BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL EASTERN ZONE BENCH KOLKATA

Original Application No. -

IN THE MATTER OF :

JATINDRA KUMAR SINGH **PETITIONER**

VERSUS

STATE OF ODISHA & ORS. **RESPONDENTS**

INDEX

S.No.	Particulars	Annexure	Page No.
1	Index		1
2	Synopsis		2-4
3	Chronology of events		5
4	Original Application under section 14, 15 read with section 18 of the NGT Act, 2010		6-18
5	Affidavit in support of the Original Application		19
6	Vakalatnama		20
7	List of Documents		21
8	Photographs	A-1	22-26
9	Medical prescription	A-2	27-28
10	Complaint to Collector	A-3	29
11	Reply to RTI by SPCB	A-4	30-138
12	Order dated 14.08.23 by Hon'ble High Court of Orissa	A-5	139-142
13	Inspection Report	A-6	143-153

Date : 15.12.24

Place : Jharsuguda

SWEKSHA PRAKASH

Counsel for the Petitioner

Email- prakashsweksha@gmail.com

Mob. - 8085110224

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL EASTERN ZONE BENCH KOLKATA

Original Application No. -

IN THE MATTER OF :

JATINDRA KUMAR SINGH **PETITIONER**

VERSUS

STATE OF ODISHA & ORS. **RESPONDENTS**

SYNOPSIS

That the petitioner is approaching this Hon'ble National Green Tribunal against the air pollution, water pollution, groundwater pollution and soil pollution caused by Respondent no. 7 namely, "JSW (ENERGY) IND-BARATH ENERGY (UTKAL) LIMITED" established at Sahaibahal, PO- Charpali Barpali, Bandhbahal, District Jharsuguda, Odisha, which has been operating as a power plant industry in the district Jharsuguda. The respondent no.7 is an "industrial unit' which is constructed illegally on forest land and has been polluting the environment of the region with smoke, ash, silo, dust and untreated trade effluents through its industrial operations. The respondent no.7 is situated in close proximity to the residential population with only 30 meters of distance from village Sahajbahal whereby the residents are immensely suffering from all the dense smoke, emissions from silo and dust in air such that the air pollution has lead to intolerable eye irritation and infections, breathing problems and burning sensations in heart. The ash and smoke dirts the residential houses, roads and infrastructures such that accumulated dark-coloured substance is found everywhere in the region. Further, the chimney of the respondent no.7 is only at 200 m distance from the government school of the village which is dangerously impacting the health of children.

The respondent no.7 is dumping and draining its waste trade effluents directly into the agricultural fields which has caused the toxicity in soil and the crops. The fields of rice which is a major crop, are polluted whereby the crop color has changed to greyish. The toxic crop is the result of soil pollution which is caused by the respondent no.7. Further, the respondent no.7 is also contaminating the groundwater of this region whereby the water in the borewell has turned yellow. A team came and inspected the borewell and told the villagers to not to drink water from the borewell as it may lead to sudden heart attack. Therefore, the groundwater pollution is being caused continuously, which is also responsible for adding toxicity to the soil and crops grown in the region.

Worsening the quality of the environment of Jharsuguda, the respondent no.7 is also responsible for causing water pollution by draining its untreated waste water in Kata (pond) and precious Mahanadi river. The flying ash has also entered the pond and polluted the water in it. The water of the pond is used by the resident population which has now been polluted with chemical wastes of respondent no.7 whereby the usage of water from Kata is causing skin problems such as continuous iching in the body. Hence, violating the Water (Prevention and Control of Pollution) Act, 1974

The respondent no. 7 has violated the section 7 of the Environment Protection Act by causing emission of heavy dark coloured smoke directly in the air and also causing widespread ash and dark emissions from silo and dust which is harmful and injurious to health of 2500 residential population. The nuisance of respondent no. 7 has adversely impacted the air, water and soil quality of the region and has made the environment unliveable with extreme environment pollution, thus, violating the Environment (Protection) Act, 1986 and Air Act. The respondent no.7 is constructed on forest land, which must had been preserved and protected. The coal combustions, silo emissions and smoke emitting out from the respondent no.7 is cancerous and has caused respiratory diseases to the people. The vicious smoke of respondent no. 7 has caused breathing problems, chest pain, irritation in eyes, nose and lungs of the petitioner and therefore, violating the Environment (Protection) Act, 1986 by injuring the health by releasing air pollutants untreated in the residential area.

All of the above acts of respondent no. 7 have resulted in creation of unhealthy, cancerous and polluted environment. The petitioner along with other residents, is helpless to witness their clean homes to turn smoky, unclean and polluted. Therefore, the petitioner is praying to this Hon'ble Tribunal for stopping the extreme damage to the environment by the respondent no.7.

Date : 15.12 .24

Place : Jharsuguda

SWEKSHA PRAKASH

Counsel for the Petitioner

Email- prakashsweksha@gmail.com

Mob. - 8085110224

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL EASTERN ZONE BENCH KOLKATA

IN THE MATTER OF :

JATINDRA SINGH **PETITIONER**

VERSUS

STATE OF ODISHA & ORS. **RESPONDENTS**

CHRONOLOGY OF EVENT

Date	Particulars
20.08.2009	Illegal establishment of Respondent no.07 on forest land in close proximity to the petitioner's village
28.12.2022	Acquisition of M/S Ind-Barath by JSW Energy Limited
01.02.2024	Respondent no. 7 emitting smoke, dust, ash and silo causing the air to be dusty and infectious; dumping and draining trade effluent/ pollutants on the agricultural field of the petitioner
26.02.24	Written complaint to the Collector, Jharsuguda
28.03.2024	Petitioner filed RTI to State Pollution Control Board, Odisha
20.04.2024	Reply to RTI from State Pollution Control Board, Odisha, subject : CTO under Air Act, 1981 and Water Act, 1974
25.11.2024	Change in colour of rice crops and air pollution due to the ongoing emission of cancerous pollutants in the environment by respondent no.7

Date : 15.12 .24

Place : Jharsuguda, Odisha

SWEKSHA PRAKASH

Counsel for the Petitioner

Email- prakashsweksha@gmail.com

Mob. - 8085110224

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL EASTERN ZONE BENCH KOLKATA

Original Application No. -

IN THE MATTER OF :

(1) JATINDRA KUMAR SINGH S/O Mr. KSHIROD CHANDRA SINGH
AGED 44 YEARS R/O SANSARATIKIRA, SAHAJBAHAL,
P.O. - CHARPALI-BARPALI, VIA B.B. COLONY
DISTRICT JHARSUGUDA, ODISHA- 768211
M.No. : 9937984490

PETITIONER

VERSUS

(1) STATE OF ODISHA
Through Chief Secretary
Government of Odisha, General Administration Department,
Odisha Secretariat, Bhubaneswar-751001
Email : csori@nic.in, cs-ori@nic.in

(2) MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
Through its secretary, New Delhi
Indira Paryavaran Bhawan, Jor Bag, New Delhi,110003
E Mail : secy-moef@nic.in

(3) CENTRAL POLLUTION CONTROL BOARD
Through its Member Secretary
Parivesh Bhawan ,East Arjun Nagar ,Delhi 110032
E Mail ccb.cpcb@nic.in

(4) ODISHA STATE POLLUTION CONTROL BOARD

Through Member Secretary

ParibeshBhawan, A/118, Nilakantha Nagar,

Unit-8, Bhubaneswar-751 012

E-mail : paribesh1@ospcboard.org

(5) DISTRICT MAGISTRATE JHARSUGUDA

Office of the District Magistrate and Collector,

Jharsuguda PIN-768204, Odisha

E-Mail : dm-jharsuguda@nic.in

(6) MUNICIPAL COMMISSIONER OF JHARSUGUDA

Jharsuguda Municipality, Mangal Bazar Rd,

Jharsuguda District, Odisha PIN- 768201

E-mail : jsgmunicipality@yahoo.com

(7) M/s JSW (ENERGY) IND-BARATH ENERGY (UTKAL) LIMITED

Through Promoter/Vice President

Mr. K Rajashekara Rao and Mr. C Venkatarama Reddy

Sahaibahal, PO- Charpali Barpali, Bandhbahal,

District Jharsuguda, Odisha, PIN-768211

(8) JSW (ENERGY) LIMITED

Through MD and CEO - Mr.PRASHANT JAIN

JSW Centre, Bandra Kurla Complex,

Bandra (East), Mumbai (400051)

(9) Mr.PRASHANT JAIN

Joint Managing Director and CEO of JSW (energy) ltd.

JSW Centre, Bandra Kurla Complex,

Bandra (East), Mumbai (400051)

RESPONDENTS

ORIGINAL APPLICATION UNDER SECTION 14,15,READ WITH SECTION 18 OF THE NATIONAL GREEN TRIBUNAL ACT 2010

It is humbly submitted by the petitioners as under:

FACTS OF THE CASE

1) That the petitioner is an Indian citizens residing in district Jharsuguda, Odisha, is a farmer and who is affected by the air pollution and water pollution being caused by the respondent no. 7. The polluted air in the region has caused irritation in eyes and eye infection, intolerable coughing and sickness to the petitioner and to so many other people like him who have been misfortunate to live under the influence of widespread emission of harmful smoke, ash, silo and toxic gases which are emitting from the industrial unit of the respondent no. 7. (Smoke emissions are photographed in Annexure A-1 and medical prescription in A-2)

2) That the respondent no. 7 is an 'industrial unit' under section 2 (k) of the Air (Prevention and Control of Pollution) Act, 1981, referred as "JSW (ENERGY) IND-BARATH ENERGY (UTKAL) LIMITED". The JSW Energy Limited is a company which has completely acquired M/S Ind-Barath and owns a 700 MW (350MW x 2 units) thermal power plant located at Jharsuguda district of Odisha. The respondent no.7 is causing extreme air pollution by emitting toxic gases, ash, silo and untreated smoke openly in the air and also draining trade effluents in the natural water bodies including Mahanadi river and open agricultural fields whereby causing contamination to water bodies and causing toxicity to soil cover and groundwater of the region.

3) That, the power plant of respondent no. 7 is situated in the close vicinity of residential population of villages of the district Jharsuguda and carrying out its industrial operations extremely affecting the health of 2500 residents. The respondent no. 7 is established at a distance of 30 meters to village Sahajbahal, 120 meters to village Munda Pada and 350 meters to village Sansaratikra, whereby the silo, chimney, boiler and ash pond of the respondent no. 7 is only 50

meters to Sansaratikra village and forcing residents and bypasses to suffer with heavy ash and smoke. Also, the track hopper is 60 meters to Munda Pada such that all the people residing and bypassing the area are badly affected by the coal burning.

4) That, the chimney of respondent no. 7 while emitting heavy smoke, is constructed at a distance of only only 180 meters from government school whereby forcing the children to breathe in polluted air such that the air is filled with smoke, dust, silo and toxic gases.

5) That the unit of respondent no. 7 is emitting large amount of smoke and ash everyday and made the environment unbreathable for the residents. The colour of the smoke is visible as black, grey and white. The smoke from respondent no.7 has caused irritation and burning sensations in eyes, nose, lungs and chest of the petitioner. (Air pollution is prima facie evident from photographs annexed in Annexure A-1)

6) That the environment has become suffocating because the air is filled with bad, intolerable, infection causing gases which are coming out of the establishment of respondent no.7.

7) That the unit of respondent no. 7 is illegally established on the forest land for which the Hon'ble High Court of Odisha has directed demolition of the power plant, but the same has not been executed till date. The respondent no.7 is illegally occupying the forest land and is continuously polluting the environment. The Hon'ble High Court of Orissa ordering the eviction of all structures and machineries from the 'encroached forest land'. The eviction order relates to constructions undertaken by Ind Barath Energy Utkal Limited (IBEUL) for the 2x350 MW coal-based thermal power plant in 2014. The high court issued the order recently after taking note in the meantime constructions including buildings, boiler, turbine, track hopper, chimney etc and transmission towers for linking the power plant with the eastern power grid had come up on forest land. Case records

showed eight encroachment cases were instituted against IBEUL(now JSW), which had applied for the diversion of forest land measuring 35.98 hectare for the establishment of the power plant. It was held that, “We have gathered from the records that no such approval for diversion has been granted so far. But, surprisingly, IBEUL now JSW Energy Ltd is still on encroachment over the forest land”.(The High Court order is annexed in Annexure A-5 and investigation report in A-6.)

8) That the respondent no.7 is operating without obtaining prior necessary approvals and environment clearances and is still operating in the residential area and has not shifted/evicted as per the directions given by the Hon’ble Orissa High Court on 14.08.2024. Also, respondent no. 7 is continuously causing air pollution and no action has been taken by any authority to stop the air pollution and conserve our precious environment.

9) That in the reply to RTI filed by the petitioner filed, it is clear that the operations are being carried by the respondent no.7,8,9 in violation to the terms of the consent. The respondent no.7 has been illegally operating without constructing of proper ash pond and disposing ash in low lying area (school of the village and Mahanadi reservoir) without proper safety measures such that the environment pollution is aggravating and worsening the quality of life in the region. (The Consent to operate is annexed as Annexure A-4)

10) That the operations of respondent no.7 have extremely polluted the air of the residential region of the petitioner by improper and unsystematic disposal system for silo. While, silos are used in power plants for storing coal, fly ash, and cooled coal slag:

    1) **Fly ash silos :** Store fly ash, a solid waste product from burning coal. Fly ash silos are designed to prevent environmental pollution from fly ash accumulation. They include systems for grading, feeding, aerating, discharging, collecting dust, packing bags, and loading trucks. Fly ash is

also used as an additive in the construction, concrete, and cement industries.

2) **Coal silos :** Store coal, and are often made of concrete or steel. Concrete silos are more expensive and take longer to build, while steel silos are less expensive and can be built more quickly.

3) **Ash silos :** Store cooled coal slag after boiler combustion in a thermal power plant. Ash silos have an unloading system that continuously loads and unloads slag.

11) That the silo coming out from the respondent no.7 has affected the daily life of the petitioner and his fellow residents whereby the houses are continuously getting dirty due to dark smoke and emissions from silo, also, when the petitioner go for farming on his agricultural field, very dark-smoky black-coloured dirt accumulates on his hands, face and nose. Just like the petitioner, every other farmer is helpless to breathe toxic air. The acts of respondent no.7 has converted the clean fresh environment into a highly toxic, unclean and poisonous.

12)That the respondent no.7 is draining the trade wastes directly in the agricultural field of the farmers, including the farming land of the petitioner which is polluting the soil with toxic water and chemicals and altering the natural physical property of the soil, thus, causing the petitioner to suffer from soil pollution. The colour of the peddy has turned greyish instead or white, the green leaves have changed its color and toxic due to soil pollution caused by the respondent no.7. Such activity of the respondent no.7 is also causing contamination to the groundwater in the region. The water in the borewell of the village has become yellow in colour and so poisonous that on inspection by a few men team, the villagers were informed to not drink the water from borewell as it may result in sudden heart attack. (Photograph of water from the well is annexed as Annexure A-1)

13)That the respondent no.7 is draining its waste water directly in the water course of Mahanadi river. Thus violating section 24,25,26 of Water (Prevention and Control of Pollution) Act, 1974.

14)That, the respondent no.7 is illegally operating its environment-damaging activities is surrounded by the villages around this forest land which are having population belonging to the scheduled tribe and scheduled caste. The Article 46 of the Constitution of India has imposed a duty on the State to protect the Scheduled Castes and the Scheduled Tribes from social injustice and all forms of exploitation, accordingly, the environment pollution being caused by the respondent no. 7 in the home of these people is an exploitation to their rights to live in clean environment.

15)That the air pollution caused by respondent no.7 is causing health problems to the public and the petitioner in particular have been facing daily eye irritation and continuous coughing. The medical prescription is attached herewith. The petitioner is not just one victim of the environment pollution caused by the respondent no.7 but all the people in the region are suffering from continuous irritation in eyes and lungs and are forced to contract infections and diseases. (Medical record is annexed in Annexure A-2)

16)That the petitioner is helpless to suffer and watch is home of serene environment being degrading in quality and purity due to environmental hazard caused by the big industry of the respondent no.7. The petitioner is sick from the infections spreading due to poor quality of air which is filled with toxicity and obnoxious smell, which is caused by the respondent no. 7. This is a violation of the right to clean air to all the citizens residing in the region of the applicant. The petitioner is responsible citizen of India and has fundamental duty to protect his family, fellow citizens and the environment from harmful emissions and nuisance initiated by industry of respondent no.7.

17)That the respondent no.7 has altered the physical, chemical properties of the air, water, ground water and soil by emission of untreated and unregulated smoke, silo wastes and other toxic wastes whereby rendering such air pollutants and water pollutants to cause harmful and injurious impact to the environment and health of public. The respondent no.7 has not intimated the State Pollution Control Board regarding the emission of air pollutants in the atmosphere. Such act of respondent no.7 shall be liable under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.

18)That the respondent no.7 and 8 have no concern for the air pollution and soil pollution done by their industrial operations. The nuisance of the respondent no. 7 and 8 have clearly violated the applicant's right to health, right to live in a clean environment, right to fresh air and right to work in healthy environment guaranteed under article 21 of the Constitution of India.

19)That the respondent no. 7 has not maintained any standardised system imposed by law to check and control the smoke emission and harmful silo emissions rather the untreated gaseous emissions from the outlets of the respondent no.7 has lead to spread of toxic air pollutants. The respondent no.7 has vehemently neglected the pollution-free environment which is the source of life to the vast population residing in residential region of Jharsuguda and has continued polluting the environment.

20)That the respondent no.7 and 8 has done wrong by illegally operating its industrial activities in the close proximity of residential area. That the irresponsible acts of the respondents no 7 are against the right to health and right to clean environment of the residents of the village of the petitioner and also against the natural resources which does not only lead to serious environmental hazards but is also making an adverse impact on the ecology and environment for the livelihood of belongings area and forthcoming generations.

21)That the petitioner has made a written complaint to the respondent no.5 but no corrective and preventive action was taken to stop the air pollution and water pollution. (Complaint to Collector in Annexure A-3)

22)That without the intervention of this Hon'ble Tribunal the applicant will not be able to prevent the clean air, water, soil quality from degrading and protect the health of the general public at large and prevent the respondents from causing irreversible damage to the environment.

GROUNDS

23)That the open emission of toxic air pollutants directly into the atmosphere in high concentration, causing air pollution is a prima facie negligent act of the respondent no.7,8,9 and such act is a clear violation of section 7 of the Environment Protection Act, 1986 and thus, act of the respondent no.7,8,9 are liable under section 7 of the Environment Protection Act, 1986.

24)That the air pollution being emitted from the outlets of the industrial unit of the respondent no.7 has been the major cause behind the extreme damage to the environment and altering the natural ecological balance. In addition, the untreatable and toxic smoke has become dangerous for public health. Therefore, the respondent no. 7 has violated the Air (Prevention and Control of Pollution) Act, 1981.

25)That the industrial unit of respondent no.7 is situated in the residential area which is continuously causing cancerous diseases and respiratory diseases to the people in the area. The burning smell and emissions from the establishment of respondent no. 7 has caused breathing problems, chest pain, irritation in eyes, nose and lungs. Thus, violating the Air (Prevention and Control of Pollution) Act, 1981 by injuring the health by releasing air pollutants untreated in the residential area.

26)That, the close proximity of the chimney of respondent no.7 is only 30 meters of distance from government school is badly affecting the health and growth of children. Thus, it is of the utmost importance to safeguard the rights of the indian citizens residing in the villages of the applicant, the right to live in clean environment and healthy environment which is free from diseases and toxic air. Therefore, the company of respondent no.7,8 is liable under section 16 of the Environment (Protection) Act, 1986.

27)That the respondent no.7 is adversely affecting the cultivation land of the petitioner and his friends by draining polluted waste waters directly into their farm farm land. This practice of disposing the waste water into the cultivation land is making the soil, the crops and the ground water toxic, which is highly injurious to environment as well as to the health of human. Thus, the respondent no.7 is causing soil pollution, water pollution and groundwater pollution whereby the degrading the natural environment in the region. Therefore, the respondent no.7 is liable to be closed down under section 5 of the Environment Protection Act.

28)That, on August 14, 2023, the Orissa High Court ordered the respondent no.7 for the eviction of all structures and machinery from the encroached forest land within 15 days whereby the respondent no.7 has violated section 2 of the Forest (Conservation) Act, 1980 and thus liable under section 3 of the Forest (Conservation) Act, 1980.

29)That the respondent no.7 has been using forest land for non-forest purposes without obtaining prior approval from the Ministry of Environment, Forest & Climate Change which is necessary for obtaining environmental clearance including environmental impact assessment and other regulatory checks. Hence, the respondent no.7 is operating without having necessary pre-requisites for environmental clearances.

30)That in case of F.K. Hussain vs Union Of India And Ors, 1990, recognising that right to health is a part of the right to live under Art. 21, the Hon’ble Kerala High

Court has observed that the right to clean water and air are attributes of the right to life.

31)That in the matter of M.C. Mehta vs. Union of India, the Hon'ble Supreme Court had stated that the right to live includes living in a pollution-free environment and being free from diseases.

32)That the respondent no.3,4,5,6 are mandated to perform functions to ensure the compliance to rules, regulations and directions made for prevention, control or abatement of pollution of environment located in the State and to secure the execution.

33)That the respondent no.7 is polluting the air and thus responsible to be closed down, and are called 'polluters' such that the liability of polluting the air is naturally imposed on the respondent no. 7. It was held that in MC Mehta v. Kamal Nath & Ors that "One who pollutes the environment must pay to reverse the damage caused by his acts".The Polluter Pays principle has been held to be a sound principle by this Court in Indian Council for Environ-Legal Action v. Union of India.

34)That in the case of Vellore Citizens' Welfare Forum v.. Union of India 1996, the Hon'ble Court interpreted the principle of Polluter Pays as an absolute liability of the polluter, not only to compensate the victims for the hurt caused to them but also to pay costs for the restoration of natural environment damaged by the activities of the polluter.

35)That it has been brought to the notice that smoke in the air, flying ash and suffocating gaseous air have caused severe air pollution in the region/residential area leading to multiple diseases and other health related issues amongst the people. It is said that the increase in respiratory diseases like asthma, lung cancer, bronchitis, etc. is primarily attributable to the worsening air quality in the

atmosphere. The damage being caused to people's lungs is said to be irreversible. Other health related issues like infections, allergies, blurry vision are also on the rise. Various experts have pointed towards multiple adverse effects of air pollution on human health like premature deaths, rise in mortality rates, palpitation, loss of vision, arthritis, heart ailments, cancer, etc.

36) That the Constitution of India under Article 243 W read with 12th Schedule entrusts responsibility of "public health, sanitation conservancy and solid waste management" to Municipalities. The Hon'ble Supreme Court held that the States will provide necessary support to such local bodies. This is to be monitored by the PCBs and the Secretaries, Environment in States and thereafter by the NGT.

