as notified under the Environment (protection) Act-1986 for disposal on Land for irrigation. The main parameters for regular monitoring.	Domestic Sewage is being treated and used for green belt development irrigation.
7	That the trade effluent shall be treated before disposal so as to conform to the Standards prescribed under the Environment (protection) Act-1986 for disposal into Inland surface water.	The trade effluent is being treated in ETP to comply with the stipulation. Regular monitoring is carried out covering the main parameters stipulated.
8	That the industry shall obtain all the necessary permissions from concern authority and district administration Barmer for operation of 270 MW lignite coal based.	Noted – Being Complied.
9	That this consent to operate is being issued for production capacity of 2 x 135 MW (Unit 5 & 6) thermal plant	Noted – Being Complied.
10	That the total project cost of unit 7 & 8 is **Rs. 1090.32** Crore. The industry shall take/obtain modification in consent to operate after paying fee as applicable.	Noted – Being Complied for Unit 7 & 8.
11	That the industry shall comply with all the conditions imposed by MoEF, Governments of India vide its office letter No. F. No. J-13011/58/2006- IAII(I) dated20/07/2007 while issuing EC to your project & also amendment made vide letter dated 19.11.2009 thereafter.	Being complied.
12	That all the conditions imposed vide CPCB letter noB-33014/07/2017-2018/IPC-II/TPP/15934 dated 11.12.2017 shall be complied in future in letter & sprit.	Being Complied.
13	That That all the conditions imposed vide letter no F (HDF)/Barmer (Barmer)/12(1)/2017-2018/1223-1225 dated 25/06/2019 shall be complied.	Being Complied.
14	That the charter of Corporate Responsibility for Environment Protection specified for power plants shall be complied	Being Complied.
15	That the Industry will comply with the standards as prescribed vide MOEF notification No. GSR 826(E) dated 16th November 2009 with respect to National Ambient Air Quality Standards.	Being Complied.

16	That the industry shall provide & maintain adequate dust collection and Extraction system to control fugitive dust emission at coal crusher and coal Transfer points and coal handling and storage areas.	Dust Extraction & suppression Systems have been implemented at required location in lignite handling location. And road coal dust collector (mobile) unit is engaged at coal yard and nearby area to collect the same.
17	That the particulate emissions from stack of various sections of power plant shall Not exceed 50 mg/NM3	ESP is designed to comply with Stack Emission standard as stipulated with continuous emission monitoring system is being installed for the monitoring of flue emissions (As per MOEF issued a notification G.S.R. 243(E)-Environment (Protection) Amendment Rules, 2021 dated 31-03-2021. Our plant falls under Category C and the timeline provided by MOEF for this Category has been provided as 31th Dec 2024 to comply PM emission limits as per new norms).
18	That the industry shall maintain opacity meter with each boiler stack to monitor the emission level of particulate matter. The monthly observation will be submitted to R.O. Office along with the reason / clarification for any recorded violation of the prescribed standards.	Being Complied.
19	The Low NOx burners shall be installed at boiler feeding system.	Boiler system is designed on CFBC Technology in which having low NOx generation. Parameters (NOx) with in stipulated limits.
20	That the level of SPM within distance 3 -10 M from dust generating source/plant Shall not exceed to 600 mg/NM3 in ambient air.	Necessary measures are being taken to comply with the stipulation. All the locations are under monitoring.
21	That for the control fugitive emission guidelines / code of practice as issued by CPCB will be followed.	Necessary measures is taken to comply with the stipulation.
22	That the project proponent shall undertake measures and ensure that no fugitive fly ash emissions take place at any point of time.	Necessary measures is taken to comply with the stipulation.
23	That no industrials effluent will be discharged from the factory premises in to a Stream or well or sewer or land and the effluent generated from captive power Plant shall be used for ash quenching control of fugitive emission and plantation.	All the effluent is being used inside the plant premises for green belt, road dust suppression and Ash Pond Dust Suppression.
24	That the industrial effluents generated from R.O. rejects, DM plant & cooling tower shall be neutralized & be used for plantation, horticulture and ash quenching purpose. No industrial effluent will be discharged inside or outside the factory premises into a stream or well or sewer or	That the industrial effluent generated from D.M. rejects & cooling Tower is being used for cooling proposes after taking it into Water circulation tank.

25	The domestic effluent shall be treated up to prescribed standards and shall be Used for plantation/green belt development within the premises.	Domestic Sewage is being treated and using for in house plantation/ green belt development.
26	Ash pond shall be lined with HDPE/LDPE lining or any suitable impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.	The ash pond is lined at the bottom with 0.5 mm thick HDPE geo-membrane, to avoid any leachate to the ground & Adequate safety measures are available to protect Ash dyke.
27	That the total fresh water requirement for unit-VII & VIII shall not exceed 21750.00 KLD (boiler/cooling-21000KLD + domestic -150KLD + industrial purpose- 600 KLD) which shall be met from ground water i.e., IGNP Mohangarh.	Being complied.
28	That no ground water shall be abstracted without prior permission from the State Board and the Central Ground Water Authority.	Being complied.
29	That suitable flow measuring devices/meters on the intake source of water, inlet and outlet effluent treatment / sewage treatment plant shall be installed and maintained. Daily record of water consumption, effluent generation and its Treatment and utilization shall be maintained.	Being Complied.
30	That the industry shall undertake suitable measures for rain water harvesting for artificial recharge of ground water.	Rain Water Harvesting is conceptualized in the design of the Plant and a Rain Harvesting done.
31	The industry shall comply with the MOEF, Government of India, Notification date: 14th September 1999 with till the date amendments relating to fly ash Management and shall provide relevant details to the state Board, MoEF, Government of India. and as per the Notification dated 25/01/2016 issued by MoEF & CC, the industry shall upload on their website the details of stock of each type of ash available with them and thereafter shall update the stock position at least once a Month. The industry shall also ensure compliance of the other provisions of the aforesaid Notification.	Ash is being utilized as per MOEF guidelines and reported.
32	That the unit shall install flow meters at inlet and outlet of STP and at outlet of ETP.	Being Complied
33	That the unit shall submit details of solid waste generated from the plant to Regional Officer of the State Board, Balotra.	Being Complied