LIMITATION

That respondent no.7 is operational and presently carrying industrial activities on forest land without legal authorisation and in violation to environmental laws. The petitioner is the victim of the air pollution being emitted from the establishment of respondent no.7, as the respondent no.7 is situated in the residential area of the petitioner's village. The improper smoke emission system and direct water drainage to the clean water bodies have caused the extreme air pollution and water pollution, while no action has been taken to prevent this environmental hazard and impose law and rules necessary to keep environment free from such smoke and toxic gaseous emissions. The offence against the environment by respondent no.7 is being continuously committed. The cause of action is continuing in nature and therefore the present original application is filed within the period of limitation prescribed under the act.

PRAYER

In view of the above Fact and Submission, the Hon'ble Tribunal may be please to grant following relief as under:

1. That the Hon'ble Tribunal may be pleased to declare operations of the respondent no.7 as illegal and unauthorised and prohibit any further emission of toxic gases and smoke into the atmosphere.
2. That the Hon'ble Tribunal may be pleased to direct to respondent no 7 and 8 to close down their industrial unit which is operating illegally on forest land and to demolish the illegal structure and machinery.
3. That the Hon'ble Tribunal may be pleased to direct the respondent no 7 to stop all activities which are causing air pollution and immediately shift the chimney, ash pond and silo from the residential area and take other corrective actions to prevent further damage to the environment.
4. That the Hon'ble Tribunal may be pleased to direct the respondent no 4,5,6,7,8,9 to take corrective actions to clear the water of pond(Kata).
5. That the Hon'ble Tribunal may be pleased to direct the respondent no 7 to compensate for adversely impacting the environment by assessing the damage according to the polluter pays principle.
6. Any other Relief which this Hon'ble Tribunal deems fit and proper in the interest of justice .

That the requisite court fees has been paid along with the original application.

Date : 15.12.24

Place : Jharsuguda

SWEKSHA PRAKASH

Counsel for the Petitioner

Email- prakashsweksha@gmail.com

Mob. - 8085110224

BEFORE NOTARY PUBLIC.LAKHANPUR
Sl.No.- 02 Date- 29/11/24

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL EAST BENCH AT KOLKATA

IN THE MATTER OF :

JATINDRA KUMAR SINGH

VERSUS

STATE OF ODISHA & ORS.

RESPONDENTS

AFFIDAVIT

I, Jatindra Kumar Singh s/o Shri Kshirod Chandra Singh aged 44 years r/o Sansaratikira, Post Office : Charpali-Barpali via B.B Colony, District Jharsuguda, Odisha, do hereby take oath and state as under -

1. That, I am the applicant in the instant case and fully conversant with the facts of the case and hence, competent to swear on this affidavit.
2. That, I am filing the original application along with the annexures before this Hon'ble Tribunal, having contents drafted on my instructions from para 1 to last and the same has been explained to me by my counsel.
3. That, I have read and understood the contents of the original application and the documents filed along.

Jatindra Ku, Singh
DEPONENT

Identified by me

29/11/24

VERIFICATION

I, the above-named deponent, do hereby verify that the contents of para no.1 to 3 above, are true and correct to best of my knowledge.

Signed and verified on .29th Nov.24 here at Lakhanpur..

Jatindra Ku, Singh
DEPONENT

29/11/24

P.K BISWAL
NOTARY, LAKHANPUR
Regd. No.- ON66/12

VAKALATNAMA

(Rule 4(1) of the Rules framed under the Advocates Act, 1981)

IN THE HON'BLE NATIONAL GREEN TRIBUNAL EAST BENCH AT KOLKATA

Original Application: /2024

JATINDRA KUMAR SINGH---------- Petitioner/ Appellant(s)

VERSUS

STATE OF ODISHA & ORS----------Respondent(s)

I, JATINDRA KUMAR SINGH s/o Shri Kshirod Chandra Singh aged 44 years r/o Sansaratikira, Post Office : Charpali-Barpali via B.B Colony, District Jharsuguda, Odisha (768211) do hereby appoint, engage and authorize advocate(s) named below to appear, act and placed in aforesaid case / proceedings, which shall include applications for restoration, setting aside of ex-parte orders, in correction, modifications, review and recall of orders passed in these proceedings, in this Court or any other Court in which the same may be tried / heard / proceeded with and also in the appellate, revisional for executing Court in respect of proceedings arising from this case / proceeding as per agreed terms and conditions and authorize him / them to sign and file pleadings, appeals, cross objections, petitions, applications, affidavits, or other documents as may be deemed necessary or proper for the prosecution / defence of the said case in all its stages and also agree to ratify and confirm acts done by him / them as if done by me / us.

In witness whereof I, JATINDRA KUMAR SINGH, do hereunto set my hand to these presents, the contents of which have been duly understood by me / us, on this 29.day of Nov. 2024

Particulars (in block letters) of each partly Executing Vakalatnama

Name & Father's / Husband's Name	Registered Address	E-mail Add. If any	Tele. No. if any	Status in the case (if any)	Full Signature **Thumb Impression
JATINDRA KUMAR SINGH s/o Shri Kshirod Chandra Singh	Sansaratikira, Post Office : Charpali-Barpali via B.B Colony, District Jharsuguda, Odisha (768211)			Applicant	Jatindra Kr. Singh

Particulars (in block letters) of each advocate Accepted Vakalatnama

Full Name & En. No. is State bar Council	Address for Service	E-mail Add. If any	Tele. No. If any	Full Signature
Sweksha Prakash En.No.MP/2056/19	**Mishra Associates, E-5/66 Arera Colony,Bhopal (M.P.)**	pswek95@yahoo.com	**8085110224**	
Prakash Pandey En.No.MP/1611/18	---do---	advprakashpande@gmail.com	**7805008055**	
Arun Goswami En. No. MP/6265/23	---do---		**7415518614**	
	---do---			
	---do---			

Address for Communication: Mishra Associates, E-5/66 Arera Colony,Bhopal (M.P.) Tele-Fax : 0755-4229752

Mob: 8085110224, E-mail: pswek95@yahoo.com

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL EASTERN ZONE BENCH KOLKATA

Original Application No. -

IN THE MATTER OF :

JATINDRA KUMAR SINGH **PETITIONER**

VERSUS

STATE OF ODISHA & ORS. **RESPONDENTS**

LIST OF DOCUMENT

S.No.	Particulars	Annexure	Page No.
1	Photographs	A-1	22-26
2	Medical prescription	A-2	27-28
3	Complaint to Collector	A-3	29
4	Reply to RTI by SPCB	A-4	30-138
5	Order dated 14.08.23 by Hon'ble High Court of Orissa	A-5	139-142
6	Inspection Report	A-6	143-153

Date : 15.12.24

Place : Jharsuguda

SWEKSHA PRAKASH

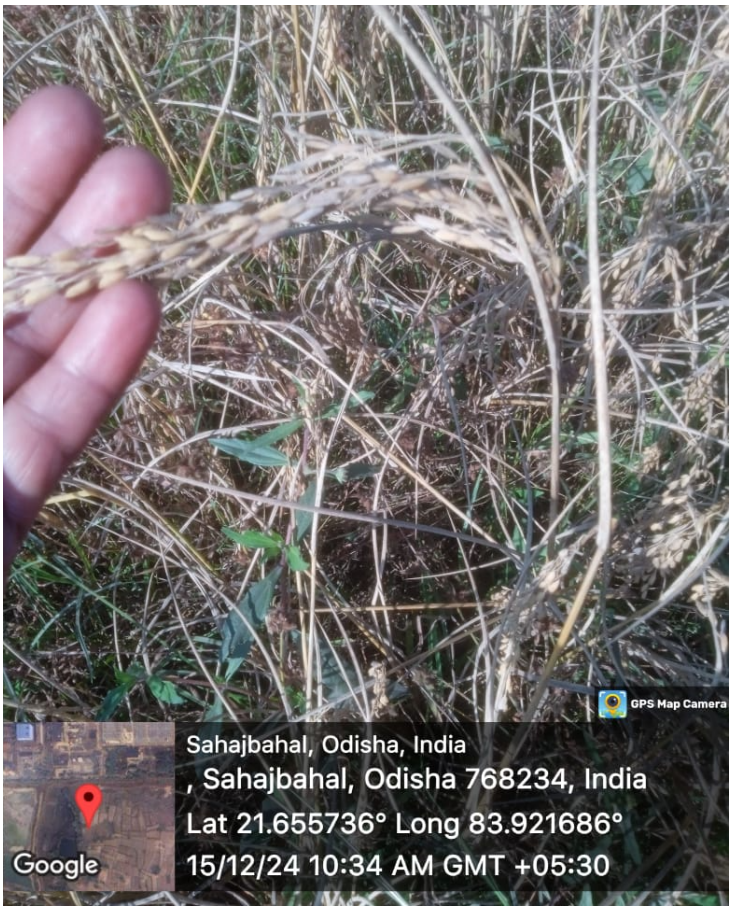
Counsel for the Petitioner

Email- prakashsweksha@gmail.com

Mob. - 8085110224


A-1
GPS Map Camera
Tilia, Odisha, India
Unnamed Road, Tilia, Odisha 768234, India
Lat 21.651715°
Long 83.922281°
15/10/24 03:47 PM GMT +05:30
Google


GPS Map Camera
Google
15/12/24 10:27 AM GMT +05:30


GPS Map Camera
Sahajbahal, Odisha, India
, Sahajbahal, Odisha 768234, India
Lat 21.655736° Long 83.921686°
15/12/24 10:34 AM GMT +05:30
Google


GPS Map Camera
Telenpali, Odisha, India
Mw5c+59p, Telenpali, Odisha 768234, India
Lat 21.657694° Long 83.921324°
15/12/24 11:20 AM GMT +05:30
Google


GPS Map Camera
Tilia, Odisha, India
, Tilia, Odisha 768234, India
Lat 21.651453° Long 83.922323°
30/12/24 12:29 PM GMT +05:30
Google


GPS Map Camera
Tilia, Odisha, India
, Tilia, Odisha 768234, India
Lat 21.651453° Long 83.922323°
30/12/24 12:28 PM GMT +05:30
Google


GPS Map Camera
Tilia, Odisha, India
, Tilia, Odisha 768234, India
Lat 21.651453° Long 83.922323°
30/12/24 12:25 PM GMT +05:30
Google


62
GPS Map Camera
Tilia, Odisha, India
, Tilia, Odisha 768234, India
Lat 21.652026° Long 83.922665°
15/12/24 03:20 PM GMT +05:30
Google


GPS Map Camera
Tilia, Odisha, India
Jwqg+qgj, Tilia, Odisha 768234, India
Lat 21.63898° Long 83.927169°
15/12/24 05:18 PM GMT +05:30
Google


GPS Map Camera
Jharsuguda, Odisha, India
Unnamed Road, Odisha 768234, India
Lat 21.654598°
Long 83.920559°
20/11/24 07:52 AM GMT +05:30
Google


GPS Map Camera
Jharsuguda, Odisha, India
Unnamed Road, Odisha 768234, India
Lat 21.654509°
Long 83.920627°
07/10/24 10:51 AM GMT +05:30
Google


GPS Map Camera
Tilia, Odisha, India
, Tilia, Odisha 768234, India
Lat 21.652917° Long 83.92102°
26/12/24 10:31 AM GMT +05:30
Google

A-2

JSW ENERGY (UTKAL) LTD. OHC

OPD TICKET

OPD No-	3975
Regd. no / Date-	10008 // 2024 0 12
Patient Name-	Jatindra ku. Singh
Address-	Sansaratikria
Age / Sex-	44 year / M

C/o Eye pain, watering, redness
Itching

BP -

Pulse -

Temp-

Spo2 -

Rx Scaboma Plus LA ~~OD~~
1 OD x 5d

~~T. Cetzine OD BD~~
~~od~~

Andre I Kul drops 1 drop 5D

Investigation

Signature, O.H.C I.C

Dr. Soumya Sailesh
Skin Aesthetic Medicine
Medical Cosmetology
Trichology (PGDMT)
Laser Expert

CLINIC :
Mobile No. / Whatsapp No. 9078999921

Name: Purusotam Bhoi Age: 28 Sex: M Wt: ...... Date: 5/11/09/...

Skin Diseases Like
Acne / ବ୍ରଣ
Urticaarial / ଆମ୍ବ
Skin Allergy / ଚର୍ମ ଏଲର୍ଜି
Malasma /
Psoriasis / ସୋରିଆସିସ୍
Leucoderma / ଧଳାଦାଗ
and all other
Skin Diseases (Etc.)

****

Cosmetic Procedures
* Facial Pore Reduction (Dermial Fillers)
* Skin Tag Removal (Wrat Removal)
* Skin Whitening
* Lip Augmentation
* Wrinkle Correction (Botox)
* Hair Examination
* Fat Reduction Management (Etc.)

℞

(1) Tab Bilastine 20 mg (60)
(BF) (1 — 0 — 1) —— 1 month

(2) Tab Medrol 8 mg
(AF) (0 — 1 — 0) —— 4 days
↓
T- Medrol 4 mg
(0 — 1 — 0) —— 4 day

(3) Hemlite cream
+
(4) Moxinail cream

(Many) Renew 2-day

(5) Cetahydra lotion (Regular)
(6) Keitafung AF Body wash

A-3

To,

The Collector, ~~Dist~~ Jharsuguda,

sub (Without knowledge of Gram Sabha & Palli Sava)

Madam,

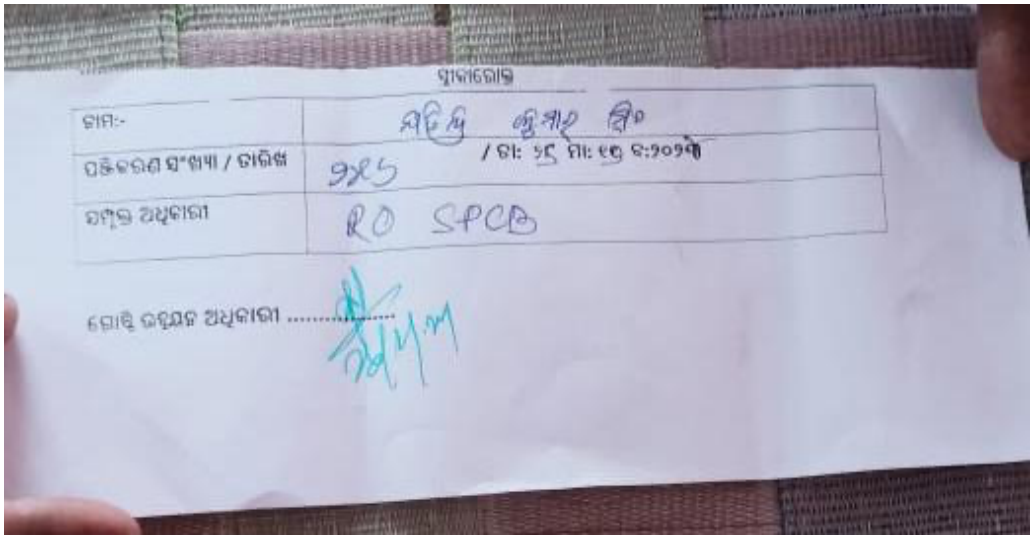
Without knowledge of Rampella's people, JSG/ Plant is using our "GRAM JUNGLE" and making his Construction Work like TOWER as well as Clearing all sorts of using place of Rampella people. second things is very short distance having 100 mts or distance A ashpond have Constructed by ~~JSG~~ Sahajpahal we are facing Lot of Pollution & air & noise also.

Therefre we request you to kindly Cridter our Case to hand over our "GRAM JUNGLE" as usen well,

Yours faithfully.

Jatindra Kr. Singh

Rampella GP
Dt -26.2.24.



A-4

EPABX : 2561909/2562847
Tel : 2562822/2560955
E-mail: paribesh1@ospcboard.org
Website: www.ospcboard.org

STATE POLLUTION CONTROL BOARD, ODISHA

[DEPARTMENT OF FOREST & ENVIRONMENT, GOVERNMENT OF ODISHA]
Paribesh Bhawan, A/118, Nilakantha Nagar, Unit – VIII
Bhubaneswar – 751 012, INDIA

No. 10005 /RTI/July/2024 Date 02.07.2024
By Speed Post

From

Sri Narottam Behera
Env. Engineer & PIO

To

Sri Jatindra Kumar Singh,
S/o-Kshirod Chandra Singh,
At-Sansaratikra, PO-Charpali Barpali,
Via-B.B. Colony, Dist-Jharsuguda-768 211

Sub: Information under the RTI Act, 2005.

Ref: Your RTI application dtd.28.03.2024 and received by this office on dt.20.04.2024 under the RTI Act, 2005.

Sir,

Please, find enclosed the copy of the available information/documents (112pgs) under the RTI Act, 2005.

Yours faithfully

02/07/24

Public Information Officer

Encl: As above

685

31

STATE POLLUTION CONTROL BOARD, ODISHA

[DEPT., OF FOREST, ENVIRONMENT & CLIMATE CHANGE, GOVT. OF ODISHA]
A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012
Phone-0674-2564033 / EPABX : 2561909/2562847
E-mail: cto17category@ospcboard.org / Website: www.ospcboard.org

CONSENT ORDER

No. 4606 / **IND-I-CON-6430** Dt. 30-03-2024

Sub : **Consent to operate under section 21 of Air (P&CP) Act, 1981, under section 25 of Water (P&CP) Act, 1974.**

Ref : Your online application **ID No.5357643, dtd. 10.01.2024**

Consent to operate 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 thereunder to

Name of the Industry **M/s. IND-BARATH ENERGY (UTKAL) LIMITED**

Name of the Occupier &Designation **Mr. C Venkatarama Reddy, Vice President**

Address **At- Sahajbahal, PO- Charpali Barpali, Bandhbahal, Dist – Jharsuguda**

This consent order is valid for the period **of 6 months from the date of issue of this order.**

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

Sl.No.	Product	Quantity
(1)	Electricity (Unit-I)	1x350 MW

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

Outlet No.	Description of outlet	Point of discharge	Quantity of discharge KLD or KL/hr	Pre-scribed Standard
01.	DM Plant blow down	To be recycled completely	--	
02.	Cooling tower blow down	To be recycled completely	--	
03.	Treated water from ETP	Used for slurry making	--	
04.	Ash pond overflow	To be recycled for ash slurry making	--	
05.	Domestic effluent generated plant and canteen	Soak pit via septic tank till installation of STP	--	pH: 6.5-9.0 BOD: less than 30mg/l TSS: less than 100mg/l Fecal Coliform (FC) (most probable number per 100 millilitre, MPN/100ml): less than 1000

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

Chimney Stack No.	Description of Stack	Stack height (m)	Quantity of emission (m^3/hr)	Prescribed Standard (mg/Nm^3)			
				PM	SO_2	NO_x	Hg
1	Stack attached to ESP of Unit-1	275	14,35,187	50	600	450	0.03

D. **Disposal of solid waste permitted in the following manner**

Sl.No.	Type of Solid waste	Quantity generated (TPD)	Quantity to be reused on site(TPD)	Quantity to be reused off site (TPD)	Quantity dispose d off (TPD)	Description of disposal site.
1.	Ash	3000	---	--	--	Utilization as per fly ash notification, Dec, 2021 and amended thereof. Rest shall be disposed through *high concentration slurry disposal in own ash pond.*

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.
2. 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.
5. 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.
12. 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 the lace 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 install 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.

19. 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 fugitive or episodal discharge from the premises.
30. In case of such episodal discharge/emissions the industry shall take immediate action to bring down the emission within the limits prescribed by the Board in conditions/stop the operation of the plant. 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 equipments 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.
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 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 10th of every month.
   a) Performance / progress of the treatment plant.
   b) 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
   ii) A description of the non-compliance discharge including its impact on the receiving waters.
   iii) 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.
   iv) Steps taken by the applicant to reduce and eliminate the non-complying discharge and
   v) 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. This shall be conducted by 3rd party expert agency and 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.

8. 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

F-1(Air Pollution Control)

1. All air pollution control devices shall be operated and maintained properly so that, the particulate matter emission from stack attached to ESPs of the Boiler shall not exceed 50mg/Nm^3.
2. All the online continuous stack emission monitoring systems (CEMS) for measurement of particulate matter and gaseous pollutants shall be operated effectively and uninterruptedly & 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.
3. All the online continuous ambient air quality monitoring stations (CAAQMS) shall be operated effectively and uninterruptedly & 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.
4. The unit shall provide dust extraction system at crusher house, boiler bunker to control dust emission. CHP shall be installed in a shed and coal carrying conveyor belts shall be covered.
5. Pneumatic conveyor system with silo will be provided for fly ash collection and vents of ash silo shall be provided with bag filter to control fugitive emission. The unit shall transport fly ash after conditioning in ash conditioner before utilization for various uses.
6. The road shall be blacktopped. Permanent type high pressure water sprinkling system shall be installed for regular spraying of water on roads to minimize fugitive dust emission.
7. Separate energy meter shall be installed for all the pollution control equipment and the records shall be maintained for verification of the Board from time to time.
8. Water sprinkling shall be provided at coal stock yard and work zone area to control fugitive emission.
9. Steps shall be taken for regular monitoring of Mercury (Hg) in the stack of boilers and submit data to the Board.
10. The industry shall install Online CEMS for Hg (Mercury) in the stacks.
11. The unit shall provide low NOx burners to reduce NOx emission to keep the level within the prescribed standard by MoEF & CC vide Notification dtd. 07.12.2015.
12. The unit shall strictly abide to confirm the MoEF & CC Notification dtd. 05.09.2022 vide GSR 682(E) regarding extension of timeline for Emission Norms
13. The unit shall submit fly ash utilization status to the Board annually and shall comply to the provisions of revised fly ash Notification No. SO.5481(E),dt. 31.12.2021 of MOEF, Govt. of India and amended thereof.
14. The DG sets of capacity (2x500 KVA) shall be operated only during black out of the power plant.
15. The unit shall comply with the conditions stipulated in the Consent to Establish (CTE) for DG sets (standby).

16. The industry shall provide both dust extraction system and dust suppression system at potential dust generating sources to control fugitive emission.
17. Good **housekeeping** practices shall be followed to improve the work environment. All roads and shop floors shall be cleaned regularly.
18. The performance evaluation of ESP, bag filter, air pollution control devices, online CEMS, AAQMS & surveillance cameras shall be conducted by an institution of National Repute (like NIT/ IIT) and annual report shall be submitted to the Board by end of June for previous financial year.
19. 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.
20. Online analysers for measuring flow, temperature and velocity of flue gas shall be installed at the stacks and integrated with online CEMS data.
21. 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.
22. Green belt shall be properly designed and developed with plantation of suitable local species and species prescribed by CPCB.
23. A green belt of adequate width and density preferably with local species along the periphery of the plant shall be raised so as to provide protection against particulates and noise. It must be ensured that at least 33% of the total land area shall be under permanent green cover. The proponent shall ensure the maintenance of green belt throughout the year and for all time to come. It is advised that they may engage professionals in this field for creation and maintenance of the green belt.
24. Air pollution control devices shall be maintained properly. Fabric bags and cages in bag house shall be checked regularly and replaced whenever required. Adequate availability of spares shall be ensured for immediate replacement.
25. The unit shall install adequate dust extraction system as well as dust suppression system at all potential dust generating points to control fugitive dust emission and the ambient air quality inside the factory premises shall conform to the National Ambient Air Quality standard.
26. Proper dust extraction system and dry fog system shall be installed in the coal handling plant to control fugitive emission.
27. Appropriate measures like provision of water sprinkling or soil covering shall be made over the exposed dry surface of the ash ponds to prevent dust nuisance due to wind action. Dust suppression measures shall also be provided where construction activities are undertaken at ash pond area to prevent dust nuisance.
28. The industry shall engage road sweeper with vacuum cleaner to maintain housekeeping inside the plant.

29. Separate energy meter shall be installed for all the pollution control equipment and the records shall be maintained for verification of the Board from time to time.
30. Ambient air quality shall conform to the National Ambient Air Quality standards as prescribed under E (P) Rules, 1986.
31. The industry shall comply all the conditions stipulated in Consent to establish order issued by SPC Board and Environmental clearance issued by Ministry of Environment, Forests& CC Govt. of India.
32. 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.
33. The industry shall strictly follow the protocol at the time of shutdown and startup of boiler as communicated by the Board earlier to avoid dust nuisance and public complaint.
34. In case the consent fee is revised upward 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 amount within the period stipulated by the Board the consent order will be revoked without prior notice.

F-2 (Water Pollution Control)

1. **Specific water consumption shall be limited within 3.5m^3/MWh as per MoEF & CC vide Notification dtd. 07.12.2015.**
2. The industry shall completely recycle the wastewater and adopt zero discharge concept.
3. The industry shall take preventive measures for protection of aquatic life at the river water intake system.
4. Wastewater generated from raw water treatment system and back wash of filtration plant shall be properly treated in settling tank /ETP and taken to the common monitoring basin.
5. Acidic /Alkaline effluent generated from DM water plant shall be properly neutralized and reused.
6. The blow down shall meet the following standards before it is discharged to the common basin.

Boiler Blow down

Suspended Solids	100.0 mg/l (Max.)
Oil & Grease	20.0mg/l (Max.)
Copper(Total)	1.0mg/l (Max.)
Iron(Total)	1.0mg/l (Max.)

Cooling Tower Blow down

Free available Chlorine	0.5 mg/l (Max.)
Zinc	1.0mg/l(Max.)
Chromium (Total)	2.0mg/l(Max.)
Phosphate	5.0mg/l(Max.)

7. All the cooling water shall be completely circulated.
8. The oil contaminated effluent from CPP and service area shall be treated in oil

178/
676

separator before taking to common basin. From common monitoring basin partly the water shall be reused for ash handling, green belt and dust suppression.

9. The industry shall explore treatment of the cooling tower blow down through reverse osmosis process and treated water shall be reused.
10. Domestic wastewater from plant and colony shall be treated in STP and treated effluent shall be reused for gardening, plantation and greenbelt.
11. The online continuous effluent quality monitoring system (EQMS) shall be operated effectively and uninterruptedly & 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.
12. The Effluent Treatment Plant (ETP) and the Sewage Treatment Plant (STP) shall be operated effectively and continuously through a dedicated in house team or through continued AMC so as to confirm to the prescribed norms.
13. The performance evaluation of ETP, STP, online CEQMS & Web cameras, flow meter shall be conducted by an institution of National Repute (like NIT/ IIT) and annual report shall be submitted to the Board by end of June for previous financial year.
14. 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.
15. The industry shall explore to adopt chemical free automated self -maintained electrolysis system for removal of scale, corrosion, bio-film from cooling towers and automated tube cleaning system for heat exchangers and condensers with remote access and alarm system wherever applicable for conservation of water and energy to reduce wastewater generation and increase plant efficiency.
16. 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 / ponds followed by high rate clarification through clari-floculator/ tube settlers to meet the discharge norms.
17. The storm water drain shall be maintained separately without being mixed up with the industrial effluent or sewage effluent.
18. Closed cycle cooling system with natural draft cooling towers shall be provided. The effluent shall be treated as per the prescribed norms.
19. No ground water shall be extracted for the project work at any stage.
20. Internal drainage arrangement like vertical and chimney, horizontal sand blanket, rock etc. shall be made for guiding the seepage water flow to the downstream side without any material erosion. The internal and external slopes of the dykes with stone rip rap, turfing, etc. shall be adequately protected to take care of erosion due to wave action, rain cuts.
21. Provision of cut-off trench filled with impervious soil below the dyke section shall be made. This shall increase the length of seepage water flow in the foundation, thereby controlling the exit gradient, which safeguards erosion problem.
22. The online continuous effluent quality monitoring system (EQMS) shall be operated effectively and uninterruptedly and the online monitoring data so generated shall be transmitted to SPCB and CPCB server on a continuous basis.
23. Rain water harvesting structure shall be developed inside the plant premises as per

concept and practices made by CPCB and maximum efforts shall be made to reuse harvested rain water, with a definite plan and programme to reduce the drawal of fresh water from water bodies.

24. Concrete parapet wall of adequate height should be provided all along the concreted drains on its both the sides with rain cuts at regular intervals to prevent entry of dust/ash from the road and work zone into the drainage system. All the industrial drains shall be cleaned regularly.
25. Oil catch pits shall be provided in oil handling area of power plant for collection of spillage.
26. The industry shall abide by E(P) Act, 1986 and Rules framed there-under.
27. The industry shall adopt high concentration slurry disposal method (HCSD) for bottom ash disposal.
28. Adequate safety measures shall be implemented to protect the ash dyke from getting breached.
29. There shall not be any clandestine discharge from the Ash pond. The excess overflow water of the ash pond shall be collected in a pond and completely recycled for ash slurry making.
30. The unit shall take all precautionary measures to ensure safety of the ash pond dykes and to avoid rain cuts, slope failure, breach of dykes and discharge of ash slurry to the surrounding area.
31. The industry shall take steps for fulfillment of all the stipulations and necessary measures to check pollution.
32. 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

1) The unit shall complete installation and commissioning of proposed Effluent Treatment Plant (ETP) for treatment of effluent generated from DM plant, boiler blow down, cooling tower blow down and the treated water shall be completely reused.
2) The unit shall complete installation and commissioning of STP for treatment of domestic wastewater generated from plant and colony.
3) The unit shall provide proper lining and pipeline for interim ash pond over an area 35 Ac (20 Ac + 15 Ac) existing inside the plant premises prior to operation of the plant. The unit shall not go for any operational activity without completion and readiness of all work related to interim ash pond.
4) The industry shall construct concrete road with concrete drains along the CHP area. Fixed type senor based rain gun water sprinklers having high capacity throughput shall be installed at CHP area for adequate dust suppression.
5) The unit shall provide adequate dry fog system (DFs) on both side of the track hopper for proper dust suppression.
6) The unit shall carry out surface run-off study and submit the report to the Board.
7) The industry shall deploy mechanized road sweeping machine of adequate capacity for the cleaning of internal concrete roads within the plant premises.
8) The unit shall provide mechanized wheel washing system with treatment facility at the exit gate of the plant.

The unit shall submit cost estimation for the above jobs for imposition of Bank Guarantee.

9) The unit shall complete connectivity of online monitoring system i.e., CEMS and CAAQMS to the RT-DAS server of the Board **within 3 months**.

10) The unit shall install HD IP surveillance camera and with data connectivity to the server of the Board **within 3 months**.

11) The unit shall ensure uninterrupted data transmission from CEMS, CAAQMS, CEQMS & uninterrupted video streaming of HD IP Surveillance Camera to the Server of the Board. If any technical issues, they may contact IT Cell immediately to sort-out the problems.

12) The industry shall install Online CEMS for Hg (Mercury) in the stacks.

13) The unit shall abide by the fuel policy of the state.

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

To

The Vice President
M/s Ind-Barath Energy (Utkal) Limited
At- Sahajbahal, PO- Charpali Barpali,
Bandhbahal,
Dist – Jharsuguda-768 211

30/03/24

MEMBER SECRETARY
STATE POLLUTION CONTROL BOARD, ODISHA

Memo No. 4607 **/Dt.** 30-03-2024

Copy forwarded to;

i) Regional Officer, State Pollution Control Board, **Jharsuguda**
ii) District Collector, **Jharsuguda**
iii) Director of Mines, Odisha, Bhubaneswar
iv) Director Factories and Boiler, Bhubaneswar
v) D.F.O, **Jharsuguda**
vi) HWM Cell, SPC Board, Bhubaneswar
vii) Consent Register

30/3/24

CHIEF ENV. ENGINEER
STATE POLLUTION CONTROL BOARD, ODISHA

GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENT POLLUTANTS
PART-A: EFFLUENTS

Sl.No.	Parameters	Standards			
		Inland surface	Public sewers	Land for irrigation	Marine Costal Areas
		(a)	(b)	(c)	(d)
1.	Colour&odour	Colourless/Odourless as far as practible	------	See 6 of 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 5^0C above the receiving water temperature	-------	-------	Shall not exceed 5^0C 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_3) mg/1 max.	100	----	------	100
11.	Free ammonia (as NH_3) mg/1 max.	5.0	----	------	5.0
12.	Biochemical Oxygen Demand (5 days at (20^0C) mg/1 max.	30	350	100	100
13.	Chemical Oxygen 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	---------	3.0
21.	Zinc (as Zn) mg/l max.	5.0	15	---------	15
22.	Selenium (as Sc) mg/l 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 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_6H_5OH) mg/l max.	1.0	5.0	---------	5.0
29.	Radioactive materials a. Alpha emitter micro curle/ml. b. Beta emitter micro curle/ml.	10^7 10^6	10^7 10^6	10^8 10^7	10^7 10^6
30.	Bio-assay test	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent
31	Manganese (as Mn)	2 mg/l	2 mg/l	---------	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

PART- B:NATIONAL AMBIENT AIR QUALITY STANDARDS

Sl. No.	Pollutants	Time Weighed Average	Concentrate of Ambient Air		
			Industrial Residential, Rural and other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1.	Sulphur Dioxide (SO_2), $\mu g/m^3$	Annual *	50	20	-Improved west and Gaeke
		24 Hours **	80	80	- Ultraviolet fluorescence
2.	Nitrogen Dioxide (NO_2), $\mu g/m^3$	Annual *	40	30	- Modified Jacob &Hochheiser (Na-Arsenite)
		24 Hours **	80	80	- Chemiluminescence
3.	Particulate Matter (size less than 10µm) or $PM_{10}\mu g/m^3$	Annual *	60	60	-Gravimetric - TOEM
		24 Hours **	100	100	- Beta Attenuation
4.	Particulate Matter (size less than 2.5µm) or $PM_{2.5}\mu g/m^3$	Annual *	40	40	-Gravimetric - TOEM
		24 Hours **	60	60	- Beta Attenuation
5.	Ozone (O_3) $\mu g/m^3$	8 Hours **	100	100	- UV Photometric - Chemiluminescence
		1 Hours **	180	180	- Chemical Method
6.	Lead (Pb) $\mu g/m^3$	Annual *	0.50	0.50	-AAS/ICP method after sampling on EMP 2000 or equivalent filter paper.
		24 Hours **	1.0	1.0	- ED-XRF using Teflon filter
7.	Carbon Monoxide (CO) mg/m^3	8 Hours **	02	02	- Non Dispersive Infra Red (NDIR) Spectroscopy
		1 Hours **	04	04	
8.	Ammonia (NH_3) $\mu g/m^3$	Annual*	100	100	-Chemiluminescence - Indophenol Blue Method
		24 Hours**	400	400	
9.	Benzene (C_6H_6) $\mu g/m^3$	Annul *	05	05	-Gas Chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10.	Benzo (a) Pyrene (BaP)-Particulate phase only, ng/m^3	Annual*	01	01	-Solvent extraction followed by HPLC/GC analysis
11.	Arsenic (As), ng/m^3	Annual*	06	06	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper
12.	Nickel (Ni),ng/m^3	Annual*	20	20	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper

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

** 24 hourly or 08 hourly or 0I 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.

STATE POLLUTION CONTROL BOARD, ODISHA

[DEPT. OF FOREST, ENVIRONMENT & CLIMATE CHANGE, GOVT. OF ODISHA]
A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012
Phone-0674-2564033 / EPABX : 2561909/2562847
E-mail: paribesh1@ospcboard.org/ Website: www.ospcboard.org

CONSENT ORDER

No. 4856 / IND-I-CON-6430 Dt. 28-03-2023

Sub : **Consent to operate under section 21 of Air (P&CP) Act, 1981, under section 25 of Water (P&CP) Act, 1974.**

Ref : Your online application **ID No. 4507964, dtd. 22.12.2022**

Consent to operate 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 thereunder to

Name of the Industry **M/s IND-BARATH ENERGY (UTKAL) LIMITED**

Name of the Occupier & Designation **The Executive Vice President**

Address **At- Sahajbahal, PO- Charpali Barpali, Bandhbahal, Dist – Jharsuguda**

This consent order is valid for the period **up to 31.03.2024**

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

Sl. No.	Product	Quantity
01.	Electricity (Unit-I)	1x350 MW

612

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

Outlet No.	Description of outlet	Point of discharge	Quantity of discharge KLD or KL/hr	Pre-scribed Standard
01.	DM Plant blow down	To be recycled completely	--	
02.	Cooling water	To be recycled completely	--	
03.	Treated water from ETP	Used for slurry making	--	
04.	Ash pond overflow	To be recycled for ash slurry making	--	

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

Chimney Stack No.	Description of Stack	Stack height (m)	Quantity of emission (m^3/hr)	Prescribed Standard (mg/Nm^3)			
				PM	SO_2	NO_x	Hg
1	Stack attached to ESP of Unit-1	275	14,35,187	50	600	450	0.03

D. **Disposal of solid waste permitted in the following manner**

Sl. No.	Type of Solid waste	Quantity generated (TPD)	Quantity to be reused on site(TPD)	Quantity to be reused off site (TPD)	Quantity dispose d off (TPD)	Description of disposal site.
1.	*Ash*	3000	---	--	--	Utilization as per fly ash notification, Dec, 2021 and amended thereof. And rest shall be disposed through *high concentration slurry disposal in own ash pond.*

CONSENT ORDER

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.
2. 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.
5. 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.
12. 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 the lace 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 install 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.
19. 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 fugitive or episodal discharge from the premises.
30. In case of such episodal discharge/emissions the industry shall take immediate action to bring down the emission within the limits prescribed by the Board in conditions/stop the operation of the plant. 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 equipments 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.

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 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 10th of every month.
   a) Performance / progress of the treatment plant.
   b) 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
   ii) A description of the non-compliance discharge including its impact on the receiving waters.
   iii) 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.
   iv) Steps taken by the applicant to reduce and eliminate the non-complying discharge and
   v) Steps to be taken by the applicant too prevent the condition of non-compliance.

608

CONSENT ORDER

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. This shall be conducted by 3rd party expert agency and 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.

8. 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

F-1 (Air Pollution Control)

1. All air pollution control devices shall be operated and maintained properly so that, the particulate matter emission from stack attached to ESPs of the Boiler shall not exceed 50mg/Nm^3.
2. All the online continuous stack emission monitoring systems (CEMS) for measurement of particulate matter and gaseous pollutants shall be operated effectively and uninterruptedly & 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.
3. All the online continuous ambient air quality monitoring stations (CAAQMS) shall be operated effectively and uninterruptedly & 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.
4. The unit shall provide dust extraction system at crusher house, boiler bunker to control dust emission. CHP shall be installed in a shed and coal carrying conveyor belts shall be covered.
5. Pneumatic conveyor system with silo will be provided for fly ash collection and vents of ash silo shall be provided with bag filter to control fugitive emission. The unit shall transport fly ash after conditioning in ash conditioner before utilization for various uses.
6. The road shall be blacktopped. Permanent type high pressure water sprinkling system shall be installed for regular spraying of water on roads to minimize fugitive dust emission.
7. Separate energy meter shall be installed for all the pollution control equipment and the records shall be maintained for verification of the Board from time to time.
8. Water sprinkling shall be provided at coal stock yard and work zone area to control fugitive emission.
9. Steps shall be taken for regular monitoring of Mercury (Hg) in the stack of boilers and submit data to the Board.
10. The industry shall install Online CEMS for Hg (Mercury) in the stacks.
11. The unit shall provide low NOx burners to reduce NOx emission to keep the level within the prescribed standard by MoEF & CC vide Notification dtd. 07.12.2015.
12. The unit shall strictly abide to confirm the MoEF & CC Notification dtd. 05.09.2022 vide GSR 682(E) regarding extension of timeline for Emission Norms
13. The unit shall submit fly ash utilization status to the Board annually and shall comply to the provisions of revised fly ash Notification No. SO.5481(E),dt. 31.12.2021 of MOEF, Govt. of India and amended thereof.
14. The DG sets of capacity (2x500 KVA) shall be operated only during black out of the power plant.

15. The unit shall comply with the conditions stipulated in the Consent to Establish (CTE) for DG sets (standby).
16. The industry shall provide both dust extraction system and dust suppression system at potential dust generating sources to control fugitive emission.
17. Good housekeeping practices shall be followed to improve the work environment. All roads and shop floors shall be cleaned regularly.
18. The performance evaluation of ESP, bag filter, air pollution control devices, online CEMS, AAQMS & surveillance cameras shall be conducted by an institution of National Repute (like NIT/ IIT) and annual report shall be submitted to the Board by end of June for previous financial year.
19. 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.
20. Online analysers for measuring flow, temperature and velocity of flue gas shall be installed at the stacks and integrated with online CEMS data.
21. 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.
22. Green belt shall be properly designed and developed with plantation of suitable local species and species prescribed by CPCB.
23. A green belt of adequate width and density preferably with local species along the periphery of the plant shall be raised so as to provide protection against particulates and noise. It must be ensured that at least 33% of the total land area shall be under permanent green cover. The proponent shall ensure the maintenance of green belt throughout the year and for all time to come. It is advised that they may engage professionals in this field for creation and maintenance of the green belt.
24. Air pollution control devices shall be maintained properly. Fabric bags and cages in bag house shall be checked regularly and replaced whenever required. Adequate availability of spares shall be ensured for immediate replacement.
25. The unit shall install adequate dust extraction system as well as dust suppression system at all potential dust generating points to control fugitive dust emission and the ambient air quality inside the factory premises shall conform to the National Ambient Air Quality standard.
26. Proper dust extraction system and dry fog system shall be installed in the coal handling plant to control fugitive emission.

27. Appropriate measures like provision of water sprinkling or soil covering shall be made over the exposed dry surface of the ash ponds to prevent dust nuisance due to wind action. Dust suppression measures shall also be provided where construction activities are undertaken at ash pond area to prevent dust nuisance.
28. The industry shall engage road sweeper with vacuum cleaner to maintain housekeeping inside the plant.
29. Separate energy meter shall be installed for all the pollution control equipment and the records shall be maintained for verification of the Board from time to time.
30. Ambient air quality shall conform to the National Ambient Air Quality standards as prescribed under E (P) Rules, 1986.
31. The industry shall comply all the conditions stipulated in Consent to establish order issued by SPC Board and Environmental clearance issued by Ministry of Environment, Forests & CC Govt. of India.
32. 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.
33. The industry shall strictly follow the protocol at the time of shutdown and startup of boiler as communicated by the Board earlier to avoid dust nuisance and public complaint.
34. In case the consent fee is revised upward 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 amount within the period stipulated by the Board the consent order will be revoked without prior notice.

F-2 (Water Pollution Control)

1. **Specific water consumption shall be limited within 3.5m^3/MWh by 6th Dec, 2017 as per MoEF & CC vide Notification dtd. 07.12.2015.**
2. The industry shall completely recycle the wastewater and adopt zero discharge concept.
3. The industry shall take preventive measures for protection of aquatic life at the river water intake system.
4. Wastewater generated from raw water treatment system and back wash of filtration plant shall be properly treated in settling tank /ETP and taken to the common monitoring basin.
5. Acidic /Alkaline effluent generated from DM water plant shall be properly neutralized and reused.
6. The blow down shall meet the following standards before it is discharged to the common basin.

Boiler Blow down	
Suspended Solids	100.0 mg/l (Max.)
Oil & Grease	20.0mg/l (Max.)
Copper(Total)	1.0mg/l (Max.)

Iron(Total)	1.0mg/l (Max.)

Cooling Tower Blow down

Free available Chlorine	0.5 mg/l (Max.)
Zinc	1.0mg/l(Max.)
Chromium (Total)	2.0mg/l(Max.)
Phosphate	5.0mg/l(Max.)

7. All the cooling water shall be completely circulated.
8. The oil contaminated effluent from CPP and service area shall be treated in oil separator before taking to common basin. From common monitoring basin partly the water shall be reused for ash handling, green belt and dust suppression.
9. The industry shall explore treatment of the cooling tower blow down through reverse osmosis process and treated water shall be reused.
10. Domestic wastewater from plant and colony shall be treated in STP and treated effluent shall be reused for gardening, plantation and greenbelt.
11. The online continuous effluent quality monitoring system (EQMS) shall be operated effectively and uninterruptedly & 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.
12. The Effluent Treatment Plant (ETP) and the Sewage Treatment Plant (STP) shall be operated effectively and continuously through a dedicated in house team or through continued AMC so as to confirm to the prescribed norms.
13. The performance evaluation of ETP, STP, online CEQMS & Web cameras, flow meter shall be conducted by an institution of National Repute (like NIT/ IIT) and annual report shall be submitted to the Board by end of June for previous financial year.
14. 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.
15. The industry shall explore to adopt chemical free automated self -maintained electrolysis system for removal of scale, corrosion, bio-film from cooling towers and automated tube cleaning system for heat exchangers and condensers with remote access and alarm system wherever applicable for conservation of water and energy to reduce wastewater generation and increase plant efficiency.
16. Concrete parapet wall of adequate height should be provided all along the concreted drains on its both the sides with rain cuts at regular intervals to prevent entry of dust/ash from the road and work zone into the drainage system. All the industrial drains shall be cleaned regularly.
17. The industry shall adequately maintain rain water harvesting structures and surface runoff treatment systems inside the plant premises.
18. 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 / ponds followed by high rate clarification

through clari-floculator/ tube settlers to meet the discharge norms.