34	That the Thermal power plant shall meet the limits of Boiler (specified in condition no.5), as per the Notification dated 07.12.2015 issued by the Ministry of Environment, Forest and Climate Change, Government of India.	Being Complied
35	That industry shall comply with the provisions of Hazardous & other Waste (Management & Transboundary movement) Rules, 2016 and record of daily hazardous waste generation and its disposal shall be maintained.	Being Complied
36	That the industry shall provide acoustic enclosure and adequate stack height of minimum 30 meters with one D.G. set of 1000 KVA.	Acoustic enclosure and adequate stack height Provided
37	That the Thermal power plant shall comply with water consumption limit as specified in the Notification dated 07/12/2015 issued by the Ministry of Environment, Forest and Climate Change (MoEF&CC).	Being Complied
38	That the industry shall carryout effluent sampling/stack monitoring/ambient air quality monitoring and submit quarterly analysis report from the State Board laboratory/ laboratory recognized by Ministry of Environment & Forests (MoE&F), Government of India.	Being Complied
39	That the industry shall comply with the standards as prescribed vide MOEF notification no. GSR 826(E) dated 16th November, 2009 with respect to National Ambient Air Quality.	Being Complied
40	That the industry shall ensure compliance of ambient air quality standard in respect of noise as prescribed under Environment (Protection) Act & Rules made therein.	Being Complied.
41	That the industry shall comply with the provisions of the Public Liability Insurance Act, 1991.	Being Complied.
42	That the industry shall complete all the works in the stipulated time as per your commitment letter dated 1.2.2022, failing which bank guarantee of Rs.20,000/- shall be forfeited without further notice in the matter.	JSWE(B)L received The BG from RSPCB as we have completed all the works within stipulated time.
43	That the industry shall undertake suitable measures for rain water harvesting for artificial recharge of ground water.	Rain Water Harvesting is conceptualized in the design of the Plant and a Rain Harvesting done.

44	That cemented roads shall be provided & maintained inside the premises to minimize the fugitive emissions due to vehicular movements.	Inside the premises all interconnected road has been constructed by Cemented & Bituminous and the same maintained well.
45	That the plantation in at least 33% of total area of the project in and around the cement plant shall be carried out & maintained	Being Complied
46	That this consent to operate shall be subject to compliance of any direction or order passed by NGT/Hon'ble Court of Law in the matter.	Noted – Being Complied.
48	That, notwithstanding anything provided hereinabove, the state board shall have power and reserves the right, as contained under section 27(2) of the water Act and under section 21(6) of the Air Act to review anyone or all the conditions imposed here in above and to make such variation as it deemed fit for the purpose of air act. & Water act.	Being Complied
49	That the grant of this consent to operate is issued from the environmental angle only, and does not above absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with the conditions laid down in all other laws for the time- being in force, rests with the industry/unit/project proponent.	Being Complied
50	That the Project Proponent shall comply with provisions of the E-waste (Management) Rules, 2016 and ensure that e-waste generated by them is channelized through collection center or dealer of authorized producer or dismantler or recycler or through designated take back service provider of the producer to authorized dismantler or recycler.	Being Complied
51	That the Project Proponent shall maintain record of e-waste generated by them in Form-2 and make such records available for scrutiny by the board	Being Complied
52	That the Project Proponent shall file annual returns in Form-3, to the Board on or before the 30th day of June following the financial year to which that return relates	Being Complied

53	That the transportation of e-waste shall be carried out as per the manifest system whereby the transporter shall be required to carry a document (three copies) prepared by the sender, giving the details as per Form-6.	Being Complied
54	That the Project Proponent shall comply with provisions of the Batteries (Management and Handling) Rules, 2001 (as amended) and submit half yearly returns (as bulk consumer, importer, auctioneer, recycler as the case may be) to the State Board as provided under Rule 10 (2) (ii) of the Battery (Management and Handling) Rules, 2001 (as amended). In	Being Complied
55	That the record of batteries purchased and sold/ returned to registered dealers and/ or authorized recyclers shall be maintained and made available to the officers of the Board during inspections.	Being Complied

Compliance Status of Thermal Plant – Charter on Corporate Responsibility for Environmental Protection

Sr. No.	CREP points for Thermal Plant	Compliance status
1	Implementation of Environmental Standards (emission & effluent) in non-compliant* Power Plants (31 & 27)	Project come up in 2006 – Not Applicable
	- Submission of action plan June 30, 2003	
	- Placement of order for Pollution of control equipment September, 2003	
	- Installation & commission December -31, 2005	
2	For existing thermal power plants, a feasibility study will be carried out by Central Electricity Authority (CEA) to examine possibility to reduce the particulate matter emissions to 100 mg/Nm3. The studies shall also suggest the road map to meet 100 mg/Nm3. The studies shall also suggest the road map to meet 100 mg/Nm3 wherever found feasible. CEA shall submit the report by March 2004.	Project come up in 2006 – Project is designed for the particulate matter emissions to 100 mg/Nm3. MOEF has also stipulated in EC conditions.
3	New / expansion power projects to be accorded environmental clearance on or after1.4.1.2003 shall meet the limit of 100 mg/Nm3 for particulate matter.	Complied
4	Development of SO2 & NOx emission standards for coal-based plants by December 2003.	Complied as per EC conditions by MOEF and CFE & CTO conditions by RSPCB
	-New/ expansion power projects shall meet the limit of SO2 & NOx w.e.f. 1.1.2005.	
	- Existing power plants shall meet the limit of SO2 & NOX w.e.f. 1.1.2006.	
5	Install/activate opacity meters/ continuous monitoring system in all the units by December 31, 2004 with proper calibration system.	All Eight flue has equipped with CEMS system with Opacity meter
6	Development of guidelines/ standards for mercury and other toxic heavy metals emissions by December 2003.	The project is Lignite Coal Based Pit head project and EC, CTO and CFE Conditions being complied. Both are well below the norms
7	Review of stack height requirement and guidelines for power plants based on micro meteorological data b y June 2003.	Stack height has been designed as per Micro Meteorological conditions and condition of EC granted by MOEF.
8	Implementation of use of beneficiated coal as per GOI Notification:	Not Applicable
	Power plants will sign fuel supply agreement (FSA)	– Project is pit head project and

	Options/mechanism for setting up of coal washeries as a long-term measure	designed on basis of Lignite coal from Adjacent Kapurdi and Jalipa Lignite.
	* Coal India will up its own washery	
	* State Electricity Board to set up its own washery	
	* Coal India to ask private entrepreneurs to set up washeries for CIL and taking washing charges	
	* SEBs to select a private entrepreneur to set up a washery near pit-head installation of coal beneficiation plant	
9	Power plants will indicate their requirement of abandoned coal mines for ash disposal & Coal India/ MOC shall provide the list of abandoned mines by June 2003 to CEA.	Complied
10	Power plants will provide dry ash to the users outside the premises or uninterrupted access to the users within six months.	This is in practice – Complied
11	Power Plants should provide dry fly ash free of cost to the users.	This is in practice – Complied
12	State P.W. Ds/ construction & development agencies shall also adhere to the specifications/Schedules of CPWD for ash-based products utilization MoEF will take up the matter with State Governments.	
13	(i) New plants to be accorded environmental 1.04.2003 shall adopt dry fly ash extraction or dry disposal system or Medium (35-40%) ash concentration slurry disposal system or Lean phase with hundred percept ash water re-circulation system depending upon site specific environmentalsituation.	Dry Fly ash Handling system is incorporated for better utilization of Ash.
	(ii) Existing plants shall adopt any of the systems mentioned in 13 (i) by December 2004.	Not applicable
14	Fly ash Mission shall prepare guidelines/manuals for fly ash utilization by March 2004.	Currently Cement Manufacturing Industries and Brick manufactures are lifting up Ash.
15	New plants shall promote adoption of clean coal and clean power generation technologies	Project is pit head project and designed on basis of Lignite coal from Adjacent Kapurdi and Jalipa Lignite.

ANNEXURE-I

STACK EMISSION MONITORING RESULTS October – 2024 to Mar – 2025

Month: Oct' 2024

SN	Parameters	UOM	Unit-I	Unit-II	Unit-III	Unit-IV	Unit-V	Unit-VI	Unit-VII	Unit-VIII
1	Average Velocity	m/Sec	17.17	16.49	15.81	14.49	SHUT DOWN	15.38	16.00	16.90
2	Flow	Nm3/Sec	135.5	131.0	125.3	116.5		121.4	127.1	134.0
3	Stack Exit Temp.	0C	151	148	149	143		151	148	149
4	Particulate Matter	mg/Nm3	37.0	33.8	31.6	32.2		36.1	33.9	34.5
5	Sulphur Dioxide	mg/Nm3	410.4	427.9	416.1	424.5		421.7	430.5	396
6	Oxides of Nitrogen	mg/Nm3	121.6	126.6	129.8	122.7		118.6	125.7	134

Month: Nov' 2024

SN	Parameters	UOM	Unit-I	Unit-II	Unit-III	Unit-IV	Unit-V	Unit-VI	Unit-VII	Unit-VIII
1	Average Velocity	m/Sec	18.27	18.77	18.23	18.73	17.53	19.27	19.02	18.77
2	Flow	Nm3/Sec	138.6	144.4	138.9	147.4	140.0	149.9	147.3	144.0
3	Stack Exit Temp.	0C	168	162	166	152	146	157	159	162
4	Particulate Matter	mg/Nm3	40.5	35.7	30.9	34.0	31.4	38.8	32.8	31.9
5	Sulphur Dioxide	mg/Nm3	412.9	424.3	413.6	427.6	410.0	419.2	432.7	387.5
6	Oxides of Nitrogen	mg/Nm3	123.9	121.9	131.8	125.7	112.9	116.2	127.9	130.9

Month: DEC' 2024

SN	Parameters	UOM	Unit-I	Unit-II	Unit-III	Unit-IV	Unit-V	Unit-VI	Unit-VII	Unit-VIII
1	Average Velocity	m/Sec	18.27	18.77	18.23	18.73	17.53	19.27	19.02	18.77
2	Flow	Nm3/Sec	135.5	134.4	135.6	138.5	136.7	143.0	143.9	131.2
3	Stack Exit Temp.	0C	174	168	162	171	160	164	165	172
4	Particulate Matter	mg/Nm3	37.9	34.4	32.1	37.9	35.45	39.9	33.8	33.5
5	Sulphur Dioxide	mg/Nm3	410.3	401.6	407.6	436.9	410.1	419.0	427.1	379.1
6	Oxides of Nitrogen	mg/Nm3	122.7	117.8	128.7	129.7	111.7	117.5	121.9	127

ANNEXURE-IV

Month: Jan' 2025

SN	Parameters	UOM	Unit-I	Unit-II	Unit-III	Unit-IV	Unit-V	Unit-VI	Unit-VII	Unit-VIII
1	Average Velocity	m/Sec	16.99	16.58	16.05	16.71	16.79	15.43	16.60	16.43
2	Flow	Nm3/Sec	134.7	129.6	126.6	131.5	134.1	121.8	133.2	129.9
3	Stack Exit Temp.	0C	149	155	151	152	146	151	144	150
4	Particulate Matter	mg/Nm3	32.9	36.9	34.6	35.9	39.1	40.0	36.2	33.4
5	Sulphur Dioxide	mg/Nm3	421.9	404.6	401.8	422.1	393.2	416.3	416.0	421.9
6	Oxides of Nitrogen	mg/Nm3	117.5	101.4	111.3	110	105.1	110	120.7	111.3