19. The storm water drain shall be maintained separately without being mixed up with the industrial effluent or sewage effluent.
20. Closed cycle cooling system with natural draft cooling towers shall be provided. The effluent shall be treated as per the prescribed norms.
21. No ground water shall be extracted for the project work at any stage.
22. Internal drainage arrangement like vertical and chimney, horizontal sand blanket, rock etc. shall be made for guiding the seepage water flow to the downstream side without any material erosion. The internal and external slopes of the dykes with stone rip rap, turfing, etc. shall be adequately protected to take care of erosion due to wave action, rain cuts.
23. Provision of cut-off trench filled with impervious soil below the dyke section shall be made. This shall increase the length of seepage water flow in the foundation, thereby controlling the exit gradient, which safeguards erosion problem.
24. The online continuous effluent quality monitoring system (EQMS) shall be operated effectively and uninterruptedly and the online monitoring data so generated shall be transmitted to SPCB and CPCB server on a continuous basis.
25. Rain water harvesting structure shall be developed inside the plant premises as per concept and practices made by CPCB and maximum efforts shall be made to reuse harvested rain water, with a definite plan and programme to reduce the drawal of fresh water from water bodies.
26. Concrete parapet wall of adequate height should be provided all along the concreted drains on its both the sides with rain cuts at regular intervals to prevent entry of dust/ash from the road and work zone into the drainage system. All the industrial drains shall be cleaned regularly.
27. Oil catch pits shall be provided in oil handling area of power plant for collection of spillage.
28. The industry shall abide by E(P) Act, 1986 and Rules framed there-under.
29. The industry shall adopt high concentration slurry disposal method (HCSD) for bottom ash disposal.
30. Adequate safety measures shall be implemented to protect the ash dyke from getting breached.
31. There shall not be any clandestine discharge from the Ash pond. The excess overflow water of the ash pond shall be collected in a pond and completely recycled for ash slurry making.
32. The unit shall take all precautionary measures to ensure safety of the ash pond dykes and to avoid rain cuts, slope failure, breach of dykes and discharge of ash slurry to the surrounding area.
33. The industry shall take steps for fulfillment of all the stipulations and necessary measures to check pollution.

34. 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 Condition

1) The designated Ash Pond of 135 Ac and Pipeline for disposal of ash through High Concentration Slurry Disposal Mode (HCSD) shall be constructed and completed by **January, 2024.**

2) The unit shall install 4 nos. of CAAQMs **by May, 2023** and real time data transmission shall be connected to the SPCB server.

3) The unit shall complete the ducting work from the bag filter chute to ID fan and electrical connection work **by May, 2023**. The unit shall not go for any operational activity without completion of the said job.

4) The unit shall submit the water drawl permission to the Board **by May, 2023**.

5) The unit shall provide proper lining and pipeline for interim ash pond over an area 20 Ac exist inside the plant premises prior to operation of the plant. The unit shall not go for any operational activity without completion and readiness of all work related to interim ash pond.

8) The industry shall install Online CEMS for Hg (Mercury) in the stacks.

6) The unit shall ensure uninterrupted data transmission from CEMS, CAAQMS, CEQMS & uninterrupted video streaming of HD IP Surveillance Camera to the Server of the Board. If any technical issues, they may contact IT Cell immediately to sort-out the problems.

7) The unit shall abide by the fuel policy of the state.

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

To

The Executive Vice President
M/s Ind-Barath Energy (Utkal) Limited
At- Sahajbahal, PO- Charpali Barpali,
Bandhbahal, Dist – Jharsuguda- 768 211

MEMBER SECRETARY
STATE POLLUTION CONTROL BOARD, ODISHA

Memo No. 4857 **/Dt.** 28-03-2023

Copy forwarded to;

i) Regional Officer, State Pollution Control Board, **Jharsuguda**
ii) District Collector, **Jharsuguda**
iii) Director of Mines, Odisha, Bhubaneswar
iv) Director Factories and Boiler, Bhubaneswar
v) D.F.O, **Jharsuguda**
vi) HWM Cell, SPC Board, Bhubaneswar
vii) Consent Register

CHIEF ENV. ENGINEER
STATE POLLUTION CONTROL BOARD, ODISHA

P.T.O

o/c

GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENT POLLUTANTS
PART-A: EFFLUENTS

Sl.No.	Parameters	Standards			
		Inland surface	Public sewers	Land for irrigation	Marine Costal Areas
		(a)	(b)	(c)	(d)
1.	Colour&odour	Colourless/Odourless as far as practible	------	See 6 of 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 5^0C above the receiving water temperature	------	-------	Shall not exceed 5^0C 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_3) mg/1 max.	100	----	------	100
11.	Free ammonia (as NH_3) mg/1 max.	5.0	----	------	5.0
12.	Biochemical Oxygen Demand (5 days at (20^0C) mg/1 max.	30	350	100	100
13.	Chemical Oxygen 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	---------	3.0
21.	Zinc (as Zn) mg/l max.	5.0	15	---------	15
22.	Selenium (as Sc) mg/l 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 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_6H_5OH) mg/l max.	1.0	5.0	---------	5.0
29.	Radioactive materials a. Alpha emitter micro curle/ml. b. Beta emitter micro curle/ml.	 10^7 10^6	 10^7 10^6	 10^8 10^7	 10^7 10^6
30.	Bio-assay test	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent
31	Manganese (as Mn)	2 mg/l	2 mg/l	---------	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

PART- B:NATIONAL AMBIENT AIR QUALITY STANDARDS

Sl. No.	Pollutants	Time Weighed Average	Concentrate of Ambient Air		
			Industrial Residential, Rural and other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1.	Sulphur Dioxide (SO_2), $\mu g/m^3$	Annual *	50	20	-Improved west and Gaeke
		24 Hours **	80	80	- Ultraviolet fluorescence
2.	Nitrogen Dioxide (NO_2), $\mu g/m^3$	Annual *	40	30	- Modified Jacob &Hochheiser (Na-Arsenite)
		24 Hours **	80	80	- Chemiluminescence
3.	Particulate Matter (size less than 10µm) or $PM_{10}\mu g/m^3$	Annual *	60	60	-Gravimetric - TOEM
		24 Hours **	100	100	- Beta Attenuation.
4.	Particulate Matter (size less than 2.5µm) or $PM_{2.5}\mu g/m^3$	Annual *	40	40	-Gravimetric - TOEM
		24 Hours **	60	60	- Beta Attenuation
5.	Ozone (O_3) $\mu g/m^3$	8 Hours **	100	100	- UV Photometric - Chemiluminescence
		1 Hours **	180	180	- Chemical Method
6.	Lead (Pb) $\mu g/m^3$	Annual *	0.50	0.50	-AAS/ICP method after sampling on EMP 2000 or equivalcnt filtcr paper. - ED-XRF using Teflon filter
		24 Hours **	1.0	1.0	
7.	Carbon Monoxide (CO) mg/m^3	8 Hours **	02	02	- Non Dispersive Infra Red (NDIR) Spectroscopy
		1 Hours **	04	04	
8.	Ammonia (NH_3) $\mu g/m^3$	Annual*	100	100	-Chemiluminescence - Indophenol Blue Method
		24 Hours**	400	400	
9.	Benzene (C_6H_6) $\mu g/m^3$	Annul *	05	05	-Gas Chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10.	Benzo (a) Pyrene (BaP)-Particulate phase only, ng/m^3	Annual*	01	01	-Solvent extraction followed by HPLC/GC analysis
11.	Arsenic (As), ng/m^3	Annual*	06	06	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper
12.	Nickel (Ni),ng/m^3	Annual*	20	20	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper

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

** 24 hourly or 08 hourly or 0I 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.

STATE POLLUTION CONTROL BOARD, ODISHA

[DEPARTMENT OF FOREST & ENVIRONMENT, GOVERNMENT OF ODISHA]
A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012
Phone-0674-2564033 / EPABX : 2561909/2562847
E-mail: paribesh1@ospcboard.org/ Website: www.ospcboard.org

CONSENT ORDER

No. 8024 / IND-I-CON-6430 Dt. 09-06-2017

Sub : **Consent for discharge of sewage and trade effluent under section 25/26 of Water(P&CP) Act, 1974 and for existing/new operation of the plant under section 21 of Air(P&CP) Act, 1981.**

Ref : Your online application **ID No. 1466910, dtd. 29.12.2016**

Consent to operate 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 thereunder to

Name of the Industry **M/s IND-BARATH ENERGY (UTKAL) LIMITED**
Name of the Occupier & Designation **Sri Jagannath Mohapatra, Director**
Address **At- Sahajbahal, PO- Charpali Barpali, Bandhbahal, Dist - Jharsuguda**

This consent order is valid for the period **up to 31.03.2018**

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

Sl.No.	Product	Quantity
01.	*Electricity (Unit-I)*	*1x350 MW*

62

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

Outlet No.	Description of outlet	Point of discharge	Quantity of discharge KLD or KL/hr	Pre-scribed Standard
01.	DM Plant blow down	To be recycled completely	--	
02.	Cooling water	To be recycled completely	--	
03.	Treated water from ETP	Used for slurry making	--	
04.	Ash pond overflow	To be recycled for ash slurry making	--	

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

Chimney Stack No.	Description of Stack	Stack height (m)	Quantity of emission (m^3/hr)	Prescribed Standard (mg/Nm^3)			
				PM	SO_2	NO_x	Hg
Emission standards applicable up to 06.12.2017							
1	Stack attached to ESP of Unit-1	275	--	50	--	--	--
Emission standards applicable w.e.f. 07.12.2017							
1	Stack attached to ESP of Unit-1	275	--	50	600	300	0.03

D. **Disposal of solid waste permitted in the following manner**

Sl. No.	Type of Solid waste	Quantity generated (TPD)	Quantity to be reused on site(TPD)	Quantity to be reused off site(TPD)	Quantity disposed off (TPD)	Description of disposal site.
1.	*Ash*	*2100*	---	1600 to cement plant, 150 to local brick manufacturer	350	*High concentration slurry disposal in own ash pond.*

63

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.
2. 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.
5. 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.
12. 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 the place 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 install 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.
19. 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 equipment 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 fugitive or episodal discharge from the premises.
30. In case of such episodal discharge/emissions the industry shall take immediate action to bring down the emission within the limits prescribed by the Board in conditions/stop the operation of the plant. 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 equipment, 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 occurrence.
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 equipment 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.
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 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

CONSENT ORDER

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 10th of every month.
   a) Performance / progress of the treatment plant.
   b) 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
   ii) A description of the non-compliance discharge including its impact on the receiving waters.
   iii) 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.
   iv) Steps taken by the applicant to reduce and eliminate the non-complying discharge and
   v) 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.

F. SPECIAL CONDITIONS

F-1 (Air Pollution Control)

1. All air pollution control devices shall be operated and maintained properly so that, the particulate matter emission from stack attached to ESPs of the Boiler shall not exceed 50 mg/Nm^3.
2. All the online continuous stack emission monitoring systems (CEMS) for measurement of particulate matter and gaseous pollutants shall be operated effectively and uninterruptedly and the online monitoring data so generated shall be transmitted to SPCB and CPCB server on a continuous basis.
3. All the online continuous ambient air quality monitoring stations (CAAQMS) shall be operated effectively and uninterruptedly and the online monitoring data so generated shall be transmitted to SPCB and CPCB server on a continuous basis.
4. The unit shall provide dust extraction system at crusher house, boiler bunker to control dust emission. CHP shall be installed in a shed and coal carrying conveyor belts shall be covered.
5. Pneumatic conveyor system with silo will be provided for fly ash collection and vents of ash silo shall be provided with bag filter to control fugitive emission. The unit shall transport fly ash after conditioning in ash conditioner before utilization for various uses.
6. The road shall be blacktopped. Permanent type high pressure water sprinkling system shall be installed for regular spraying of water on roads to minimize fugitive dust emission.
7. Separate energy meter shall be installed for all the pollution control equipment and the records shall be maintained for verification of the Board from time to time.
8. Water sprinkling shall be provided at coal stock yard and work zone area to control fugitive emission.
9. Steps shall be taken for regular monitoring of Mercury (Hg) in the stack of boilers and submit data to the Board.
10. The unit shall provide low NOx burners to reduce NOx emission to keep the level within the prescribed standard by MoEF & CC vide Notification dtd. 07.12.2015.
11. Steps shall be taken for installation of Flue Gas Desulpurisation (FGD) system in future if required to keep the SO2 level within 600mg/Nm3 to confirm the MoEF &

CC Notification dtd. 07.12.2015. This shall also include management and disposa of effluent / solid waste to be generated from FGD system.

12. The unit shall submit fly ash utilization status to the Board annually and shall comply to the provisions of revised fly ash Notification No. SO.254(E),dt. 25.01.2016 of MOEF, Govt. of India.
13. The industry shall provide both dust extraction system and dust suppression system at potential dust generating sources to control fugitive emission.
14. Good housekeeping practices shall be followed to improve the work environment. All roads and shop floors shall be cleaned regularly.
15. A green belt of adequate width and density preferably with local species along the periphery of the plant shall be raised so as to provide protection against particulates and noise. It must be ensured that at least 33% of the total land area shall be under permanent green cover. The proponent shall ensure the maintenance of green belt throughout the year and for all time to come. It is advised that they may engage professionals in this field for creation and maintenance of the green belt.
16. Air pollution control devices shall be maintained properly. Fabric bags and cages in bag house shall be checked regularly and replaced whenever required. Adequate availability of spares shall be ensured for immediate replacement.
17. The industry should use hydrogen gas cylinder instead of going for a hydrogenation plant.
18. The unit shall install adequate dust extraction system as well as dust suppression system at all potential dust generating points to control fugitive dust emission and the ambient air quality inside the factory premises shall conform to the National Ambient Air Quality standard .
19. Proper dust extraction system and dry fog system shall be installed in the coal handling plant to control fugitive emission.
20. Appropriate measures like provision of water sprinkling or soil covering shall be made over the exposed dry surface of the ash ponds to prevent dust nuisance due to wind action. Dust suppression measures shall also be provided where construction activities are undertaken at ash pond area to prevent dust nuisance.

21. Supply of fly ash to Brick Manufacturing units shall be done on free of cost. Further, transportation cost of fly ash within 100km radius of your plant shall be borne by you or a subsidy of Rs.150/- per ton of fly ash shall be provided to all the fly ash brick, tile, road construction or other fly ash based construction materials manufacturing units or for use in road making if utilizing your fly ash.
22. The industry shall engage road sweeper with vacuum cleaner to maintain housekeeping inside the plant.
23. Separate energy meter shall be installed for all the pollution control equipment and the records shall be maintained for verification of the Board from time to time.
24. Ambient air quality shall conform to the National Ambient Air Quality standards as prescribed under E P Rules, 1986.
25. The industry shall comply all the conditions stipulated in Consent to establish order issued Board vide Letter No. 13374, dtd. 13.08.2010 and Environmental clearance issued by Ministry of Environment & Forests Govt. of India vide its letter dt. 30.11.2009 & dt. 04.02.2015.
26. 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.
27. The industry shall strictly follow the protocol at the time of shutdown and startup of boiler as communicated by the Board earlier to avoid dust nuisance and public complaint.
28. In case the consent fee is revised upward 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 amount within the period stipulated by the Board the consent order will be revoked without prior notice.

F-2 (Water Pollution Control)

1. **Specific water consumption shall be limited within 3.5m^3/MWh by 6th Dec, 2017 as per MoEF & CC vide Notification dtd. 07.12.2015.**
2. The industry shall completely recycle the wastewater and adopt zero discharge concept.
3. The industry shall take preventive measures for protection of aquatic life at the river water intake system.

4. Wastewater generated from raw water treatment system and back wash of filtration plant shall be properly treated in settling tank /ETP and taken to the common monitoring basin.
5. Acidic /Alkaline effluent generated from DM water plant shall be properly neutralized and reused.
6. The blow down shall meet the following standards before it is discharged to the common basin.

Boiler Blow down	
Suspended Solids	100.0 mg/l (Max.)
Oil & Grease	20.0mg/l (Max.)
Copper(Total)	1.0mg/l (Max.)
Iron(Total)	1.0mg/l (Max.)
Cooling Tower Blow down	
Free available Chlorine	0.5 mg/l (Max.)
Zinc	1.0mg/l(Max.)
Chromium (Total)	2.0mg/l(Max.)
Phosphate	5.0mg/l(Max.)

7. All the cooling water shall be completely circulated.
8. The oil contaminated effluent from CPP and service area shall be treated in oil separator before taking to common basin. From common monitoring basin partly the water shall be reused for ash handling, green belt and dust suppression.
9. The industry shall explore treatment of the cooling tower blow down through reverse osmosis process and treated water shall be reused.
10. Domestic wastewater from plant and colony shall be treated in STP and treated effluent shall be reused for gardening, plantation and greenbelt.
11. The storm water drain shall be maintained separately without being mixed up with the industrial effluent or sewage effluent.
12. Closed cycle cooling system with natural draft cooling towers shall be provided. The effluent shall be treated as per the prescribed norms.
13. No ground water shall be extracted for the project work at any stage.
14. Internal drainage arrangement like vertical and chimney, horizontal sand blanket, rock etc. shall be made for guiding the seepage water flow to the downstream side without any material erosion. The internal and external slopes of the dykes with stone rip rap, turfing, etc. shall be adequately protected to take care of erosion due to wave action, rain cuts.

15. Provision of cut-off trench filled with impervious soil below the dyke section shall be made. This shall increase the length of seepage water flow in the foundation, thereby controlling the exit gradient, which safeguards erosion problem.
16. The online continuous effluent quality monitoring system (EQMS) shall be operated effectively and uninterruptedly and the online monitoring data so generated shall be transmitted to SPCB and CPCB server on a continuous basis.
17. Rain water harvesting structure shall be developed inside the plant premises as per concept and practices made by CPCB and maximum efforts shall be made to reuse harvested rain water, with a definite plan and programme to reduce the drawal of fresh water from water bodies.
18. Concrete parapet wall of adequate height should be provided all along the concreted drains on its both the sides with rain cuts at regular intervals to prevent entry of dust/ash from the road and work zone into the drainage system. All the industrial drains shall be cleaned regularly.
19. Oil catch pits shall be provided in oil handling area of power plant for collection of spillage.
20. The industry shall abide by E(P) Act, 1986 and Rules framed there-under.
21. The industry shall adopt high concentration slurry disposal method (HCSD) for bottom ash disposal.
22. Bottom ash shall be collected in a double 'V' 'water impounded refractory lined furnace hopper. From where it will be taken to clinker grinder for grinding to 25mm size and shall be transported through high concentration slurry disposal system to ash disposal site.
23. Adequate safety measures shall be implemented to protect the ash dyke from getting breached.
24. There shall not be any clandestine discharge from the Ash pond. The excess overflow water of the ash pond shall be collected in a pond and completely recycled for ash slurry making.
25. The unit shall take all precautionary measures to ensure safety of the ash pond dykes and to avoid rain cuts, slope failure, breach of dykes and discharge of ash slurry to the surrounding area.

448

26. The industry shall take steps for fulfillment of all the stipulations and necessary measures to check pollution.
27. 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 Condition

1. This consent to operate is granted subject to submission of comprehensive proposal by 30.04.2017 for implementation of Action Plan prepared for critically polluted areas like Angul –Talcher area and Ib Valley – Jharsuguda declared by CPCB. Non-receipt of proper proposals in this regard shall lead to review of relevant conditions of CTO or revocation of CTO as deemed proper.
2. The unit shall strictly comply the conditions stipulated bank guarantee conditions vide Board's letter No. 5913, dtd. 24.04.2017.
3. The industry shall install dust extraction system (Pulse jet bag filters) at the coal crusher and screen circuit.

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

To

The Director
M/s IND-BARATH ENERGY (UTKAL) LIMITED
At- Sahajbahal, PO- Charpali, Barpali,
Bandhbahal, Dist - Jharsuguda

MEMBER SECRETARY
STATE POLLUTION CONTROL BOARD, ODISHA

Memo No. 8025 **/Dt.** 09-06-2017 /

Copy forwarded to;

i) Regional Officer, State Pollution Control Board, **Jharsuguda.**
iii) D.F.O, Sambalpur
iv) Director Factories and Boilers, Odisha, Bhubaneswar
v) SEE, Cess (Head Office)
vi) Consent Register
vii) Sr. Env. Scientist (L)

SR. ENV. ENGINEER, L-I (C)
for STATE POLLUTION CONTROL BOARD, ODISHA

Chittaranjan Sahu
Ind-Barath Energy (Utkal) Ltd.
09/06/17
for.