Month: Feb' 2025

SN	Parameters	UOM	Unit-I	Unit-II	Unit-III	Unit-IV	Unit-V	Unit-VI	Unit-VII	Unit-VIII
1	Average Velocity	m/Sec	15.35	15.01	16.72	15.43	15.88	15.67	15.82	16.12
2	Flow	Nm3/Sec	121.7	118.4	132.2	121.8	122.4	121.6	122.8	124.6
3	Stack Exit Temp.	0C	149	151	150	151	161	158	158	160
4	Particulate Matter	mg/Nm3	29.1	32.2	30.2	34.3	36.3	34.9	30.1	36.1
5	Sulphur Dioxide	mg/Nm3	430.2	407.6	413.3	418.8	427.9	430.5	442	451
6	Oxides of Nitrogen	mg/Nm3	104.3	110	113.3	112.5	118.3	119.5	121.6	124.6

Month: Mar' 2025

SN	Parameters	UOM	Unit-I	Unit-II	Unit-III	Unit-IV	Unit-V	Unit-VI	Unit-VII	Unit-VIII
1	Average Velocity	m/Sec	15.40	16.93	17.77	16.51	15.40	16.89	15.88	16.29
2	Flow	Nm3/Sec	122.1	135.2	138.9	129.4	122.1	133.3	122.4	126.4
3	Stack Exit Temp.	0C	149	146	155	154	149	151	161	158
4	Particulate Matter	mg/Nm3	30.6	31.9	34.8	32.4	35.2	36.0	37.4	29.0
5	Sulphur Dioxide	mg/Nm3	416.1	421.4	436.2	410.5	416.0	421.4	401.7	422.1
6	Oxides of Nitrogen	mg/Nm3	111.3	115.8	107.2	107.9	104.3	97.5	108.4	112.1

ANNEXURE-II

Unit # 1 - Continuous Emission Monitoring System-CEMS DATA

Month		SOX mg/m3	NOX mg/m3	SPM mg/m3
Oct-24	Average	433.49	213.41	30.63
	Max	496.57	259.08	37.99
Nov-24	Average	341.18	162.26	27.08
	Max	500.21	189.36	46.41
Dec-24	Average	369.73	165.03	25.12
	Max	444.59	175.87	33.47
Jan-25	Average	446.99	104.41	35.25
	Max	505.09	156.21	46.39
Feb-25	Average	477.98	125.96	26.65
	Max	503.32	143.83	36.79
Mar-25	Average	460.81	135.33	32.62
	Max	510.15	155.45	41.19

Unit # 2 - Continuous Emission Monitoring System-CEMS DATA

Month		SOX mg/m3	NOX mg/m3	SPM mg/m3
Oct-24	Average	391.66	132.96	40.56
	Max	444.09	169.19	44.87
Nov-24	Average	354.17	112.73	37.29
	Max	443.57	140.13	44.68
Dec-24	Average	308.81	111.76	38.75
	Max	440.14	126.29	44.21
Jan-25	Average	398.57	151.76	23.92
	Max	443.50	166.26	37.26
Feb-25	Average	380.20	129.39	22.67
	Max	435.46	151.29	35.95
Mar-25	Average	410.67	148.07	31.36
	Max	444.93	164.09	44.54

ANNEXURE-II

Unit # 3 - Continuous Emission Monitoring System-CEMS DATA

Month		SOX mg/m3	NOX mg/m3	SPM mg/m3
Oct-24	Average	496.56	270.64	41.89
	Max	528.05	297.21	43.32
Nov-24	Average	420.46	164.04	42.41
	Max	520.09	194.21	43.61
Dec-24	Average	467.38	162.08	43.22
	Max	509.29	179.23	44.18
Jan-25	Average	435.72	150.36	39.27
	Max	511.49	190.89	46.88
Feb-25	Average	419.21	116.19	42.36
	Max	513.16	141.08	46.67
Mar-25	Average	486.06	137.50	30.04
	Max	527.95	163.45	40.05

Unit # 4 - Continuous Emission Monitoring System-CEMS DATA

Month		SOX mg/m3	NOX mg/m3	SPM mg/m3
Oct-24	Average	391.16	205.54	38.17
	Max	424.38	248.65	41.83
Nov-24	Average	355.11	179.89	35.61
	Max	420.84	234.20	41.07
Dec-24	Average	373.76	137.21	40.14
	Max	424.12	166.21	41.61
Jan-25	Average	358.74	123.02	41.82
	Max	409.76	190.60	46.63
Feb-25	Average	367.04	118.37	40.82
	Max	410.36	152.73	44.54
Mar-25	Average	373.70	148.00	40.78
	Max	398.64	171.69	42.03

ANNEXURE-II

Unit # 5 - Continuous Emission Monitoring System-CEMS DATA

Month		SOX mg/m3	NOX mg/m3	SPM mg/m3
Oct-24	Average			
	Max	UNIT	SHUT	DOWN
Nov-24	Average	431.63	160.94	38.95
	Max	513.71	190.54	46.36
Dec-24	Average	481.01	141.58	42.44
	Max	509.88	154.89	46.28
Jan-25	Average	504.18	124.20	42.19
	Max	531.96	168.05	46.63
Feb-25	Average	388.07	126.99	39.37
	Max	506.34	155.79	45.78
Mar-25	Average	484.74	133.53	39.09
	Max	556.03	196.93	45.67

Unit # 6 - Continuous Emission Monitoring System-CEMS DATA

Month		SOX mg/m3	NOX mg/m3	SPM mg/m3
Oct-24	Average	492.42	193.57	38.78
	Max	555.07	274.11	42.18
Nov-24	Average	529.68	156.35	31.22
	Max	553.67	211.65	37.96
Dec-24	Average	539.23	140.09	22.98
	Max	546.22	205.92	26.88
Jan-25	Average	363.13	122.48	37.93
	Max	461.49	185.45	38.63
Feb-25	Average	487.59	112.62	37.30
	Max	539.20	133.45	38.68
Mar-25	Average	524.74	124.38	32.71
	Max	562.98	177.89	37.46