O/C

P.T.O

GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENT POLLUTANTS
PART-A: EFFLUENTS

Sl.No.	Parameters	Standards			
		Inland surface	Public sewers	Land for irrigation	Marine Costal Areas
		(a)	(b)	(c)	(d)
1.	Colour&odour	Colourless/Odourless as far as practible	------	See 6 of 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 5^0C above the receiving water temperature	-------	--------	Shall not exceed 5^0C 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_3) mg/1 max.	100	----	------	100
11.	Free ammonia (as NH_3) mg/1 max.	5.0	----	------	5.0
12.	Biochemical Oxygen Demand (5 days at (20^0C) mg/1 max.	30	350	100	100
13.	Chemical Oxygen 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	---------	3.0
21.	Zinc (as Zn) mg/l max.	5.0	15	---------	15
22.	Selenium (as Sc) mg/l 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 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_6H_5OH) mg/l max.	1.0	5.0	---------	5.0
29.	Radioactive materials a. Alpha emitter micro curle/ml. b. Beta emitter micro curle/ml.	10^7 10^6	10^7 10^6	10^8 10^7	10^7 10^6
30.	Bio-assay test	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent
31	Manganese (as Mn)	2 mg/l	2 mg/l	---------	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

PART- B:NATIONAL AMBIENT AIR QUALITY STANDARDS

Sl. No.	Pollutants	Time Weighed Average	Concentrate of Ambient Air		
			Industrial Residential, Rural and other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1.	Sulphur Dioxide (SO_2), $\mu g/m^3$	Annual *	50	20	-Improved west and Gaeke
		24 Hours **	80	80	- Ultraviolet fluorescence
2.	Nitrogen Dioxide (NO_2), $\mu g/m^3$	Annual *	40	30	- Modified Jacob &Hochheiser (Na-Arsenite)
		24 Hours **	80	80	- Chemiluminescence
3.	Particulate Matter (size less than 10µm) or $PM_{10}\mu g/m^3$	Annual *	60	60	-Gravimetric - TOEM
		24 Hours **	100	100	- Beta Attenuation
4.	Particulate Matter (size less than 2.5µm) or $PM_{2.5}\mu g/m^3$	Annual *	40	40	-Gravimetric - TOEM
		24 Hours **	60	60	- Beta Attenuation
5.	Ozone (O_3) $\mu g/m^3$	8 Hours **	100	100	- UV Photometric - Chemiluminescence
		1 Hours **	180	180	- Chemical Method
6.	Lead (Pb) $\mu g/m^3$	Annual *	0.50	0.50	-AAS/ICP method after sampling on EMP 2000 or equivalent filter paper. - ED-XRF using Teflon filter
		24 Hours **	1.0	1.0	
7.	Carbon Monoxide (CO) mg/m^3	8 Hours **	02	02	- Non Dispersive Infra Red (NDIR) Spectroscopy
		1 Hours **	04	04	
8.	Ammonia (NH_3) $\mu g/m^3$	Annual*	100	100	-Chemiluminescence - Indophenol Blue Method
		24 Hours**	400	400	
9.	Benzene (C_6H_6) $\mu g/m^3$	Annul *	05	05	-Gas Chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10.	Benzo (a) Pyrene (BaP)-Particulate phase only, ng/m^3	Annual*	01	01	-Solvent extraction followed by HPLC/GC analysis
11.	Arsenic (As), ng/m^3	Annual*	06	06	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper
12.	Nickel (Ni),ng/m^3	Annual*	20	20	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper

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

** 24 hourly or 08 hourly or 0I 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.

Tel : 0674-2564033
FAX : 0674-2564033/2564573
EPABX : 2561909/2562847
E-mail: paribesh1@ospcboard.org
Website: www.ospcboard.org

STATE POLLUTION CONTROL BOARD, ODISHA

[DEPARTMENT OF FOREST & ENVIRONMENT, GOVERNMENT OF ODISHA]
ParibeshBhawan, A/118, Nilakantha Nagar, Unit – VIII
Bhubaneswar – 751 012, INDIA

CONSENT ORDER

No. 5872 / IND-I-CON-6430 Dt. 30.03.2016

Sub : **Consent for discharge of sewage and trade effluent under section 25/26 of Water(P&CP) Act, 1974 and for existing/new operation of the plant under section 21 of Air(P&CP) Act, 1981.**

Ref : Your online application **ID No. 474463, dtd. 03.01.2016**

Consent to operate 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 thereunder to

Name of the Industry **M/s IND-BARATH ENERGY (UTKAL) LIMITED**

Name of the Occupier & Designation **Sri Jagannath Mohapatra, Director**

Address **At- Sahajbahal, PO- Charpali Barpali, Bandhbahal, Dist - Jharsuguda**

This consent order is valid for the period **from 01.04.2016 up to 31.03.2017.**

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

Sl.No.	Product	Quantity
01	Electricity (Unit-I)	*1x350 MW*

P.T.O

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

Outlet No.	Description of outlet	Point of discharge	Quantity of discharge KLD or KL/hr	Pre-scribed Standard
01.	*DM Plant blow down*	To be recycled completely		
02.	*Cooling water*	To be recycled completely		
03.	*Treated water from ETP*	Used for slurry making		
04.	*Ash pond overflow*	To be recycled for ash slurry making		

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

Chimney Stack No.	Description of Stack	Stack height (m)	Quantity of emission (m^3/hr)	Prescribed Standard		
				PM	SO_2	NO_x
1	Stack attached to ESP of Unit-1	275	--	50 mg/Nm^3	--	--

D. **Disposal of solid waste permitted in the following manner**

Sl.No.	Type of Solid waste	Quantity generated (TPD)	Quantity to be reused on site(TPD)	Quantity to be reused off site(TPD)	Quantity disposed off (TPD)	Description of disposal site.
1.	*Ash*	*2100*	---	1600 to cement plant, 150 to local brick manufacturer	350	*High concentration slurry disposal in ash pond.*

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.
2. 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.
5. 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.
12. 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 the lace 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 install 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.
19. 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 fugitive or episodal discharge from the premises.
30. In case of such episodal discharge/emissions the industry shall take immediate action to bring down the emission within the limits prescribed by the Board in conditions/stop the operation of the plant. 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 equipments 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.
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 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 perio 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 10th of every month.
   a) Performance / progress of the treatment plant.
   b) 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
   ii) A description of the non-compliance discharge including its impact on the receiving waters.
   iii) 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.
   iv) Steps taken by the applicant to reduce and eliminate the non-complying discharge and
   v) 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.

82

F. SPECIAL CONDITIONS

F-1 (Air Pollution Control)

1. All air pollution control devices shall be operated and maintained properly so that, the particulate matter emission from stack attached to ESPs of the Boiler shall not exceed 50 mg/Nm^3.
2. The unit should develop more areas with plantation and proper landscaping.
3. All the online continuous stack emission monitoring systems (CEMS) for measurement of particulate matter and gaseous pollutants shall be operated effectively and uninterruptedly and the online monitoring data so generated shall be transmitted to SPCB and CPCB server on a continuous basis.
4. All the online continuous ambient air quality monitoring stations (CAAQMS) shall be operated effectively and uninterruptedly and the online monitoring data so generated shall be transmitted to SPCB and CPCB server on a continuous basis.
5. The unit shall provide dust extraction system at crusher house, boiler bunker to control dust emission. CHP shall be installed in a shed and coal carrying conveyor belts shall be covered.
6. Pneumatic conveyor system with silo will be provided for fly ash collection and vents of ash silo shall be provided with bag filter to control fugitive emission. The unit shall transport fly ash after conditioning in ash conditioner before utilization for various uses.
7. The road shall be blacktopped. Permanent type high pressure water sprinkling system shall be installed for regular spraying of water on roads to minimize fugitive dust emission.
8. Separate energy meter shall be installed for all the pollution control equipment and the records shall be maintained for verification of the Board from time to time.
9. Water sprinkling shall be provided at coal stock yard and work zone area to control fugitive emission.
10. The industry shall provide both dust extraction system and dust suppression system at potential dust generating sources to control fugitive emission.

11. Good housekeeping practices shall be followed to improve the work environment. All roads and shop floors shall be cleaned regularly.

12. Air pollution control devices shall be maintained properly. Fabric bags and cages in bag house shall be checked regularly and replaced whenever required. Adequate availability of spares shall be ensured for immediate replacement.

13. Adequate space shall be earmarked for installation of flue gas desulphurization (FGD) system in future if required. This shall also include management and disposal of solid waste to be generated from FGD system.

14. The industry should use hydrogen gas cylinder instead of going for a hydrogenation plant.

15. The unit shall install adequate dust extraction system as well as dust suppression system at all potential dust generating points to control fugitive dust emission and the ambient air quality inside the factory premises shall conform to the National Ambient Air Quality standard . The unit shall provide low NOx burners to reduce NOx emission.

16. Proper dust extraction system and dry fog system shall be installed in the coal handling plant to control fugitive emission.

17. The unit shall submit fly ash utilization status to the Board annually and shall comply to the provisions of fly ash Notification No.SO.2804(E),dt. 03/11/2009 of MOEF, Govt. of India.

18. Appropriate measures like provision of water sprinkling or soil covering shall be made over the exposed dry surface of the ash ponds to prevent dust nuisance due to wind action. Dust suppression measures shall also be provided where construction activities are undertaken at ash pond area to prevent dust nuisance.

19. Supply of fly ash to Brick Manufacturing units shall be done on free of cost. Further, transportation cost of fly ash within 100km radius of your plant shall be borne by you or a subsidy of Rs.150/- per ton of fly ash shall be provided to all the fly ash brick, tile, road construction or other fly ash based construction materials manufacturing units or for use in road making if utilizing your fly ash.

20. The industry shall engage road sweeper with vacuum cleaner to maintain housekeeping inside the plant.
21. Separate energy meter shall be installed for all the pollution control equipment and the records shall be maintained for verification of the Board from time to time.
22. Ambient air quality shall conform to the National Ambient Air Quality standards as prescribed under E P Rules, 1986.
23. The industry shall comply all the conditions stipulated in Consent to establish order issued Board vide Letter No. 13374, dtd. 13.08.2010 and Environmental clearance issued by Ministry of Environment & Forests Govt. of India vide its letter dt. 30.11.2009 & dt. 04.02.2015.
24. 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.
25. The industry shall strictly follow the protocol at the time of shutdown and startup of boiler as communicated by the Board earlier to avoid dust nuisance and public complaint.
26. In case the consent fee is revised upward 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 amount within the period stipulated by the Board the consent order will be revoked without prior notice.

F-2 (Water Pollution Control)

1. The industry shall completely recycle the wastewater and adopt zero discharge concept.
2. The industry shall take preventive measures for protection of aquatic life at the river water intake system.
3. Wastewater generated from raw water treatment system and back wash of filtration plant shall be properly treated in settling tank /ETP and taken to the common monitoring basin.
4. Acidic /Alkaline effluent generated from DM water plant shall be properly

neutralized and reused.

5. The blow down shall meet the following standards before it is discharged to the common basin.

Boiler Blow down

Suspended Solids	100.0 mg/l (Max.)
Oil & Grease	20.0mg/l (Max.)
Copper(Total)	1.0mg/l (Max.)
Iron(Total)	1.0mg/l (Max.)

Cooling Tower Blow down

Free available Chlorine	0.5 mg/l (Max.)
Zinc	1.0mg/l(Max.)
Chromium (Total)	2.0mg/l(Max.)
Phosphate	5.0mg/l(Max.)

6. All the cooling water shall be completely circulated.
7. The oil contaminated effluent from CPP and service area shall be treated in oil separator before taking to common basin. From common monitoring basin partly the water shall be reused for ash handling, green belt and dust suppression.
8. The industry shall explore treatment of the cooling tower blow down through reverse osmosis process and treated water shall be reused.
9. Domestic wastewater from plant and colony shall be treated in STP and treated effluent shall be reused for gardening, plantation and greenbelt.
10. The storm water drain shall be maintained separately without being mixed up with the industrial effluent or sewage effluent.
11. Closed cycle cooling system with natural draft cooling towers shall be provided. The effluent shall be treated as per the prescribed norms.
12. No ground water shall be extracted for the project work at any stage.
13. Internal drainage arrangement like vertical and chimney, horizontal sand blanket, rock etc. shall be made for guiding the seepage water flow to the downstream side without any material erosion. The internal and external slopes of the dykes with stone rip rap, turfing, etc. shall be adequately protected to take care of erosion due to wave action, rain cuts.
14. Provision of cut-off trench filled with impervious soil below the dyke section shall be made. This shall increase the length of seepage water flow in the

foundation, thereby controlling the exit gradient, which safeguards erosion problem.

15. Rain water harvesting structure shall be developed inside the plant premises as per concept and practices made by CPCB and maximum efforts shall be made to reuse harvested rain water, with a definite plan and programme to reduce the drawal of fresh water from water bodies.
16. Concrete parapet wall of adequate height should be provided all along the concreted drains on its both the sides with rain cuts at regular intervals to prevent entry of dust/ash from the road and work zone into the drainage system. All the industrial drains shall be cleaned regularly.
17. Online effluent quality monitoring system at the outlet of ETP/STP shall be installed with provisions of multi-port system(like RS-232/4-20mA) for online data transmission through GPRS system to SPCB server. The installation shall be completed by 30.06. 2015.
18. Oil catch pits shall be provided in oil handling area of power plant for collection of spillage.
19. The industry shall abide by E(P) Act, 1986 and Rules framed there-under.
20. The industry shall adopt high concentration slurry disposal method (HCSD) for bottom ash disposal.
21. Bottom ash shall be collected in a double 'V' 'water impounded refractory lined furnace hopper. From where it will be taken to clinker grinder for grinding to 25mm size and shall be transported through high concentration slurry disposal system to ash disposal site.
22. The ash pond of 135 Ac shall be made ready with HDPE lining work and recirculation system . Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.
23. There shall not be any clandestine discharge from the Ash pond. The excess overflow water of the ash pond shall be collected in a pond and completely recycled for ash slurry making.
24. The unit shall take all precautionary measures to ensure safety of the ash pond dykes and to avoid rain cuts, slope failure, breach of dykes and discharge of ash slurry to the surrounding area.

CONSENT ORDER

25. The industry shall take steps for fulfillment of all the stipulations and necessary measures to check pollution.
26. 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 Condition

1. The industry shall install dust extraction system (Pulse jet bag filters) at the coal crusher and screen circuit within a period of six months which shall be covered under bank guarantee.
2. To ensure installation of rest 3nos. of CAAQMS within 3 months which shall be covered under bank guarantee.
3. The unit shall complete the approved permanent ash pond over an area of 135 Ac with ash water recirculation system within 6 months, which shall be covered under bank guarantee.
4. The industry shall complete the connectivity of the existing CEMS, CAAQMS and EQMS with the RT-DAS server of the Board within one month.

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

To

The Director
M/s IND-BARATH ENERGY (UTKAL) LIMITED
At- Sahajbahal, PO- Charpali Barpali,
Bandhbahal, Dist - Jharsuguda

MEMBER SECRETARY
STATE POLLUTION CONTROL BOARD, ODISHA

Memo No. 5873 **/Dt.** 30.03.2016

Copy forwarded to;

i) Regional Officer, State Pollution Control Board, **Jharsuguda.** He is requested to conduct monitoring of Stack, AAQ and Effluent quality after plant starts operation.
ii) District Collector, Sambalpur
iii) D.F.O, Sambalpur
iv) Director Factories and Boilers, Odisha, Bhubaneswar
v) SEE, Cess (Head Office)
vi) Consent Register
Sr. Env. Scientist (L)

30/3/16

SR. ENV. ENGINEER, L-I (C)
STATE POLLUTION CONTROL BOARD, ODISHA

GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENT POLLUTANTS
PART-A: EFFLUENTS

Sl.No.	Parameters	Standards			
		Inland surface	Public sewers	Land for irrigation	Marine Costal Areas
		(a)	(b)	(c)	(d)
1.	Colour&odour	Colourless/Odourless as far as practible	------	See 6 of 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 5^0C above the receiving water temperature	------	-------	Shall not exceed 5^0C 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_3) mg/1 max.	100	---	------	100
11.	Free ammonia (as NH_3) mg/1 max.	5.0	---	------	5.0
12.	Biochemical Oxygen Demand (5 days at (20^0C) mg/1 max.	30	350	100	100
13.	Chemical Oxygen 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

296

CONSENT ORDER

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	-------	3.0
21.	Zinc (as Zn) mg/l max.	5.0	15	-------	15
22.	Selenium (as Sc) mg/l 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 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_6H_5OH) mg/l max.	1.0	5.0	-------	5.0
29.	Radioactive materials a. Alpha emitter micro curle/ml. b. Beta emitter micro curle/ml.	10^7 10^6	10^7 10^6	10^8 10^7	10^7 10^6
30.	Bio-assay test	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent
31	Manganese (as Mn)	2 mg/l	2 mg/l	-------	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

PART- B:NATIONAL AMBIENT AIR QUALITY STANDARDS

Sl. No.	Pollutants	Time Weighed Average	Concentrate of Ambient Air		
			Industrial Residential, Rural and other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1.	Sulphur Dioxide (SO_2), $\mu g/m^3$	Annual *	50	20	-Improved west and Gaeke
		24 Hours **	80	80	- Ultraviolet fluorescence
2.	Nitrogen Dioxide (NO_2), $\mu g/m^3$	Annual *	40	30	- Modified Jacob &Hochheiser (Na-Arsenite)
		24 Hours **	80	80	- Chemiluminescence
3.	Particulate Matter (size less than 10µm) or $PM_{10}\mu g/m^3$	Annual *	60	60	-Gravimetric - TOEM
		24 Hours **	100	100	- Beta Attenuation
4.	Particulate Matter (size less than 2.5µm) or $PM_{2.5}\mu g/m^3$	Annual *	40	40	-Gravimetric - TOEM
		24 Hours **	60	60	- Beta Attenuation
5.	Ozone (O_3) $\mu g/m^3$	8 Hours **	100	100	- UV Photometric - Chemiluminescence
		1 Hours **	180	180	- Chemical Method
6.	Lead (Pb) $\mu g/m^3$	Annual *	0.50	0.50	-AAS/ICP method after sampling on EMP 2000 or equivalent filter paper.
		24 Hours **	1.0	1.0	- ED-XRF using Teflon filter
7.	Carbon Monoxide (CO) mg/m^3	8 Hours **	02	02	- Non Dispersive Infra Red (NDIR) Spectroscopy
		1 Hours **	04	04	
8.	Ammonia (NH_3) $\mu g/m^3$	Annual*	100	100	-Chemiluminescence - Indophenol Blue Method
		24 Hours**	400	400	
9.	Benzene (C_6H_6) $\mu g/m^3$	Annul *	05	05	-Gas Chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10.	Benzo (a) Pyrene (BaP)-Particulate phase only, ng/m^3	Annual*	01	01	-Solvent extraction followed by HPLC/GC analysis
11.	Arsenic (As), ng/m^3	Annual*	06	06	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper
12.	Nickel (Ni),ng/m^3	Annual*	20	20	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper

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

** 24 hourly or 08 hourly or 0I 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.

Tel : 0674-2564033
FAX : 0674-2564033/2564573
EPABX : 2561909/2562847
E-mail: paribesh1@ospcboard.org
Website: www.ospcboard.org

STATE POLLUTION CONTROL BOARD, ODISHA

[DEPARTMENT OF FOREST & ENVIRONMENT, GOVERNMENT OF ODISHA]
ParibeshBhawan, A/118, Nilakantha Nagar, Unit – VIII
Bhubaneswar – 751 012, INDIA

CONSENT ORDER

No. 16909 / IND-I-CON-6430 Dt. 29-10-2015

CONSENT ORDER NO. 2807

Sub : **Consent for discharge of sewage and trade effluent under section 25/26 of Water(P&CP) Act, 1974 and for existing/new operation of the plant under section 21 of Air(P&CP) Act, 1981.**

Ref : Your online application ID No. **91754, dtd. 09.03.2015**

Consent to operate 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 thereunder to

Name of the Industry **M/s IND-BARATH ENERGY (UTKAL) LIMITED**

Name of the Occupier &Designation- **Sri Jagannath Mohapatra, Director**

Address **At- Sahajbahal, PO- Charpali Barpali, Bandhbahal, Dist - Jharsuguda**

This consent order is valid for the period **up to 31.03.2016.**

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

Sl.No.	Product	Quantity
01	Electricity (Unit-I)	*1x350 MW*

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

Outlet No.	Description of outlet	Point of discharge	Quantity of discharge KLD or KL/hr	Pre-scribed Standard
01.	*DM Plant blow down*	To be recycled completely		
02.	*Cooling water*	To be recycled completely		
03.	*Treated water from ETP*	Used for slurry making		
04.	*Ash pond overflow*	To be recycled for ash slurry making		

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

Chimney Stack No.	Description of Stack	Stack height (m)	Quantity of emission (m^3/hr)	Prescribed Standard		
				PM	SO_2	NO_x
1	Stack attached to ESP of Unit-1	275	--	50 mg/Nm^3	--	--

D. Disposal of solid waste permitted in the following manner

Sl.No.	Type of Solid waste	Quantity generated (TPD)	Quantity to be reused on site(TPD)	Quantity to be reused off site(TPD)	Quantity disposed off (TPD)	Description of disposal site.
1.	*Ash*	*2100*	---	1600 supplied to cement plant, 150 supplied to local brick manufacturer	350	*High concentration slurry disposal in ash pond of 20 Acres.*

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.
2. 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.
5. 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.
12. 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 the lace 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.

219

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 install 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.
19. 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 fugitive or episodal discharge from the premises.
30. In case of such episodal discharge/emissions the industry shall take immediate action to bring down the emission within the limits prescribed by the Board in conditions/stop the operation of the plant. 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 equipments 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.
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 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 10th of every month.
   a) Performance / progress of the treatment plant.
   b) 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
   ii) A description of the non-compliance discharge including its impact on the receiving waters.
   iii) 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.
   iv) Steps taken by the applicant to reduce and eliminate the non-complying discharge and
   v) 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.

F. SPECIAL CONDITIONS

F-1 (AIR POLLUTION CONTROL)

1. All air pollution control devices shall be operated and maintained properly so that the particulate matter emission from stack attached to ESPs of the Boiler shall not exceed 50mg/Nm^3.
2. The unit should develop more areas with plantation and proper landscaping.
3. Online stack emission monitoring system for measurement of particulate matter and gaseous pollutants shall be operated adequately at all the ESP stacks with provisions of multi-port system(like RS-232/4-20mA) for online data transmission through GPRS system to SPCB server.
4. **4 nos. of online ambient air quality monitoring systems shall be installed with provisions of multi-port system(like RS-232/4-20mA) for online data transmission through GPRS system to server of SPCB, Odisha and CPCB. This job shall be completed by 31.01.2016. The industry shall furnish bank guarantee of Rs. 45 lakhs (@ 25% of the estimated cost of 4 nos. of continuous AAQ monitoring stations of Rs. 45 lakh each).** At least six permanent ambient air quality monitoring station shall be established in consultation with the Regional Officer of the Board.
5. The unit shall provide dust extraction system at crusher house, boiler bunker to control dust emission. CHP shall be installed in a shed and coal carrying conveyor belts shall be covered.
6. Pneumatic conveyor system with silo will be provided for fly ash collection and vents of ash silo shall be provided with bag filter to control fugitive emission. The unit shall transport fly ash after conditioning in ash conditioner before utilization for various uses.
7. The road shall be blacktopped. Permanent type high pressure water sprinkling system shall be installed for regular spraying of water on roads to minimize fugitive dust emission.
8. Separate energy meter shall be installed for all the pollution control equipment and the records shall be maintained for verification of the Board from time to time.
9. Water sprinkling shall be provided at coal stock yard and work zone area to control fugitive emission.
10. The industry shall provide both dust extraction system and dust suppression system at potential dust generating sources to control fugitive emission.
11. Good housekeeping practices shall be followed to improve the work environment. All roads and shop floors shall be cleaned regularly.
12. Air pollution control devices shall be maintained properly. Fabric bags and cages in bag house shall be checked regularly and replaced whenever

F-2

required. Adequate availability of spares shall be ensured for immediate replacement.

13. Adequate space shall be earmarked for installation of flue gas desulphurization (FGD) system in future if required. This shall also include management and disposal of solid waste to be generated from FGD system.
14. The industry should use hydrogen gas cylinder instead of going for a hydrogenation plant.
15. The unit shall comply with the conditions imposed in the action plan prepared by Board for abatement of pollution in the critically polluted industrial clusters of Jharsuguda-Ib-valley area.
16. The unit shall install adequate dust extraction system as well as dust suppression system at all potential dust generating points to control fugitive dust emission and the ambient air quality inside the factory premises shall conform to the National Ambient Air Quality standard . The unit shall provide low NOx burners to reduce NOx emission.
17. Proper dust extraction system and dry fog system shall be installed in the coal handling plant to control fugitive emission.
18. The unit shall submit fly ash utilization status to the Board annually and shall comply to the provisions of fly ash Notification No.SO.2804(E), dt. 03/11/2009 of MOEF, Govt. of India.
19. The industry shall engage road sweeper with vacuum cleaner to maintain housekeeping inside the plant.
20. Separate energy meter shall be installed for all the pollution control equipment and the records shall be maintained for verification of the Board from time to time.
21. Ambient air quality shall conform to the National Ambient Air Quality standards as prescribed under E P Rules, 1986.
22. Supply of fly ash to Brick Manufacturing units shall be done on free of cost. Further, transportation cost of fly ash within 100km radius of your plant shall be borne by you.
23. The industry shall comply all the conditions stipulated in Consent to establish order issued Board vide Letter No. 13374, dtd. 13.08.2010 and Environmental clearance issued by Ministry of Environment & Forests Govt. of India vide its letter dt. 30.11.2009 & dt. 04.02.2015.
24. 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.
25. The industry shall strictly follow the protocol at the time of shutdown and startup of boiler as communicated by the Board earlier to avoid dust nuisance and public complaint.