ANNEXURE-II

Unit # 7 - Continuous Emission Monitoring System-CEMS DATA

Month		SOX mg/m3	NOX mg/m3	SPM mg/m3
Oct-24	Average	418.45	186.33	34.33
	Max	494.59	263.48	38.62
Nov-24	Average	434.27	162.48	30.56
	Max	478.88	198.45	36.05
Dec-24	Average	421.41	122.43	29.92
	Max	456.59	125.99	36.24
Jan-25	Average	378.79	137.23	32.31
	Max	431.83	185.70	35.58
Feb-25	Average	419.44	113.11	26.93
	Max	477.17	167.23	34.56
Mar-25	Average	422.65	137.98	31.01
	Max	447.39	171.47	35.58

Unit # 8 - Continuous Emission Monitoring System-CEMS DATA

Month		SOX mg/m3	NOX mg/m3	SPM mg/m3
Oct-24	Average	442.17	193.23	38.49
	Max	491.29	210.64	42.92
Nov-24	Average	498.17	202.48	33.01
	Max	521.56	240.83	44.83
Dec-24	Average	432.67	181.99	24.59
	Max	480.91	198.48	27.47
Jan-25	Average	470.13	131.92	32.77
	Max	515.47	163.56	42.28
Feb-25	Average	473.18	109.50	35.24
	Max	517.56	126.83	41.16
Mar-25	Average	427.84	114.00	37.61
	Max	510.41	132.51	44.27

ANNEXURE-III

Ambient Air Quality Data- Oct, 2024 – Mar, 2025

Month – Oct' 2024

SN	Location (Avg.24 Hrs.)	PM-10 (µg/m³)	SO2 (µg/m³)	NO2 (µg/m³)	CO (mg/m³)	PM-2.5 (µg/m³)
1	Reservoir Area	31.11	6.16	16.83	0.56	16.63
2	Main Gate	31.20	20.38	26.24	0.35	22.20
3	Ash pond	46.53	21.41	29.25	0.86	23.19
4	Ishrpura Village	75.59	18.42	35.86	0.63	43.89
5	Bhadresh Village	75.94	18.24	35.03	0.70	44.26
6	Chuli Village	76.99	17.88	34.19	0.59	44.08

Month – Nov' 2024

SN	Location (Avg.24 Hrs.)	PM-10 (µg/m³)	SO2 (µg/m³)	NO2 (µg/m³)	CO (mg/m³)	PM-2.5 (µg/m³)
1	Reservoir Area	30.60	11.78	25.54	0.33	18.59
2	Main Gate	30.75	22.02	26.24	0.30	21.55
3	Ash pond	30.67	13.22	36.75	0.86	21.64
4	Ishrpura Village	79.37	19.79	36.70	0.63	46.05
5	Bhadresh Village	76.53	18.38	34.87	0.67	43.41
6	Chuli Village	76.08	20.14	36.93	0.65	44.54

Month – Dec' 2024

SN	Location (Avg.24 Hrs.)	PM-10 (µg/m³)	SO2 (µg/m³)	NO2 (µg/m³)	CO (mg/m³)	PM-2.5 (µg/m³)
1	Reservoir Area	27.26	10.31	14.83	0.40	19.90
2	Main Gate	49.89	23.11	26.25	0.30	43.98
3	Ash pond	30.96	11.94	20.94	0.89	24.99
4	Ishrpura Village	77.16	18.17	35.06	0.59	43.24
5	Bhadresh Village	76.79	17.79	33.98	0.64	41.92
6	Chuli Village	76.56	19.13	32.89	0.59	41.85

ANNEXURE-III

Month – Jan' 2025

SN	Location (Avg.24 Hrs.)	PM-10 (µg/m³)	SO2 (µg/m³)	NO2 (µg/m³)	CO (mg/m³)	PM-2.5 (µg/m³)
1	Reservoir Area	30.45	13.79	24.12	0.36	18.15
2	Main Gate	44.79	22.82	32.79	0.33	29.27
3	Ash pond	42.75	12.93	18.98	0.85	25.17
4	Ishrpura Village	76.69	18.93	36.56	0.71	43.21
5	Bhadresh Village	76.34	17.86	37.18	0.72	44.08
6	Chuli Village	73.52	17.86	35.36	0.59	41.69

Month – Feb' 2025

SN	Location (Avg.24 Hrs.)	PM-10 (µg/m³)	SO2 (µg/m³)	NO2 (µg/m³)	CO (mg/m³)	PM-2.5 (µg/m³)
1	Reservoir Area	51.63	10.98	24.76	0.34	27.09
2	Main Gate	51.27	13.25	30.97	0.32	32.82
3	Ash pond	36.83	17.75	6.91	0.82	21.02
4	Ishrpura Village	76.40	15.39	31.22	0.64	41.48
5	Bhadresh Village	76.01	17.75	35.77	0.67	42.57
6	Chuli Village	75.29	17.84	32.80	0.54	42.42

Month – Mar' 2025

SN	Location (Avg.24 Hrs.)	PM-10 (µg/m³)	SO2 (µg/m³)	NO2 (µg/m³)	CO (mg/m³)	PM-2.5 (µg/m³)
1	Reservoir Area	49.80	10.46	33.48	0.32	19.24
2	Main Gate	51.24	10.43	33.61	0.32	32.64
3	Ash pond	37.05	14.63	27.65	0.85	19.47
4	Ishrpura Village	78.33	18.70	35.76	0.54	43.61
5	Bhadresh Village	74.48	16.50	33.81	0.54	42.26
6	Chuli Village	75.50	18.46	36.71	0.53	44.17