26. In case the consent fee is revised upward 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 amount within the period stipulated by the Board the consent order will be revoked without prior notice.

F-2 (WATER POLLUTION CONTROL)

1. The industry shall completely recycle the wastewater and adopt zero discharge concept. However, in exigency shall discharge the treated effluent to the nearby river through closed pipeline meet the prescribed standard such pH- 6.5 to 8.0, TSS-50mg/l, O&G- 5 mg/l, BOD- 30mg/l, COD-250 mg/l.
2. The industry shall take preventive measures for protection of aquatic life at the river water intake system.
3. Wastewater generated from raw water treatment system and back wash of filtration plant shall be properly treated in settling tank /ETP and taken to the common monitoring basin.
4. Acidic /Alkaline effluent generated from DM water plant shall be properly neutralized and reused.
5. The blow down shall meet the following standards before it is discharged to the common basin.

Boiler Blow down

Suspended Solids	100.0 mg/l (Max.)
Oil & Grease	20.0mg/l (Max.)
Copper(Total)	1.0mg/l (Max.)
Iron(Total)	1.0mg/l (Max.)

Cooling Tower Blow down

Free available Chlorine	0.5 mg/l (Max.)
Zinc	1.0mg/l(Max.)
Chromium (Total)	2.0mg/l(Max.)
Phosphate	5.0mg/l(Max.)

6. All the cooling water shall be completely circulated.
7. The oil contaminated effluent from CPP and service area shall be treated in oil separator before taking to common basin. From common monitoring basin partly the water shall be reused for ash handling, green belt and dust suppression.
8. The industry shall explore treatment of the cooling tower blow down through reverse osmosis process and treated water shall be reused.
9. Domestic wastewater from plant and colony shall be treated in STP and treated effluent shall be reused for greenbelt.
10. The storm water drain shall be maintained separately without being mixed up with the industrial effluent or sewage effluent.

11. Closed cycle cooling system with natural draft cooling towers shall be provided. The effluent shall be treated as per the prescribed norms.
12. No ground water shall be extracted for the project work at any stage.
13. Internal drainage arrangement like vertical and chimney, horizontal sand blanket, rock etc. shall be made for guiding the seepage water flow to the downstream side without any material erosion. The internal and external slopes of the dykes with stone rip rap, turfing, etc. shall be adequately protected to take care of erosion due to wave action, rain cuts.
14. Provision of cut-off trench filled with impervious soil below the dyke section shall be made. This shall increase the length of seepage water flow in the foundation, thereby controlling the exit gradient, which safeguards erosion problem.
15. Rain water harvesting structure shall be developed inside the plant premises as per concept and practices made by CPCB and maximum efforts shall be made to reuse harvested rain water, with a definite plan and programme to reduce the drawal of fresh water from water bodies.
16. Concrete parapet wall of adequate height should be provided all along the concreted drains on its both the sides with rain cuts at regular intervals to prevent entry of dust/ash from the road and work zone into the drainage system. All the industrial drains shall be cleaned regularly.
17. **Online effluent quality monitoring system at the outlet of ETP/STP shall be installed for monitoring of pH, TSS, BOD & COD with provisions of multi-port system(like RS-232/4-20mA) for online data transmission through GPRS system to the server of SPCB Odisha and CPCB. The installation shall be completed by 31.01.2016. The industry shall furnish bank guarantee of Rs. 5 lakhs (25% of the estimated cost of installation of such online effluent quality monitoring system @ Rs. 20 lakhs).**
18. Oil catch pits shall be provided in oil handling area of power plant for collection of spillage.
19. The unit shall comply with the conditions imposed in the action plan Prepared by Board for abatement of pollution in the critically polluted industrial clusters of Jharsuguda – Ibvallyarea .
20. The industry shall abide by E(P) Act, 1986 and Rules framed there-under.
21. The industry shall adopt high concentration slurry disposal method (HCSD) for bottom ash disposal.
22. Bottom ash shall be collected in a double 'V' 'water impounded refractory lined furnace hopper. From where it will be taken to clinker grinder for grinding to 25mm size and shall be transported through high concentration slurry disposal system to ash disposal site.
23. Ash pond shall be lined with HDPE / LDPE lining. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.

24. The unit shall supply fly ash to cement plant and local brick manufacturers. Rest of the ash shall be disposed through High Concentration Slurry disposal system in it's ash pond of 20Ac at present. The ash pond of 135 Ac shall be made ready with HDPE lining work by 31.01.2016.
25. There shall not be any clandestine discharge from the Ash pond. The excess overflow water of the ash pond shall be collected in a pond and completely recycled for ash slurry making.
26. The unit shall take all precautionary measures to ensure safety of the ash pond dykes and to avoid rain cuts, slope failure, breach of dykes and discharge of ash slurry to the surrounding area.
27. The industry shall take steps for fulfillment of all the stipulations and necessary measures to check pollution.
28. 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 CONDITION**

1. **The ash pond of 135 Ac shall be made ready with HDPE lining work and recirculation system by 31.01.2016.**
2. **The industry shall install 4 nos. of continuous AAQ monitoring stations (as per condition No. 4 of F-1 APC) and online effluent monitoring station at the outlet of ETP (as per condition No. 17 of F-2 WPC) by 31.01.2016. Performance bank guarantee for an amount of Rs. 50 lakhs in this regard shall be submitted to the Board by 15.11.2015 positively.**

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

To

The Director
M/s Ind-Barath Energy (Utkal) Limited,
At- Sahajbahal, PO- Charpali Barpali,
Bandhbahal, Dist - Jharsuguda

MEMBER SECRETARY
STATE POLLUTION CONTROL BOARD, ODISHA

24

CONSENT ORDER

Memo No. 16910 /Dt. 29-10-2015

Copy forwarded to;

i) Regional Officer, State Pollution Control Board, **Jharsuguda**
ii) District Collector, Sambalpur
iii) D.F.O,**Sambalpur**
iv) Director Factories and Boilers, Odisha, Bhubaneswar
v) SEE, Cess (Head Office)
vi) Consent Register
vii) Sr. Env. Scientist (L)

SR. ENV. ENGINEER,L-I(C)
STATE POLLUTION CONTROL BOARD, ODISHA

o/c

Received the copy
of the above
on 30/10/15
for.

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

Sl.No.	Parameters	Standards			
		Inland surface	Public sewers	Land for irrigation	Marine Costal Areas
		(a)	(b)	(c)	(d)
1.	Colour&odour	Colourless/Odourless as far as practible	------	See 6 of 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^{0}C above the receiving water temperature	-------	--------	Shall not exceed 5^{0}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_3) mg/1 max.	100	----	------	100
11.	Free ammonia (as NH_3) mg/1 max.	5.0	----	------	5.0
12.	Biochemical Oxygen Demand (5 days at (20^{0}C) mg/1 max.	30	350	100	100
13.	Chemical Oxygen 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	---------	3.0
21.	Zinc (as Zn) mg/l max.	5.0	15	---------	15
22.	Selenium (as Sc) mg/l 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 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_6H_5OH) mg/l max.	1.0	5.0	---------	5.0
29.	Radioactive materials a. Alpha emitter micro curle/ml. b. Beta emitter micro curle/ml.	 10^7 10^6	 10^7 10^6	 10^8 10^7	 10^7 10^6
30.	Bio-assay test	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent
31	Manganese (as Mn)	2 mg/l	2 mg/l	---------	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

PART- B:NATIONAL AMBIENT AIR QUALITY STANDARDS

Sl. No.	Pollutants	Time Weighed Average	Concentrate of Ambient Air		
			Industrial Residential, Rural and other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1.	Sulphur Dioxide (SO_2), $\mu g/m^3$	Annual *	50	20	-Improved west and Gaeke
		24 Hours **	80	80	- Ultraviolet fluorescence
2.	Nitrogen Dioxide (NO_2), $\mu g/m^3$	Annual *	40	30	- Modified Jacob &Hochheiser (Na-Arsenite)
		24 Hours **	80	80	- Chemiluminescence
3.	Particulate Matter (size less than 10µm) or $PM_{10}\mu g/m^3$	Annual *	60	60	-Gravimetric - TOEM - Beta Attenuation
		24 Hours **	100	100	
4.	Particulate Matter (size less than 2.5µm) or $PM_{2.5}\mu g/m^3$	Annual *	40	40	-Gravimetric - TOEM - Beta Attenuation
		24 Hours **	60	60	
5.	Ozone (O_3) $\mu g/m^3$	8 Hours **	100	100	- UV Photometric - Chemiluminescence - Chemical Method
		1 Hours **	180	180	
6.	Lead (Pb) $\mu g/m^3$	Annual *	0.50	0.50	-AAS/ICP method after sampling on EMP 2000 or equivalent filter paper. - ED-XRF using Teflon filter
		24 Hours **	1.0	1.0	
7.	Carbon Monoxide (CO) mg/m^3	8 Hours **	02	02	- Non Dispersive Infra Red (NDIR) Spectroscopy
		1 Hours **	04	04	
8.	Ammonia (NH_3) $\mu g/m^3$	Annual*	100	100	-Chemiluminescence - Indophenol Blue Method
		24 Hours**	400	400	
9.	Benzene (C_6H_6) $\mu g/m^3$	Annul *	05	05	-Gas Chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10.	Benzo (a) Pyrene (BaP)-Particulate phase only, ng/m^3	Annual*	01	01	-Solvent extraction followed by HPLC/GC analysis
11.	Arsenic (As), ng/m^3	Annual*	06	06	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper
12.	Nickel (Ni),ng/m^3	Annual*	20	20	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper

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

** 24 hourly or 08 hourly or 0I 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.

CONSENT ORDER

Tel : 0674-2564033
FAX : 0674-2564033/2564573
EPABX : 2561909/2562847
E-mail: paribesh1@ospcboard.org
Website: www.ospcboard.org

STATE POLLUTION CONTROL BOARD, ODISHA

[DEPARTMENT OF FOREST & ENVIRONMENT, GOVERNMENT OF ODISHA]
ParibeshBhawan, A/118, Nilakantha Nagar, Unit - VIII
Bhubaneswar - 751 012, INDIA

CONSENT ORDER

No. 7330 / IND-I-CON-6430 Dt. 29.04.2015

CONSENT ORDER NO. 2807

Sub : **Consent for discharge of sewage and trade effluent under section 25/26 of Water(P&CP) Act, 1974 and for existing/new operation of the plant under section 21 of Air(P&CP) Act, 1981.**

Ref : Your online application ID No. **91754, DTD. 09.03.2015**

Consent to operate 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 thereunder to

Name of the Industry **M/s IND-BARATH ENERGY (UTKAL) LIMITED**

Name of the Occupier &Designation **Sri Jagannath Mohapatra, Director**

Address **At- Sahajbahal, PO- Charpali Barpali, Bandhbahal, Dist - Jharsuguda**

This consent order is valid for the period **upto 31.10.2015.**

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**

Sl.No.	Product	Quantity
01	Electricity (Unit-I)	*1x350 MW*

P.T.O

dk

191

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

Outlet No.	Description of outlet	Point of discharge	Quantity of discharge KLD or KL/hr	Pre-scribed Standard
01.	*DM Plant blow down*	To be recycled completely		
02.	*Cooling water*	To be recycled completely		
03.	*Treated water from ETP*	Used for slurry making		
04.	*Ash pond overflow*	To be recycled for ash slurry making		

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

Chimney Stack No.	Description of Stack	Stack height (m)	Quantity of emission (m^3/hr)	Prescribed Standard		
				PM	SO_2	NO_x
1	Stack attached to ESP of Unit-1	275	--	50 mg/Nm^3	--	--

D. **Disposal of solid waste permitted in the following manner**

Sl.No.	Type of Solid waste	Quantity generated (TPD)	Quantity to be reused on site(TPD)	Quantity to be reused off site(TPD)	Quantity disposed off (TPD)	Description of disposal site.
1.	*Ash*	*2100*	---	1600 supplied to cement plant, 150 supplied to local brick manufacturer	350	*High concentration slurry disposal in ash pond.*

E. GENE

1.

2.

3

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.
2. 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.
5. 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.
12. 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 the lace 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 install 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.
19. 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 fugitive or episodal discharge from the premises.
30. In case of such episodal discharge/emissions the industry shall take immediate action to bring down the emission within the limits prescribed by the Board in conditions/stop the operation of the plant. 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 equipments 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.
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 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 10th of every month.
   a) Performance / progress of the treatment plant.
   b) 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
   ii) A description of the non-compliance discharge including its impact on the receiving waters.
   iii) 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.
   iv) Steps taken by the applicant to reduce and eliminate the non-complying discharge and
   v) 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.

F. SPECIAL CONDITIONS
F-1 (Air Pollution Control)

1. All air pollution control devices shall be operated and maintained properly so that, the particulate matter emission from stack attached to ESPs of the Boiler shall not exceed 50 mg/Nm^3.
2. The unit should develop more areas with plantation and proper landscaping.
3. Online stack emission monitoring system for measurement of particulate matter and gaseous pollutants shall be operated adequately at all the ESP stacks,4 nos.of online ambient air quality monitoring systems shall be installed with provisions of multi-port system(like RS-232/4-20mA) for online data transmission through GPRS system to SPCB server. The installation shall be completed by 30.06.2015. At least six permanent ambient air quality monitoring station shall be established in consultation with the Regional Officer of the Board
4. The unit shall provide dust extraction system at crusher house, boiler bunker to control dust emission. CHP shall be installed in a shed and coal carrying conveyor belts shall be covered.
5. Pneumatic conveyor system with silo will be provided for fly ash collection and vents of ash silo shall be provided with bag filter to control fugitive emission. The unit shall transport fly ash after conditioning in ash conditioner before utilization for various uses.
6. The road shall be blacktopped. Permanent type high pressure water sprinkling system shall be installed for regular spraying of water on roads to minimize fugitive dust emission.
7. Separate energy meter shall be installed for all the pollution control equipment and the records shall be maintained for verification of the Board from time to time.
8. Water sprinkling shall be provided at coal stock yard and work zone area to control fugitive emission.
9. The industry shall provide both dust extraction system and dust suppression system at potential dust generating sources to control fugitive emission.

10. Good housekeeping practices shall be followed to improve the work environment. All roads and shop floors shall be cleaned regularly.
11. Air pollution control devices shall be maintained properly. Fabric bags and cages in bag house shall be checked regularly and replaced whenever required. Adequate availability of spares shall be ensured for immediate replacement.
12. Adequate space shall be earmarked for installation of flue gas desulphurization (FGD) system in future if required. This shall also include management and disposal of solid waste to be generated from FGD system.
13. The industry should use hydrogen gas cylinder instead of going for a hydrogenation plant.
14. The unit shall comply with the conditions imposed in the action plan prepared by Board for abatement of pollution in the critically polluted industrial clusters of Jharsuguda-Ib-valley area .
15. The unit shall install adequate dust extraction system as well as dust suppression system at all potential dust generating points to control fugitive dust emission and the ambient air quality inside the factory premises shall conform to the National Ambient Air Quality standard . The unit shall provide low NOx burners to reduce NOx emission.
16. Proper dust extraction system and dry fog system shall be installed in the coal handling plant to control fugitive emission.
17. The unit shall submit fly ash utilization status to the Board annually and shall comply to the provisions of fly ash Notification No.SO.2804(E),dt. 03/11/2009 of MOEF, Govt. of India.
18. The industry shall engage road sweeper with vacuum cleaner to maintain housekeeping inside the plant.
19. Separate energy meter shall be installed for all the pollution control equipment and the records shall be maintained for verification of the Board from time to time.
20. Ambient air quality shall conform to the National Ambient Air Quality standards as prescribed under E P Rules, 1986.

21. Supply of fly ash to Brick Manufacturing units shall be done on free of cost. Further, transportation cost of fly ash within 100km radius of your plant shall be borne by you.
22. The industry shall comply all the conditions stipulated in Consent to establish order issued Board vide Letter No. 13374, dtd. 13.08.2010 and Environmental clearance issued by Ministry of Environment & Forests Govt. of India vide its letter dt. 30.11.2009 & dt. 04.02.2015.
23. 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.
24. The industry shall strictly follow the protocol at the time of shutdown and startup of boiler as communicated by the Board earlier to avoid dust nuisance and public complaint.
25. In case the consent fee is revised upward 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 amount within the period stipulated by the Board the consent order will be revoked without prior notice.

F-2 (Water Pollution Control)

1. The industry shall completely recycle the wastewater and adopt zero discharge concept. However, in exigency shall discharge the treated effluent to the nearby river through closed pipeline meet the prescribed standard such pH- 6.5 to 8.0, TSS-50mg/l, O&G- 5 mg/l, BOD- 30mg/l, COD-250 mg/l.
2. The industry shall take preventive measures for protection of aquatic life at the river water intake system.
3. Wastewater generated from raw water treatment system and back wash of filtration plant shall be properly treated in settling tank /ETP and taken to the common monitoring basin.
4. Acidic /Alkaline effluent generated from DM water plant shall be properly neutralized and reused.

5. The blow down shall meet the following standards before it is discharged to the common basin.

Boiler Blow down

Suspended Solids	100.0 mg/l (Max.)
Oil & Grease	20.0mg/l (Max.)
Copper(Total)	1.0mg/l (Max.)
Iron(Total)	1.0mg/l (Max.)

Cooling Tower Blow down

Free available Chlorine	0.5 mg/l (Max.)
Zinc	1.0mg/l(Max.)
Chromium (Total)	2.0mg/l(Max.)
Phosphate	5.0mg/l(Max.)

6. All the cooling water shall be completely circulated.
7. The oil contaminated effluent from CPP and service area shall be treated in oil separator before taking to common basin. From common monitoring basin partly the water shall be reused for ash handling, green belt and dust suppression.
8. The industry shall explore treatment of the cooling tower blow down through reverse osmosis process and treated water shall be reused.
9. Domestic wastewater from plant and colony shall be treated in STP and treated effluent shall be reused for greenbelt.
10. The storm water drain shall be maintained separately without being mixed up with the industrial effluent or sewage effluent.
11. Closed cycle cooling system with natural draft cooling towers shall be provided. The effluent shall be treated as per the prescribed norms.
12. No ground water shall be extracted for the project work at any stage.
13. Internal drainage arrangement like vertical and chimney, horizontal sand blanket, rock etc. shall be made for guiding the seepage water flow to the downstream side without any material erosion. The internal and external slopes of the dykes with stone rip rap, turfing, etc. shall be adequately protected to take care of erosion due to wave action, rain cuts.
14. Provision of cut-off trench filled with impervious soil below the dyke section shall be made. This shall increase the length of seepage water flow in the foundation, thereby controlling the exit gradient, which safeguards erosion problem.

15. Rain water harvesting structure shall be developed inside the plant premises as per concept and practices made by CPCB and maximum efforts shall be made to reuse harvested rain water, with a definite plan and programme to reduce the drawal of fresh water from water bodies.
16. Concrete parapet wall of adequate height should be provided all along the concreted drains on its both the sides with rain cuts at regular intervals to prevent entry of dust/ash from the road and work zone into the drainage system. All the industrial drains shall be cleaned regularly.
17. Online effluent quality monitoring system at the outlet of ETP/STP shall be installed with provisions of multi-port system(like RS-232/4-20mA) for online data transmission through GPRS system to SPCB server. The installation shall be completed by 30.06. 2015.
18. Oil catch pits shall be provided in oil handling area of power plant for collection of spillage.
19. The unit shall comply with the conditions imposed in the action plan Prepared by Board for abatement of pollution in the critically polluted industrial clusters of Jharsuguda – Ibvallyarea .
20. The industry shall abide by E(P) Act, 1986 and Rules framed there-under.
21. The industry shall adopt high concentration slurry disposal method (HCSD) for bottom ash disposal.
22. Bottom ash shall be collected in a double 'V' 'water impounded refractory lined furnace hopper. From where it will be taken to clinker grinder for grinding to 25mm size and shall be transported through high concentration slurry disposal system to ash disposal site.
23. Ash pond shall be lined with HDPE / LDPE lining. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.
24. The unit shall supply fly ash to cement plant and local brick manufacturers. Rest of the ash shall be disposed through High Concentration Slurry disposal system in it's ash pond of 20Ac at present. The ash pond of 135 Ac shall be made ready with HDPE lining work within six months.

25. There shall not be any clandestine discharge from the Ash pond. The excess overflow water of the ash pond shall be collected in a pond and completely recycled for ash slurry making.
26. The unit shall take all precautionary measures to ensure safety of the ash pond dykes and to avoid rain cuts, slope failure, breach of dykes and discharge of ash slurry to the surrounding area.
27. The industry shall take steps for fulfillment of all the stipulations and necessary measures to check pollution.
28. 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 CONDITION

1] The ash pond of 135 Ac shall be made ready with HDPE lining work and recirculation system within six months.