ANNEXURE-IV

Effluent Water Quality Oct– 2024 to Mar– 2025

SN	Parameters	UoM	CPCB Limits	Results					
				Oct	Nov	Dec	Jan	Feb	Mar
1.	pH		**6.5-8.5**	7.65	7.85	7.53	7.83	7.61	7.88
2.	Biochemical Oxygen Demand (BOD) @ 27Deg C for 3 days	mg/L	**< 30.0**	19.50	21.25	19.50	19.00	21.50	21.75
3.	Chemical Oxygen Demand (COD)	mg/L	**< 250**	94.00	103.25	92.50	89.50	92.50	104.3
4.	Total Kjeldhal Nitrogen as NH3	mg/L	**< 100**	14.93	17.05	12.83	13.55	12.59	13.30
5.	Free Available Chlorine	mg/L	**< 0.5**	BDL	BDL	BDL	BDL	BDL	BDL
6.	Oil & Grease	mg/L	**< 20**	1.50	1.87	1.50	1.30	BDL	BDL
7.	Copper as Cu	mg/L	**< 1**	BDL	BDL	BDL	BDL	BDL	BDL
8.	Zinc as Zn	mg/L	**< 1**	0.20	0.203	BDL	0.34	0.28	0.120
9.	Iron as Fe	mg/L	**< 1**	0.84	0.865	BDL	0.511	0.38	0.209
10.	Total Suspended Solid	mg/L	**< 100**	32.50	43.5	34.50	41.75	38.50	39.75
11.	Ammonical Nitrogen as N	mg/L	**< 50**	5.84	7.95	6.30	7.91	7.00	6.53
12.	Nitrate Nitrogen	mg/L	**< 10**	1.70	1.41	1.36	1.49	1.12	1.30
13.	Total Chromium as Cr	mg/L	**< 1**	BDL<0.01	BDL<0.01	BDL<0.01	BDL<0.01	BDL<0.01	BDL<0.01

ANNEXURE-V

UBROS TECHNO INDIA PVT. LTD.
(An ISO 9001:2015 Certified Lab)
Kh. No. 1125, Raj Complex, Meerut Road
Industrial Area, Ghaziabad-201001(U.P.)
labs@ubrosindia.com, info@ubrosindia.com
+91 9958610110, +91 7895607775

TEST REPORT

Report No. UTL20241021002

Issued To: M/s Aquatech Systems (Asia) Pvt.Ltd.
Survey No.244/2,
Rajiv Gandhi Infotech Park,
Hinjewadi, Pune-411057, India

Date of Receiving: 21/10/2024
Date of Analysis Start: 21/10/2024
Date of Analysis 25/10/2024
Date of Reporting: 25/10/2024
Sample Quantity: 2 Litre

Sample: STP OUTLET WATER
Sample ID: JSW ENERGY (BARMER LIMITED)
Main Plant, STP-100 KLD
Sample Packing: Plastic Can

Sampling Done By: Client

TEST RESULTS

S. No.	Test parameters	Unit	Results	Limits as per EPA 1986 Schedule-VI General Standards for Discharge		Testing Method
				Inland Surface Water	Land For Irrigation	
1	pH Value	-	7.88	5.5-9.0	5.5-9.0	IS 3025(P-11)
2	Total Suspended Solids	mg/l	27.4	100 Max	200 Max	IS 3025(P-17)
3	Oil and Grease	mg/l	<2.0	10 Max	10 Max	IS 3025(P-39)
4	Biochemical Oxygen Demand(BOD)-3 Days at 27^{0}C	mg/l	16.8	30 Max	100 Max	IS 3025(P-44)
5	Chemical Oxygen Demand	mg/l	94.6	250 Max	NS	IS 3025(P-58)
6	Total Nitrogen (as N)	mg/l	11.6	NS	NS	IS 3025(P-34/Sec-1)-2023
7	Ammonical Nitrogen (as N)	mg/l	6.2	50 Max.	NS	IS 3025(P-34/Sec-1)-2023
8	Faecal Coliform	MPN/100ml	80	<100	<100	IS 1622-1981

NS – Not Specified

End of Report

Jayprakash Narayan
(Deputy Tech. Manager)
Authorised Signatory

1. The result listed refer only to the tested samples and applicable parameter / Endorsement of product is neither inferred nor implied
2. Sample not drawn by us otherwise mentioned .Total liability of our analytical division is limited to the sample supplied or invoiced amount
3. This report is not to be reproduced wholly or in part and cannot be use as an evidence in court of law and should not be used in any advertising media without special permission in writing
4. Sample has been tested as per the latest valid version of standard .
5. Sample will be destroyed as per the procedure

ANNEXURE-V

UBROS TECHNO INDIA PVT LTD

AN ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 CERTIFIED LABORATORY
1125, Meerut Road Industrial Area, Ghaziabad – 201001 (Uttar Pradesh)
Ph. : 7895607775, 9958610110 Email : ubroslab@gmail.com
Website : www.ubrosindia.com

TEST REPORT

Report No. UTL20241118002

Issued To: **M/s Aquatech Systems (Asia) Pvt. Ltd.**
Survey No.244/2,
Rajiv Gandhi Infotech Park,
Hinjewadi, Pune-411057, India

Date of Receiving: 18/11/2024
Date of Analysis Start: 18/11/2024
Date of Analysis Complete: 23/11/2024
Date of Reporting: 23/11/2024
Sample Quantity: 2 Litre

Sample: **STP OUTLET WATER**
Sample ID: **JSW ENERGY (BARMER LIMITED) Main Plant STP-100 KLD**
Sample Packing: Plastic Can

Sampling Done By: Client

TEST RESULTS

S. No.	Test parameters	Unit	Results	Limits as per EPA 1986 Schedule-VI General Standards for Discharge		Testing Method
				Inland Surface Water	Land For Irrigation	
1	pH Value	-	7.72	5.5-9.0	5.5-9.0	IS 3025(P-11)
2	Total Suspended Solids	mg/l	28.0	100 Max	200 Max	IS 3025(P-17)
3	Oil and Grease	mg/l	<2.0	10 Max	10 Max	IS 3025(P-39)
4	Biochemical Oxygen Demand (BOD)-3 Days at 27^{0}C	mg/l	20.1	30 Max	100 Max	IS 3025(P-44)
5	Chemical Oxygen Demand	mg/l	96.3	250 Max	NS	IS 3025(P-58)
6	Total Nitrogen (as N)	mg/l	13.1	NS	NS	IS 3025(P-34/Sec-1)-2023
7	Ammoniacal Nitrogen (as N)	mg/l	6.6	50 Max.	NS	IS 3025(P-34/Sec-1)-2023
8	Fecal Coliform	MPN/100ml	60	<100	<100	IS 1622-1981