2] The industry shall use 20 ac of ash pond for the present only after completion of HDPE lining for making the pond impervious

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

To

The Director
M/s IND-BARATH ENERGY (UTKAL) LIMITED
At- Sahajbahal, PO- Charpali Barpali,
Bandhbahal, Dist - Jharsuguda

MEMBER SECRETARY
STATE POLLUTION CONTROL BOARD, ODISHA

Memo No. 7331 **/Dt.** 29.04.15

i) Regional Officer, State Pollution Control Board, Jharsuguda
ii) District Collector, Sambalpur
iii) D.F.O,Sambalpur
iv) Director Factories and Boilers, Odisha, Bhubaneswar
v) SEE, Cess (Head Office)
vi) Consent Register
vii) Sr. Env. Scientist (L)

for SR. ENV. ENGINEER,L-I (C)
STATE POLLUTION CONTROL BOARD, ODISHA

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

Sl.No.	Parameters	Standards			
		Inland surface	Public sewers	Land for irrigation	Marine Costal Areas
		(a)	(b)	(c)	(d)
1.	Colour&odour	Colourless/Odourless as far as practible	------	See 6 of 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 5^0C above the receiving water temperature	------	-------	Shall not exceed 5^0C 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_3) mg/1 max.	100	----	-----	100
11.	Free ammonia (as NH_3) mg/1 max.	5.0	----	------	5.0
12.	Biochemical Oxygen Demand (5 days at (20^0C) mg/1 max.	30	350	100	100
13.	Chemical Oxygen 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

Sl. No.	Pollutants	(1)			
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	-------	3.0
21.	Zinc (as Zn) mg/l max.	5.0	15	-------	15
22.	Selenium (as Sc) mg/l 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 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_6H_5OH) mg/l max.	1.0	5.0	-------	5.0
29.	Radioactive materials a. Alpha emitter micro curle/ml. b. Beta emitter micro curle/ml.	10^7 10^6	10^7 10^6	10^8 10^7	10^7 10^6
30.	Bio-assay test	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent
31	Manganese (as Mn)	2 mg/l	2 mg/l	-------	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

PART- B:NATIONAL AMBIENT AIR QUALITY STANDARDS

	Pollutants	Time Weighed Average	Concentrate of Ambient Air		
			Industrial Residential, Rural and other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1.	Sulphur Dioxide (SO_2), $\mu g/m^3$	Annual *	50	20	-Improved west and Gaeke
		24 Hours **	80	80	- Ultraviolet fluorescence
2.	Nitrogen Dioxide (NO_2), $\mu g/m^3$	Annual *	40	30	- Modified Jacob &Hochheiser (Na-Arsenite)
		24 Hours **	80	80	- Chemiluminescence
3.	Particulate Matter (size less than 10µm) or $PM_{10}\mu g/m^3$	Annual *	60	60	-Gravimetric - TOEM - Beta Attenuation
		24 Hours **	100	100	
4.	Particulate Matter (size less than 2.5µm) or $PM_{2.5}\mu g/m^3$	Annual *	40	40	-Gravimetric - TOEM - Beta Attenuation
		24 Hours **	60	60	
5.	Ozone (O_3) $\mu g/m^3$	8 Hours **	100	100	- UV Photometric - Chemiluminescence - Chemical Method
		1 Hours **	180	180	
6.	Lead (Pb) $\mu g/m^3$	Annual *	0.50	0.50	-AAS/ICP method after sampling on EMP 2000 or equivalent filter paper. - ED-XRF using Teflon filter
		24 Hours **	1.0	1.0	
7.	Carbon Monoxide (CO) mg/m^3	8 Hours **	02	02	- Non Dispersive Infra Red (NDIR) Spectroscopy
		1 Hours **	04	04	
8.	Ammonia (NH_3) $\mu g/m^3$	Annual*	100	100	-Chemiluminescence - Indophenol Blue Method
		24 Hours**	400	400	
9.	Benzene (C_6H_6) $\mu g/m^3$	Annul *	05	05	-Gas Chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10.	Benzo (a) Pyrene (BaP)- Particulate phase only, ng/m^3	Annual*	01	01	-Solvent extraction followed by HPLC/GC analysis
11.	Arsenic (As), ng/m^3	Annual*	06	06	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper
12.	Nickel (Ni),ng/m^3	Annual*	20	20	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper

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

** 24 hourly or 08 hourly or 0I 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.

P.T.O

STATE POLLUTION CONTROL BOARD, ODISHA

(Department of Forest & Environment, Govt. of Odisha)
Paribesh Bhawan, A/118, Nilakanthanagar, Unit-VIII
Bhubaneswar – 751012

BY REGD POST

No. _____/ **Ind-II-NOC - 5151 (pt.)** Date _____/

OFFICE MEMORANDUM

In consideration of the request of the proponent vide letter No. IBEUL/BBSR/111/14, dtd. 23.07.2014 and recommendation of the consent committee in its meeting held on 10.10.2014, the State Pollution Control Board has been pleased to **revise the plant layout map Annexed** with **consent to establish order issued vide this office letter no. 13375, dtd. 13.08.2010 to M/s. Ind-Barath Energy (Utkal) Ltd., for Coal based power plant of 700 MW (2x350MW) over an area of 592.00 acres,** At- Sahajbahal, in the district of Jharsuguda with following additional conditions

i) The land area indicated in the changed modified layout map should not include any forest land.

ii) The proponent shall carry out construction activity within the non-forest land and no construction activity shall be carried out in the forest land without obtaining forest clearance under Forest Conservation Act. 1980. If it was found that the land area proposed in modified layout map includes any forest land and construction activity carried out in that forest land, then the consent to establish granted shall be revoked.

All other matter/ conditions mentioned in the aforesaid consent to establish order No. **13375, dtd. 13.08.2010** shall be remain unchanged.

Encl : Approved revised layout map

MEMBER SECRETARY

To

The President,
M/s. Ind-Barath Energy (Utkal) Ltd.,
Plot No.249, Unit-3, Kharavela Nagar,
Bhubaneswar-751001, Odisha

PTO...

87

Memo No. 1745 /Dt. 30.01.15

Copy forwarded to:

1. The District Magistrate & Collector, Jharsuguda
2. The District Industries Centre, Jharsuguda
3. The Director, Factories & Boilers, Bhubaneswar
4. Consent to Operate Cell, SPC Board, BBSR
5. Hazardous Waste Management Cell, SPC Board, BBSR
6. The Regional Officer, .SPC Board, Jharsuguda
7. The DFO, Jharsuguda
8. Copy to Guard file

SR.ENV. ENGINEER (N)

No. J-13012/31/2008-IA.II (T)
Government of India
Ministry of Environment, Forests and Climate Change

45

3rd Floor, Vayu Block,
Indira Paryavaran Bhawan, Jor Bagh Road,
Aliganj, New Delhi-110003

Dated: 04.02.2015

To

M/s Ind-Barath Energy (Utkal) Ltd.
Plot No. 249, Unit-3,
Kharvela Nagar,
Bhubaneshwar- 751001
Orissa.

Ph: 0674-2532164; Fax: 0674-2532174

Sub: **2x350 MW Coal Based Thermal Power Plant at Sahajbahal, Distt. Jharsuguda, Odisha by M/s Ind-Barath Energy (Utkal) Ltd. - reg. extension of validity of EC.**

Sir,

This has reference to your letters dated 10.10.2014 and 08.12.2014 on the above subject.

2. The matter was placed before the EAC (Thermal Power) in its 26th Meeting held during 27th & 28th November, 2014. In acceptance of the recommendation of the EAC and in view of the information/clarification furnished by you with respect to the implementation of the above mentioned power project, the validity of the EC issued by this Ministry's letter of even no. dated 30.11.2009 is extended **till 31.12.2015** to start the production operations by the power plant.

3. Further, under Para no.4 of the said EC dated 30.11.2009, after the condition no. (xxxiv), the following conditions shall be added:

xxxv) Harnessing solar power within the premises of the plant particularly at available rooftops shall be carried out and status of implementation including actual generation of solar power shall be submitted along with half-yearly monitoring report.

xxxvi) A long term study of radio activity and heavy metals contents on coal to be used shall be carried out through a reputed institute and results thereof analyzed every two year and reported along with monitoring reports. Thereafter mechanism for an in-built continuous monitoring for radio activity and heavy metals in coal and fly ash (including bottom ash) shall be put in place.

xxxvii) Fugitive emissions shall be controlled to prevent impact on agricultural or non-agricultural land.

xxxviii) Space for FGD shall be provided for future installation as may be required.

xxxix) No water bodies including natural drainage system in the area shall be disturbed due to activities associated with the setting up/operation of the power plant.

xl) Fly ash shall not be used for agricultural purpose. No mine void filling will be undertaken as an option for ash utilization without adequate lining of mine with suitable media such that no leachate shall take place at any point of time. In case, the option of mine void filling is to be adopted, prior detailed study of soil characteristics of the mine area shall be undertaken from an institute of repute and adequate clay lining shall be ascertained by the State Pollution Control Board and implementation done in close co-ordination with the State Pollution Control Board.

xli) Green belt shall also be developed around the Ash Pond over and above the Green Belt around the plant boundary.

xlii) For proper and periodic monitoring of CSR activities, a CSR committee or a Social Audit committee or a suitable credible external agency shall be appointed. CSR activities shall also be evaluated by an independent external agency. This evaluation shall be both concurrent and final.

xliii) An Environmental Cell comprising of at least one expert in environmental science/ engineering, ecology, occupational health and social science, shall be created preferably at the project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be ensured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.

xliv) The project proponent shall formulate a well laid Corporate Environment Policy and identify and designate responsible officers at all levels of its hierarchy for ensuring adherence to the policy and compliance with the conditions stipulated in this clearance letter and other applicable environmental laws and regulations.

4. All other conditions mentioned in this Ministry's letter of even no. dated 30.11.2009 shall remain the same.

5. This issues with the approval of the Competent Authority.

Yours faithfully,

(Dr. Saroj)
Scientist 'F'

Copy to:

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001.
2. The Secretary (Environment), Environment Department, Government of Orissa, Bhubaneshwar.
3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
4. The Chairman, Orissa State Pollution Control Board, A-118, Nilkanta Nagar, Unit – VIII, Bhubaneshwar- 751012.
5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
6. The Chief Conservator of Forests, Regional Office (EZ), Ministry of Environment & Forests, A/3, Chandesekhapur, Bhubaneswar – 751023.
7. The District Collector, Jharsuguda District, Orissa.
8. Guard file.

(Dr. Saroj)
Scientist 'F'

BY SPEED POST

J 13012/31/2008-IA.II(T)
Government of India
Ministry of Environment & Forests

Paryavaran Bhawan
CGO Complex, Lodi Road
New Delhi-110 003

Dated: November 30, 2009

To

M/s Ind-Barath Energy (Utkal) Ltd.
Plot No. 30-A, Road No.1, Film Nagar
Jubilee Hills
Hyderabad – 500 033.

Sub: 2x350 MW Coal Based Thermal Power plant at Shajbahal District Jharsuguda, Orissa – reg. Environmental Clearance.

Sir,

The undersigned is directed to refer to letter no.20.08.2009 on the subject mentioned above. The Ministry of Environment & Forests has examined the application.

2. It has been noted that the proposal is for setting up setting up of a 2x350 MW Coal Based Thermal Power Plant at Sahajbahal, Tehsil- Lakhanpur, District- Jharsuguda, Orissa. Land requirement for the project will be 240 ha, out of which 46.67 ha is government land and rest is private land. Water requirement of 2740 m^3/hr which will be sourced from river Mahanadi for which allocation from the Sate Govt. has been obtained. Coal requirement will be 14700 TPD. Coal allocation from the Ministry of Coal has been obtained. Ash and Sulphur content in the coal to be used will be 45% and 0.5% respectively. Transport of coal will be through railway. A twin flue stack of 275 m height to be provided and exit velocity will be 21 m/s. Particulate emission will be 50mg/Nm^3. No ash will disposed off in abandoned mines. A 50 m wide greenbelt all along the plant boundary will be provided. Public hearing for the project was held on 29.05.2009. Cost of the project will be Rs. 3200.0 Crores.

3. The project has been considered in accordance with the provisions of the EIA notification issued by the Ministry of Environment & Forests vide S.O. 1533 (E), dated September 14, 2006.

4. Based on the information submitted by you, as at Para 2 above and others, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA notification dated September 14, 2006, subject to the compliance of the following conditions:

(i) Land requirement shall be optimized and revised break-up of land for the proposed power plant shall be submitted to the Ministry within three months.

(ii) A bi-flue stack of 275 m height shall be provided with continuous online monitoring equipments for SOx, NOx and PM. Exit velocity of flue gases shall not be less than 25 m/sec. Mercury emissions from stack shall also be monitored on periodic basis.

(iii) High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm^3.

42

(iv) Adequate dust extraction system such as cyclones/ bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.

(v) Fly ash shall be collected in dry form and storage facility (silos) shall be provided. 100% fly ash utilization shall be ensured from 4th year onwards. Mercury and other heavy metals (As,Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed off in low lying area. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.

(vi) Ash pond shall be lined with HDP/LDP lining. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.

(vii) Closed cycle cooling system with natural draft cooling towers shall be provided. The Effluents shall be treated as per the prescribed norms.

(viii) No ground water shall be extracted for the project work at any stage.

(ix) Hydro-geological study of the area shall be reviewed annually and results submitted to the Ministry and concerned agency in the State Govt. In case adverse impact on ground water quality and quantity is observed, immediate mitigating steps to contain any adverse impact on ground water shall be undertaken.

(x) The treated effluents conforming to the prescribed standards only shall discharged. Arrangements shall be made that effluents and storm water do not do not get mixed.

(xi) A sewage treatment plant shall be provided and the treated sewage shall be used for raising greenbelt/plantation.

(xii) Rainwater harvesting should be adopted. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within a **period of three months** from the date of clearance and details shall be furnished.

(xiii) Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yard (as applicable), especially during summer season. Copy of these measures with full details along with location plant layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry.

(xiv) Storage facilities for auxiliary liquid fuel such as LDO and/ HFO/LSHS shall be made in the plant area in consultation with Department of Explosives, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5%. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.

(xv) Regular monitoring of ground water in and around the ash pond area including heavy metals (Hg,Cr,As,Pb) shall be carried out, records maintained and six monthly reports shall be furnished to the Regional Office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project.

(xvi) Green belt consisting of 3 tiers of plantations of native species around plant and at least 100 m width shall be raised. Wherever 100 m width is not feasible a 50 m width

41

shall be raised and adequate justification shall be submitted to the Ministry. Tree density shall not less than 2500 per ha with survival rate not less than 70 %.

(xvii) First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.

(xviii) Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in the high noise area, requisite personal protective equipment like earplugs/ear muffs etc. shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non noisy/less noisy areas.

(xix) Regular monitoring of ground level concentration of SO_2, NOx, RSPM and Hg shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company.

(xx) A good action plan for R&R (if applicable) with package for the project affected persons be submitted and implemented as per prevalent R&R policy **within three months** form the date of issue of this letter.

(xxi) An amount of Rs 6.2 Crores shall be earmarked as one time capital cost for CSR programme. Subsequently a recurring expenditure of Rs 1.5 Crores per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be **submitted within one month** along with road map for implementation.

(xxii) As part of CSR programme the company shall conduct need based assessment for the nearby villages to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes. This will be in addition to vocational training for individuals imparted to take up self employment and jobs.

(xxiii) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

(xxiv) The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution Control Board/Committee and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in.

40

(xxv) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad / Municipal Corporation, urban local Body and the Local NGO, if any, from whom suggestions/representations, if any, received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.

(xxvi) A separate Environment Management Cell with qualified staff consisting of Ecologist and hydro-Chemist shall be set up for implementation of the stipulated environmental safeguards.

(xxvii) The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO2, NOx (ambient levels as well as stack emissions)shall be displayed at a convenient location near the main gate of the company in the public domain.

(xxviii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well by e- mail) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB.

(xxix) The environment statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail.

(xxx) **The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environment of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forests.**

(xxxi) Regional Office of the Ministry of Environment & Forests will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. Project proponent will up-load the compliance status in their website and up-date the same from time to time at least six monthly basis. **Criteria pollutants levels including NOx (from stack & ambient air) shall be displayed at the main gate of the power plant.**

(xxxii) Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.

39

(xxxiii) The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.

(xxxiv) Full cooperation shall be extended to the Scientists/Officers from the Ministry / Regional Office of the Ministry at Bangalore/ CPCB/ SPCB who would be monitoring the compliance of environmental status.

4. The Ministry of Environment and Forests reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry. The Ministry may also impose additional environmental conditions or modify the existing ones, if necessary.

5. The environmental clearance accorded **shall be valid for a period of 5 years** to start operations by the power plant.

6. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

7. In case of any deviation or alteration in the project proposed including coal transportation system from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition(s) imposed and to add additional environmental protection measures required, if any.

8. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the Public Liability Insurance Act, 1991 and its amendments.

9. Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.

(LALIT KAPUR)
DIRECTOR

Copy to:

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001.
2. The Secretary (Environment), Forests and Environment Department, Government of Orissa.
3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
4. The Chairman, Orissa State Pollution Control Board, A-118, Nilkanta Nagar, Unit – VIII, Bhubaneshwar- 751 012.
5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi- 110032.

38

6. The Chief Conservator of Forests, Regional Office (EZ), Ministry of Environment & Forests, A/3, Chandesekhapur, Bhubaneswar – 751023.
7. The District Collector, Jharsuguda District, Govt. of Orissa.
8. The Director (EI), MOEF.
9. Guard file.
10. Monitoring file.

(LALIT KAPUR)
DIRECTOR

37

STATE POLLUTION CONTROL BOARD, ODISHA

(Department of Forest & Environment, Govt. of Odisha)
Paribesh Bhawan, A/118, Nilakanthanagar, Unit-VIII
Bhubaneswar – 751012

BY REGD POST

No. 1744 / Ind-II-NOC - 5151 (pt.) Date 30-01-2015

OFFICE MEMORANDUM

In consideration of the request of the proponent vide letter No. IBEUL/BBSR/111/14, dtd. 23.07.2014 and recommendation of the consent committee in its meeting held on 10.10.2014, the State Pollution Control Board has been pleased to **revise the plant layout map Annexed with consent to establish order issued vide this office letter no. 13375, dtd. 13.08.2010 to M/s. Ind-Barath Energy (Utkal) Ltd., for Coal based power plant of 700 MW (2x350MW) over an area of 592.00 acres,** At- Sahajbahal, in the district of Jharsuguda with following additional conditions

i) The land area indicated in the changed modified layout map should not include any forest land.

ii) The proponent shall carry out construction activity within the non-forest land and no construction activity shall be carried out in the forest land without obtaining forest clearance under Forest Conservation Act. 1980. If it was found that the land area proposed in modified layout map includes any forest land and construction activity carried out in that forest land, then the consent to establish granted shall be revoked.

All other matter/ conditions mentioned in the aforesaid consent to establish order No. **13375, dtd. 13.08.2010** shall be remain unchanged.

Encl : Approved revised layout map

MEMBER SECRETARY

To

The President,
M/s. Ind-Barath Energy (Utkal) Ltd.,
Plot No.249, Unit-3, Kharavela Nagar,
Bhubaneswar-751001, Odisha

PTO...

36

Memo No._____/Dt._____/

Copy forwarded to:

1. The District Magistrate & Collector, Jharsuguda
2. The District Industries Centre, Jharsuguda
3. The Director, Factories & Boilers, Bhubaneswar
4. Consent to Operate Cell, SPC Board, BBSR
5. Hazardous Waste Management Cell, SPC Board, BBSR
6. The Regional Officer, .SPC Board, Jharsuguda
7. The DFO, Jharsuguda
8. Copy to Guard file

SR.ENV. ENGINEER (N)

Annexure - III

BY REGD POST

OFFICE OF THE
STATE POLLUTION CONTROL BOARD, ORISSA
Parivesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII,
Bhubaneswar - 751 012

No. 13374 / Ind-II-NOC- 5151 Date 13-08-10-

OFFICE MEMORANDUM

In consideration of the application for obtaining Consent to Establish for **M/s Ind-Barath Energy (Utkal) Limited** the State Pollution Control Board has been pleased to convey its Consent to Establish under section 25 of Water (Prevention & Control of Pollution) Act, 1974 and section 21 of Air (Prevention & Control of Pollution) Act, 1981 for **Coal based Power Plant of 700 MW(2x350 MW) At – Sahajbahal** (Plot No. & Khata No. as mentioned in application form)) in the district of **Jharsuguda** with the following conditions.

GENERAL CONDITIONS:

1. This Consent to establish is valid for the product, quantity, manufacturing process and raw materials as mentioned in the application and for a period of five years from the date of issue of this letter, provided commencement of production of the proposed project has not taken place in the meantime.
2. If the proponent fails to start operation of the project within five years but substantial physical progress has been made then a renewal of this consent shall be sought by the proponent.
3. Adequate effluent treatment facilities are to be provided such that the quality of sewage and trade effluent satisfies the standards as prescribed under Environment Protection Rule,1986 or as prescribed by the Central Pollution Control Board and/or State Pollution Control Board or otherwise stipulated in the special conditions.
4. All emission from the industry as well as the ambient air quality and noise shall conform to the standards as laid down under Environment(Protection) Act. 1986 or as prescribed by Central Pollution Control Board/State Pollution Control Board or otherwise stipulated in the special conditions.
5. Appropriate method of disposal of solid waste is to be adopted to avoid environmental pollution.
6. The industry shall comply to the provisions of Environment Protection Act, 1986 and the rules made there under with their amendments from time to time such as the Hazardous Waste (Management & Handling) Rules 1989, Hazardous Chemical Rules, /Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 etc. and amendments there under. The industry shall also comply to the provisions of Public Liability Insurance Act, 1991, if applicable.

7. The industry is to apply for grant of Consent to operate under section 25/26 of Water(Prevention & Control of Pollution)Act, 1974 & Air (Prevention & Control of Pollution)Act, 1981 at least 3 (three) months before the commercial production and obtain Consent to Operate from this Board.
8. **This consent to establish is subject to statutory and other clearances from Govt. of Orissa and/or Govt. of India, as and when applicable.**

SPECIAL CONDITIONS : -

1. **The Proponent shall comply the conditions stipulated in environmental clearance issued by MoEF, Govt. of India vide letter no.J.13012/31/2008-IA II (T) dt.30.11.2010.**
2. This NOC is given for the capacity as mentioned above and any expansion in the capacity, change or modification in the process, addition, alternation of any nature has to be undertaken with the prior approval of the Board. For any change in the site or area fresh NOC has to be obtained from the Board.
3. **The proponent shall carry out construction activity as per approved lay out map (enclosed). Any deviation in approved layout map during construction activity shall be treated as violation of consent condition and appropriate action (including revocation of consent to establish) shall be taken as per law. If the proponent desires to change the approved plant layout map, they can submit a modified plant layout map surrendering the previous one and get it approved by the Board before going for physical construction activity.**
4. Necessary preventive measures shall be taken during construction phase so that the ambient air quality including noise shall conform to National ambient air quality standards and standards for noise in industrial area **(As per Annexure-I)**.
5. The construction material which has potential to be air borne. shall be transported in covered trucks.
6. The unit shall install ESP in the stack attached to power plant boiler such that particulate matter emission shall not exceed 100mg/Nm^3.The height of the common stack attached to both boilers shall be 275mts.
7. **The proponent shall design air pollution control equipments such as ESP and bag filters to achieve emission standard of 50 mg/Nm^3. They should also have provision of one spare field during the design of ESP. If more than one field of ESP fails, the plant should trip automatically through interlocking system.**
8. The unit shall provide port hole and platform at suitable location with safe approach to conduct emission monitoring at the stack.
9. The unit shall provide dust extraction system at crusher house, boiler bunker to control dust emission. CHP shall be installed in a shed and coal carrying conveyor belts shall be covered.
10. Bottom ash shall be collected in a double 'V' water impounded refractory lined furnace hopper. From where it will be taken to clinker grinder for grinding to -25mm size and shall be transported through high concentration slurry disposal system to ash disposal site.
11. Pneumatic conveyor system with silo will be provided for fly ash collection and vents of ash silo shall be provided with bag filter to control fugitive emission. The unit shall transport fly ash after conditioning in ash conditioner before utilization for various uses.