NS = Not Specified

****End of Report****

Jayprakash Narayan
(Deputy Tech. Manager)
Authorised Signatory

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1125, Meerut Road Industrial Area, Ghaziabad – 201001 (Uttar Pradesh)
Ph. : 7895607775, 9958610110 Email : ubroslab@gmail.com
Website : www.ubrosindia.com

TEST REPORT

Report No. UTL20241220002

Issued To: **M/s Aquatech Systems (Asia) Pvt. Ltd.**
Survey No.244/2,
Rajiv Gandhi Infotech Park,
Hinjewadi, Pune-411057, India

Date of Receiving: 20/12/2024
Date of Analysis Start: 20/12/2024
Date of Analysis Complete: 25/12/2024
Date of Reporting: 25/12/2024
Sample Quantity: 2 Litre

Sample: STP OUTLET WATER
Sample ID: JSW ENERGY (BARMER LIMITED) Main Plant STP-100 KLD
Sample Packing: Plastic Can

Sampling Done By: Client

TEST RESULTS

S. No.	Test parameters	Unit	Results	Limits as per EPA 1986 Schedule-VI General Standards for Discharge		Testing Method
				Inland Surface Water	Land For Irrigation	
1	pH Value	-	7.80	5.5-9.0	5.5-9.0	IS 3025(P-11)
2	Total Suspended Solids	mg/l	29.1	100 Max	200 Max	IS 3025(P-17)
3	Oil and Grease	mg/l	<2.0	10 Max	10 Max	IS 3025(P-39)
4	Biochemical Oxygen Demand (BOD)-3 Days at 27°C	mg/l	21.2	30 Max	100 Max	IS 3025(P-44)
5	Chemical Oxygen Demand	mg/l	98.1	250 Max	NS	IS 3025(P-58)
6	Total Nitrogen (as N)	mg/l	14.3	NS	NS	IS 3025(P-34/Sec-1)-2023
7	Ammoniacal Nitrogen (as N)	mg/l	6.5	50 Max.	NS	IS 3025(P-34/Sec-1)-2023
8	Fecal Coliform	MPN/100ml	60	<100	<100	IS 1622-1981

NS = Not Specified

End of Report

Jayprakash Narayan
(Deputy Gen. Manager)
Authorised Signatory

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Website : www.ubrosindia.com

TEST REPORT

Issued To: M/s Aquatech Systems (Asia) Pvt. Ltd.
Survey No.244/2,
Rajiv Gandhi Infotech Park,
Hinjewadi, Pune-411057, India

Report No. UTL20250118002

Date of Receiving: 18/01/2025
Date of Analysis Start: 18/01/2025
Date of Analysis 24/01/2025
Date of Reporting: 24/01/2025
Sample Quantity: 2 Litre

Sample: STP OUTLET WATER
Sample ID: JSW ENERGY (BARMER LIMITED) Main Plant STP-100 KLD
Sample Packing: Plastic Can

Sampling Done By: Client

TEST RESULTS

S. No.	Test parameters	Unit	Results	Limits as per EPA 1986 Schedule-VI General Standards for Discharge		Testing Method
				Inland Surface Water	Land For Irrigation	
1	pH Value	-	7.82	5.5-9.0	5.5-9.0	IS 3025(P-11)
2	Total Suspended Solids	mg/l	29.6	100 Max	200 Max	IS 3025(P-17)
3	Oil and Grease	mg/l	<2.0	10 Max	10 Max	IS 3025(P-39)
4	Biochemical Oxygen Demand (BOD)-3 Days at 27°C	mg/l	21.7	30 Max	100 Max	IS 3025(P-44)
5	Chemical Oxygen Demand	mg/l	101.3	250 Max	NS	IS 3025(P-58)
6	Total Nitrogen (as N)	mg/l	13.9	NS	NS	IS 3025(P-34/Sec-1)-2023
7	Ammonical Nitrogen (as N)	mg/l	6.8	50 Max.	NS	IS 3025(P-34/Sec-1)-2023
8	Faecal Coliform	MPN/100ml	80	<100	<100	IS 1622-1981

NS = Not Specified

End of Report

Jayprakash Narayan
(Deputy Tech., Manager)
Reviewed & Approved By
(Authorized Signatory)

Note:
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TEST REPORT

Issued To: M/s Aquatech Systems (Asia) Pvt. Ltd.
Survey No.244/2,
Rajiv Gandhi Infotech Park,
Hinjewadi, Pune-411057, India

Report No. UTL20250220002

Date of Receiving: 20/02/2025
Date of Analysis Start: 20/02/2025
Date of Analysis Complete: 25/02/2025
Date of Reporting: 25/02/2025
Sample Quantity: 2 Litre

Sample: STP OUTLET WATER
Sample ID: JSW ENERGY (BARMER LIMITED) Main Plant STP-100 KLD
Sample Packing: Plastic Can

Sampling Done By: Client

TEST RESULTS

S. No.	Test parameters	Unit	Results	Limits as per EPA 1986 Schedule-VI General Standards for Discharge		Testing Method
				Inland Surface Water	Land For Irrigation	
1	pH Value	-	7.63	5.5-9.0	5.5-9.0	IS 3025(P-11)
2	Total Suspended Solids	mg/l	30.4	100 Max	200 Max	IS 3025(P-17)
3	Oil and Grease	mg/l	<2.0	10 Max	10 Max	IS 3025(P-39)
4	Biochemical Oxygen Demand (BOD)-3 Days at 27°C	mg/l	23.0	30 Max	100 Max	IS 3025(P-44)
5	Chemical Oxygen Demand	mg/l	104.6	250 Max	NS	IS 3025(P-58)
6	Total Nitrogen (as N)	mg/l	15.2	NS	NS	IS 3025(P-34/Sec-1)-2023
7	Ammonical Nitrogen (as N)	mg/l	7.1	50 Max.	NS	IS 3025(P-34/Sec-1)-2023
8	Faecal Coliform	MPN/100ml	60	<100	<100	IS 1622-1981

NS = Not Specified

End of Report

Jayprakash Narayan
(Deputy Tech. Manager)
Reviewed & Approved By
(Authorized Signatory)

Note:
1. The result listed refer only to the tested samples and applicable parameter / Endorsement of product is neither inferred nor implied
2. Sample not drawn by us otherwise mentioned .Total liability of our analytical division is limited to the sample supplied or invoiced amount
3. This report is not to be reproduced wholly or in part and cannot be use as an evidence in court of law and should not be used in any advertising media without special permission in writing
4. Sample has been tested as per the latest valid version of standard .
5. Sample will be destroyed as per the procedure

ANNEXURE-V

UBROS TECHNO INDIA PVT LTD

AN ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 CERTIFIED LABORATORY
1125, Meerut Road Industrial Area, Ghaziabad – 201001 (Uttar Pradesh)
Ph. : 7895607775, 9958610110 Email : ubroslab@gmail.com
website : www.ubrosindia.com

TEST REPORT

Report No. UTL20250317005

Issued To: M/s Aquatech Systems (Asia) Pvt. Ltd.
Survey No.244/2,
Rajiv Gandhi Infotech Park,
Hinjewadi, Pune-411057, India

Date of Receiving: 17/03/2025
Date of Analysis Start: 17/03/2025
Date of Analysis Complete: 22/03/2025
Date of Reporting: 22/03/2025
Sample Quantity: 2 Litre

Sample: STP OUTLET WATER
Sample ID: JSW ENERGY (BARMER LIMITED) Main Plant STP-100 KLD
Sample Packing: Plastic Can

Sampling Done By: Client

TEST RESULTS

S. No.	Test parameters	Unit	Results	Limits as per EPA 1986 Schedule-VI General Standards for Discharge		Testing Method
				Inland Surface Water	Land For Irrigation	
1	pH Value	-	7.71	5.5-9.0	5.5-9.0	IS 3025(P-11)
2	Total Suspended Solids	mg/l	29.7	100 Max	200 Max	IS 3025(P-17)
3	Oil and Grease	mg/l	<2.0	10 Max	10 Max	IS 3025(P-39)
4	Biochemical Oxygen Demand (BOD)-3 Days at 27°C	mg/l	22.3	30 Max	100 Max	IS 3025(P-44)
5	Chemical Oxygen Demand	mg/l	101.5	250 Max	NS	IS 3025(P-58)
6	Total Nitrogen (as N)	mg/l	14.8	NS	NS	IS 3025(P-34/Sec-1)-2023
7	Ammonical Nitrogen (as N)	mg/l	7.7	50 Max.	NS	IS 3025(P-34/Sec-1)-2023
8	Faecal Coliform	MPN/100ml	70	<100	<100	IS 1622-1981

NS = Not Specified

End of Report

Jayprakash Narayan
(Deputy Tech. Manager)
Reviewed & Approved By
(Authorized Signatory)

Note:
1. The result listed refer only to the tested samples and applicable parameter / Endorsement of product is neither inferred nor implied
2. Sample not drawn by us otherwise mentioned .Total liability of our analytical division is limited to the sample supplied or invoiced amount
3. This report is not to be reproduced wholly or in part,and cannot be use as an evidence in court of law and should not be used in any advertising media without special permission in writing
4. Sample has been tested as per the latest valid version of standard .
5. Sample will be destroyed as per the procedure

ANNEXURE-VI

JSW Energy (Barmer) Limited
Village & Post: Bhadresh, Post Box No. 30,
Distt: Barmer – 344001 (Rajasthan)
CIN: U31102MH1996PLC185098
Fax: +91 2982 229222
Website : www.jsw.in

Ref: JSWE(B)L/ENV/24-25/023 **Date: 22.11.2024**

To,

The Member Secretary
Rajasthan State Pollution Control Board
4-Institutional Area, Jhalana Doongari,
Jaipur – 302004

Sub: Compliance Report – Consent to Operate for 1080 MW Lignite based Power Plant at Village-Bhadresh, District Barmer.

Ref: Consent to Operate

1. Compliance to CTO for Unit 1 & 2, File No. **F(Tech)/Barmer (Barmer)/5153(1)/2023-2024/5821-5823**; Order No. **2023-2024/Power/3, Dt 05/12/2023.**
2. Compliance to CTO for Unit 3 & 4, File No. **F(Tech)/Barmer (Barmer)/5153(1)/2023-2024/5925-5927**; Order No. **2023-2024/Power/4, Dt 08/12/2023.**
3. Compliance to CTO for Unit 5 & 6, File No. **F(Tech)/Barmer (Barmer)/3(1)/2008-2009/6524-6526**; Order No. **2021-2022/CPM/8556**, Dt: **10/02/2022.**
4. Compliance to CTO for Unit 7 & 8, File No. **F(Tech)/Barmer (Barmer)/3(1)/2008-2009/6527-6529**; Order No. **2021-2022/CPM/8557**, Dt: **10/02/2022.**

Dear Sir,

With reference to Consent to Operate issued for Unit # 1-2, 3-4, 5-6 and 7-8 for operating 1080 MW (8 x 135 MW) Lignite Based Thermal Plant of M/s JSW ENERGY (BARMER) Ltd, Dist.- Barmer, Rajasthan, we herewith submit half-yearly compliance report, for the period pertaining to **APRIL– 2024 to SEP– 2024,** for the conditions stipulated in the Consent to Operate issued for this Power Project. Analysis Data has uploaded on JSWEBL website - http://www.jsw.in/energy/about-barmer-plant.

We have taken up the operation activity at the Power Plant as per the conditions stipulated in this Consent to Operate.

Thanking you.

For JSW ENERGY (BARMER) Ltd.

Sharad Chandra Totla
GM (Operation & Maintenance)

Enclosed:

1. Compliance Report
2. Stack monitoring data **_Annexure-I**
3. CEMS Monitoring data **_Annexure-II**
4. AAQ Monitoring data **_Annexure-III**
5. Effluent water data **_Annexure-IV**
6. STP Treated water quality **_Annexure-V**
7. Last compliance report **_Annexure-VI**

C.C. The Regional Officer – RSPCB, Balotara.