12. The roads shall be black topped. Permanent high pressure water sprinkling system shall be installed for regular spraying of water on roads to minimize fugitive dust emission.
13. Separate energy meter shall be installed for all the pollution control equipments and the records shall be maintained for verification of the Board from time to time.
14. Water sprinkling shall be provided at coal stock yard and work zone area to conttol fugitive emission.
15. The industry shall provide both dust extraction system and dust suppression system at potential dust generating sources to control fugitive emission.
16. The proponent shall install continuous on line ambient air quality and stack monitoring system with display facilities at gate. Detail proposal to this effect shall be submitted to the Board and the monitoring result shall be submitted to the Board quarterly.
17. Ambient air quality at the boundary of the plant premises shall meet the prescribed standards of the Board as per **Annexure - II**. The ambient air quality monitoring report shall be submitted to the Board every month. At least six permanent ambient air quality monitoring station shall be established in consultation with the Regional Officer of the Board.
18. Good house keeping practices shall be followed to improve the work environment. All roads and shop floors shall be cleaned regularly.
19. Air pollution Control devices shall be maintained properly. Fabric bags and cages in bag house shall be checked regularly and replaced whenever required. Adequate availability of spares shall be ensured for immediate replacement.
20. Adequate space shall be earmarked for installation of Flue Gas Desulphurisation (FGD) system in future if required. This shall also include management and disposal of solid waste to be generated from FGD system.
21. Existing stream flowing through the plant site if any shall diverted properly and clearance from the appropriate authority shall be obtained prior to construction of the project.
22. The industry shall take preventive measures for protection of aquatic life at the river water intake system.
23. The Blow down shall meet the following standards before it is discharged to the common basin.

Boiler Blow Down :

Suspended solids	-	100.0mg/l (max)
Oil & Grease	-	20.0 mg/l (max)
Copper (Total)	-	1.0 mg/l (max)
Iron (total)	-	1.0mg/l (max)

Cooling Tower Blow Down

Free available Chlorine	-	0.5 mg/l (Max)
Zinc	-	1.0 mg/l (Max)
Chromium (total)	-	2.0 mg/l (Max)
Phosphate	-	0.2 mg/l (Max)

24. Waste water generated from raw water treatment system and back wash of filtration plant shall be properly treated in settling tank/ETP and taken to the common monitoring basin.
25. Acidic/Alkaline effluent generated from DM water plant shall be properly neutralized and reused.
26. The oil contaminated effluent from CPP and service area shall be treated in oil separator before taking to common basin.
27. From common monitoring basin partly the water shall be reused for ash handling, green belt and dust suppression.
28. The industry shall explore treatment of the cooling tower blow down through reverse osmosis process and treated water shall be reused.
29. Industry shall provide internal drains inside the plant for collection of accumulated rain water and garland drains around coal stock pile area. Surface run-off from garland drains around coal stock yard and coal dust yard shall be interconnected to a common channel which shall be treated properly in settling tank and taken to common basin.
30. **The industry shall completely recycled the waste water and adopt zero discharge concept as proposed in environmental management plan. However, in exigency shall discharge the treated effluent to the near by river through closed pipe line meeting prescribed standard such as pH = 6.5 – 8.0, TSS = 50 mg/l, Oil & grease = 5 mg/l, BOD = (3 days at 27oC) – 30 mg/l, COD = 250 mg/l.**
31. Domestic wastewater from plant and colony shall be treated in STP and treated effluent shall be reused for greenbelt.
32. The storm water drains shall be maintained separately without being mixed up with the industrial effluent or sewage effluent.
33. **The industry shall adopt high concentration slurry disposal method (HCSD) for bottom ash disposal. A detail proposal to this effect is to be submitted within 3 months from the date of issue of this consent to establish.**
34. Internal drainage arrangement like vertical sand chimney, horizontal sand blanket, rock toe, etc. shall be made for guiding the seepage water flow to the downstream side without any material erosion. The internal and external slopes of the dykes with stone rip rap, turfing, etc. shall be adequately protected to take care of erosion due to wave action, rain cuts.
35. Provision of cut-off trench filled with impervious soils below the dyke section shall be made. This shall increases the length of seepage water flow in the foundation, thereby controlling the exit gradient, which safeguards erosion problem.
36. The foundation shall be prepared by removal of weak and organic materials, compaction by rolling, filling the voids and controlling the moisture on land surface. The dykes shall be constructed in layers compacted with rollers appropriate to the type of soil sued to achieve a dry density of above 95%.

37. **Ash generated shall be used in a phased manner as per provisions of the notification on Fly Ash Utilization issued by the Ministry of Environment and Forest, Govt. of India in September, 1999 and its amendment.**
38. **Fly ash shall be completely utilized in cement plants(own & others) fly ash brick making and other uses as proposed in environmental management plan.**
39. Rain water harvesting structure shall be developed inside the plant premises as per concept and practices made by CPCB and maximum efforts shall be made to reuse harvested rain water, with a definite plan and programme to reduce the drawal of fresh water from water bodies.
40. Silencer in the steam safety valve shall be provided. Air compressor, DG set and turbine house shall be acoustically designed and shall be housed in appropriate acoustic enclosures so that the noise level outside it shall conform to the prescribed norms. The unit shall take adequate noise control measures in case of steam venting by passing through adequate control system (HP, LP then to condenser).
41. The proponent shall deploy vehicles which conform to the latest BIS emission specification.
42. The industry should use hydrogen gas cylinder instead of going for a hydrogenation plant.
43. The unit shall open a new ITI unit or adopting existing ITI of imparting training to local youth so that they can be absorbed in the proposed plant as skilled manpower.
44. The proponent should provide full fledged environmental management cell (EMC) and head of environmental management cell should report to the unit head. The function, procedure and span of control of the EMC should be properly documented and submitted to the Board.
45. Separate application shall be made to obtain letter of authorization for disposal of all hazardous wastes under Hazardous (Management & Handling) Rule, 1989 and amendment thereafter.
46. All compliance shall be made with respect to manufacture, storage and import of Hazardous Chemical Rule, 1989 and other provisions of the Environment Protection Act, 1986.
47. **The industry shall comply with all the conditions stipulated under Charter on Corporate Responsibility for Environmental Protection (CREP) guidelines in a time bound manner as envisaged there in.**
48. The unit shall obtain permission for drawl of water from concerned authority before operation of the project.
49. **The unit shall submit the copy of clearance from Airport authority for construction of stack height of 275m for the proposed power plant.**
50. **A green belt of adequate width and density preferably with local species along the periphery of the plant shall be raised so as to provide protection against particulates and noise. It must be ensured that at least 33% of the total land area shall be under permanent green cover. The proponent shall ensure the maintenance of green belt throughout the year and for all time to come. It is advised that they may engage professionals in this field for creation and maintenance of the green belt. Plantation activity should be carried out concurrently during construction work of proposed project. An action plan for this purpose shall be prepared and shall be submitted accordingly.**

65
30

51. The industry shall take up adequate measure for routine health check up of its employees / workers and the people residing in the neighborhood of the plant free of cost.
52. The civil construction shall be carried out with the fly ash bricks. If the fly ash bricks are not available locally the civil construction may carried out with other bricks with prior intimation to the concerned Regional Office of SPC Board. A statement indicating use of fly ash bricks during construction period shall be submitted to the Board quarterly for record.
53. The land on which the unit is proposed to be established the power plant shall be converted to industrial use Kisam by the competent authority. The copy of said land conversion document shall be submitted to the Board alongwith consent to operate application.
54. No production activity shall commence prior to installation of the pollution control devices. In case. it is found that the plant is operating without installation of appropriate pollution control equipment(s) and without permission for trial operation from the Board, a direction of closure shall be issued u/s 31-A of Air (PCP) Act, 1981 and /or u/s 33-A of Water (PCP) Act, 1974 without any further notice in this regard.
55. The Board may impose further conditions or modify the conditions stipulated in this order during installation and / or at the time of obtaining consent to operate and may revoke this clearance in case the stipulated conditions are not implemented and / or any information suppressed in the application form.

Encl: Plant lay out map & Annexures

13/8/10
MEMBER SECRETARY

To,
The Chairman,
M/s Ind-Barath Energy (Utkal) Ltd.,
Plot No.249, Unit- 3,Kharvela Nagar,
Bhubaneswar-751001

Memo No. _____ /dt.

Copy forwarded to :
1. The Collector, Jharsuguda
2. District Industries Centre, Jharsuguda
3. The Director of Factories & Boiler, Bhubaneswar
4. DFO, Jharsuguda
5. Sr. Environmental Engineer (C)
6. Regional Officer, SPC Board, Sambalpur
7. Haz. Waste Management Cell
8. Copy to Guard File/Consent Section

SR. ENV. ENGINEER (N)

A-5

IN THE HIGH COURT OF ORISSA AT CUTTACK

W.P.(C) No. 4167 of 2014

Anchalika Jana Kalyan Anusthan .... ***Petitioner***

Mr. Gokulananda Pattnaik, Advocate

-versus-

Union of India and others .... ***Opposite Parties***

Mr. Debakanta Mohanty, A.G.A. for State
Mr. B.S. Rayaguru, CGC for OP Nos.1 & 3
Mr. Ramesh Singh, Senior Advocate assisted by
Mr. Venugopal Mohapatra and Ms. Aishwarya Ray, Advocate
for Opposite Party No.12

CORAM:
THE CHIEF JUSTICE
JUSTICE SAVITRI RATHO

ORDER

Order No. **14.08.2023**

07. 1. This matter is taken up through Hybrid Mode.

2. Heard Mr. Gokulananda Pattnaik, learned counsel appearing for the Petitioner, Mr. Debakanta Mohanty, learned Additional Government Advocate (AGA) appearing for the State Opposite Parties, Mr. B.S. Rayaguru, learned CGC for Opposite Parties No.1 & 3 and Mr. Ramesh Singh, learned Senior Counsel assisted by Mr. Venugopal Mohapatra and Ms. Aishwarya Ray, learned counsel for Opposite Party No.12.

3. In this Public Interest Litigation (PIL), the allegation has been made by the Petitioner that Opposite Party No.12 has encroached the forest land. The encroachment has been admitted by Opposite Party No.12 in their counter affidavit filed on 15th May, 2023. In the

said affidavit, in para-12(c), it has been stated by Opposite Party No.12 that the total land requirement of the power plant project is 239.90 ha which includes 35.985 ha of revenue forest land. The said revenue forest land comprises an area of 21.898 ha in the village Sahajbahal and an area of 14.087 ha in village Barpali under the Lakhanpur Tahasil of Jharsuguda district.

4. It has also been admitted that having encroached the land, Opposite Party No.12 had constructed buildings, thereafter, Opposite Party No.12 has applied for diversion of the forest land measuring 35.985 ha for establishment of the power plant. It has also been admitted by Opposite Party No.12 that they had carried on construction for the power plant unit and for setting up transmission towers for linking the power plant with the eastern power grid.

5. On 4th September, 2013 and 19th November 2013, Opposite Party No.12 had received notices from the District Forest Officer, Jharsuguda to stop their construction activities being carried on forest land. Thereafter, on 22nd January, 2014 an inspection of the alleged construction was undertaken by the Range Officer, Brajrajnagar and the Revenue Department staff of Lakhanpur Tahasil. In the report submitted pursuant to the joint enquiry, it was alleged that Opposite Party No.12 had constructed boiler, turbine, track hopper, chimney etc., over the forest lands admeasuring Ac 14.52 in Mouzas Sahajbal and Barpali.

6. It has also been admitted by Opposite Party No.12 that eight encroachment cases were instituted against them and they were

levied fine. At this juncture, we asked Mr. Debakanta Mohanty, learned AGA appearing for the State to state what has happened after levying fine and whether Opposite Party No.12 is still in encroachment of the land or not. Mr. Mohanty, learned AGA could not give any answer off-hand. It is obvious that Opposite Party No.12 did not remove the structure and the machineries that they had set up on the said forest land.

7. By the order dated 17th May 2023, this Court had directed that the proposals submitted by Opposite Party No.12 for diversion of the forest land be considered in accordance with law and after hearing learned counsel for Opposite Party No.12, a reasoned order shall be passed in that regard by 1st July, 2023. It was also directed that the State Government shall file an affidavit. Accordingly, the affidavit has been filed by Opposite Party No.2 on 1st August, 2023 stating that the proposals submitted by Opposite Party No.12, i.e. M/s. Ind-Barath Energy (Utkal) Ltd. for diversion of the forest land will be considered in accordance with law.

8. It has been stated that the appropriate authority for according approval for diversion of 34.63 ha out of 35.985 ha of the Revenue Forest land for establishment of 2x350 MW coal based Thermal Power Plant at Sahajbahal and Barpali villages under Lakhanpur Tahasil in Jharsuguda district is the Ministry of Environment, Forest & Climate Change, Integrated Regional Office, Bhubaneswar, i.e. Opposite Party No.3. We have gathered from the records that no such approval for diversion has been granted so far.

But, surprisingly, Opposite Party No.12 is still on encroachment over the forest land.

9. Having noted the encroachment, as admitted by Opposite Party No.12, we direct the Opposite Party No.12 to vacate the forest land by removing all the structures and machineries from the encroached forest land within fifteen days from today.

10. The Opposite Party No.2 is also directed to file an affidavit indicating whether the Opposite Party No.12 has vacated the encroached forest land or not.

11. Let the matter be listed on 4th September, 2023 at 2 pm for passing further orders.

12. A copy of this order be supplied to Mr. Debakanta Mohanty, learned AGA, free of cost forthwith.

(S. Talapatra)
Chief Justice

(Savitri Ratho)
Judge

S. Behera

भारत सरकार / Government of India
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय / Ministry of Environment, Forest & Climate Change
क्षेत्रीय कार्यालय, भुवनेश्वर / Regional Office, Bhubaneswar
ए/३, चंद्रसेखरपुर / A/3, Chandrasekharpur
भुवनेश्वर – ७५१ ०२३ / Bhubaneswar - 751 023
Telephone: 0674 - 2301213, 2301248, 2302452, 2302453. E-mail: roez.bsr-mef@nic.in

No.5-ORC236/2015-BHU

1st April, 2024

A-6

To

The Addl. Director General of Forests (FC),
Ministry of Environment, Forest & Climate Change,
Indira Paryavaran Bhawan,
Jor Bagh Road, Aliganj,
New Delhi – 110 003.

Sub: Proposal seeking prior approval of the Central Government under Section 2 of the Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 for non-forestry uses of 34.63 ha (out of 35.985 ha applied for) of Revenue Forest land for establishment of 2 x 350 MW coal based TPP at Sahajbahal and Barpali villages under Lakhanpur Tehsil in Jharsuguda district by M/s Ind-Barath Energy (Utkal) Limited – regading.

Ref: Ministry's letter No.5-ORC236/-2015-BHU dated 26.02.2024.

Sir,

With reference to the subject cited above, I am directed to inform that the site inspection of the above project was carried out by the Assistant Commissioner (F) of this office on 23.03.2024 and the site inspection report is enclosed herewith for kind information and necessary action.

Yours faithfully,
Padma Mahanti

Encl: As state above.

(Dr. Padma Mahanti)
Dy. Inspector General of Forests (C)

RECOMMENDATION OF DEPUTY DIRECTOR GENERAL OF FORESTS (CENTRAL)

I agree with the inspection report of the inspecting officer. The regularization of encroachment over 3.78 ha (9.34 Ac.) of revenue forest land is recommended with realization of Penal NPV and Penal CA as applicable along with other standard conditions and the balance area of 30.78 ha may be developed as Green belt realizing NPV and equivalent non-forest area for CA.

(A.T. Mishra)
Dy. Director General of Forests (C)

Site Inspection Report in respect of proposal for regularization of encroachment and ex-post facto approval under the Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 for diversion of 34.63 ha (out of 35.985 ha applied for) of Revenue Forest land for establishment of 2 x 350 MW coal based TPP at Sahebganj and Barpali villages under Lakhanpur Tehsil in Jharsuguda district by M/s Ind-Barath Energy (Utkal) Limited (online proposal No.FP/OR/THE/4785/2010).

Name of the Inspecting Officer: Sujoy Dutta, Assistant Commissioner (F), Sub Office at Kolkata, Regional Office Bhubaneswar, MoEF&CC

Date of Inspection: 23rd March 2024.

Officials present from the State Forest Department:
(i) Shri Baljit Dungdung, ACF, Jharsuguda Forest Division
(ii) Ms Rishna Jamdalia, Forest Ranger, Brajarajnagar

Officials present from the User Agency:
(i) Shri CV Reddy, Plant Incharge, M/s Ind-Barath Energy (Utkal) Ltd.
(ii) Shri Pradeep Manoor, Associate Vice President, M/s Ind-Barath Energy (Utkal) Ltd

1. **Legal status of the forest land proposed for diversion:**
   Total 34.63 ha Revenue Forest (25.89 ha Gramya Jungle & 8.74 ha Patra Jungle) proposed for diversion

Name of Tehsil	Name of Village	Category of Revenue Forest land in Ha		Total forest land (in Ha)
		Gramya Jungle	Patra Jungle	
Lakhanpur	Sahajbahal	13.16	8.74	21.9
	Barpali	12.73	0.00	12.73
Total		25.89	8.740	34.63

2. **Item-wise break-up details of the forest land proposed for diversion.**

   The User Agency has furnished purpose wise break up of total land of 238.54 ha (including 34.63 ha of forest land) which is as follows:

Sl. No.	Purpose	Govt. Non-forest land (in Acres)	Private land (in Acres)	Forest land (in Acres)	Total land (in Acres)
1.	T.G. Building	0.00	15.53	0.00	15.53

2.	Boiler, ESP, Chimney Bottom Ash Slurry Pump House	0.00	8.66	8.94	17.60
3.	Switch Yard	3.91	25.57	0.00	29.48
4.	Cooling Tower	4.36	16.16	4.24	24.76
5.	Crushed Coal Stock Pile	0.00	31.08	10.66	41.74
6.	Track Hopper/Wagon Tripler/ Coal Stock Yard	0.50	20.39	0.00	20.89
7.	Admn. Building, Store Room	0.00	5.80	0.00	5.80
8.	Colony Area	0.00	28.37	0.00	28.37
9.	Ash Disposal/Ash Dyke	4.11	39.67	0.00	43.78
10.	Road	6.04	41.45	0.00	47.49
11.	Green Belt	0.00	252.28	61.73	314.01
Total Area (in Acres)		**18.92**	**484.96**	**85.57**	**589.45**
Total Area (in Ha)		**7.656**	**196.256**	**34.63**	**238.54**

3. Whether proposal involves any construction of buildings (including residential) or not. If yes, details thereof:

No new construction is proposed. Two nos of quarter are already constructed over 0.032 ha Gramya Jungle in Sahajbahal village.

4. Total cost of the project at present rates:

During site visit, it was reported by the representative of the User Agency that the total cost of the project is Rs. 2,600 Cr. Earlier it was estimated Rs.3,185 Cr.

5. Wildlife: Whether forest area proposed for diversion is important from wildlife point of view or not:

No rare/ endangered animals are reported in the forest area proposed for diversion. The proposed forest area does not form part of any National Park, Wildlife Sanctuary.

6. Vegetation:

(a) Total number of trees to be felled:

No fresh tree felling is proposed.

(b) Effect of removal of trees on the general ecosystem in the area:

NA.

7. Background Note on the proposal

- The proposal for 35.9 ha forest land diversion was submitted by the Ind-Barath Energy (Utkal) Ltd (i.e. IBEUL) vide proposal No.FP/OR/THE/4785/2010.
- Construction of the project started in forest land with out approval of the Central Government.
- A PIL (WPC NO.4167 of 2014) was filed by Anchalika Jana Kalyan Anusthan before Hon'ble High Court of Odisha on 12.12.2014 against the construction in forest land without prior approval of the competent authority.
- The proposal was recommended by the State Government of Odisha in 2015 with provision of penal NPV & penal CA to the RO Bhubaneswar, MoEF&CC.
- The RO Bhubaneswar, MoEF&CC deliberated the proposal in REC meeting in the month of Feb 2018 and decided to defer till the decision of Hon'ble High Court and User Agency was requested to pursue the court case.
- The M/s JSW Energy Limited (i.e. JSWEL) took over the acquisition of the project on 28.12.2022 vide successful corporate insolvency proceedings under the IBC, 2016 through NCLT, Hyderabad Bench.
- The JSWEL filed an affidavit before Hon'ble Odisha High Court in May 2023 with an appeal to allow Govt. authorities to process the pending proposal with appropriate remedial actions.
- The Hon'ble Odisha High Court vide order dated 17.05.2023 was pleased to direct that the forest land diversion proposal should be considered in accordance with law, without prejudice to the rights and contentions of any of the parties.
- In pursuant to the Hon'ble High Court's direction, the forest land diversion proposal was considered by the Regional Empowered Committee, Bhubaneswar RO, MoEF&CC on 13.06.2023 and recommended the proposal for regularization.
- The Hon'ble Odisha High Court in its order dated 14.08.2023 (in W.P.(C) No.4167 of 2014), grant a time period of six months to Opposite Party No.12 (M/s JSW Energy Limited) to obtain the final order for forest diversion proposal pertaining to its Thermal Power Plant.
- The proposal was forwarded by the RO Bhubaneswar to the MoEF&CC, New Delhi on 8.12.2023 for the approval of the Competent Authority in the Ministry.

8. Compensatory afforestation:

Compensatory afforestation has been proposed over an area of 35.937 ha non-forest Revenue land in Rampela Village under Jharsuguda Forest Division.

(a) Whether land for compensatory afforestation is suitable from plantation and management point of view or not:

The proposed 35.937 ha revenue land is found suitable for plantation under the block plantation model @ 1600 plants/ ha. Some minor portion of the both proposed CA patches found very near to water logging area of the Dam and after soil filling, the areas will be suitable for plantation.

(b) Whether land for compensatory afforestation is free from encroachment/ other encumbrances:

Yes, it is free from any structural encroachment. However, some old agricultural practice was observed in some portion of the proposed CA land during the inspection.

(c) Whether land for compensatory afforestation is important from Religious/Archaeological point of view:

Not reported.

(d) Land identified for raising compensatory afforestation is in how many patches, whether patches are compact or not:

In two contiguous patches.
Patch 1 (Rampela village – 26.711 ha) - One kacha road is passing through the southern side of the Patch 1 of plot No.1343. The proposed patch is surrounding a water body which is excluded from the proposed CA land and proposed CA land is approximately 200 m away from the Hirakud Reservoir Highest Water Level. During inspection, it was informed by the local forest officer that during rainy season the proposed land is above the highest water level of the Dam.
Patch 2 (Rampela village – 9.226 ha) – It is a contiguous patch and one black topped road & one kacha road is passing through the proposed patch. Northern portion of the proposed land is about 100 m distance from Hirakud Reservoir but it was informed by the local local forest officer that during rainy season the proposed land is above the highest water level of the Dam.

(e) Total financial outlay:

Rs.2,70,01,600/- as per AR plantation @ 1600 plant per ha over 29.988 ha land with 10 years maintenance along with Iron & Chain Link Wire Fencing and SMC activities.

9. Whether proposal involves violation of Forest (Conservation) Act, 1980 or not. If yes, a detailed report on violation including action taken against the concerned officials:

The State Forest Department of Odisha has reported the actual encroachment of 3.78 ha (9.34 ac) of revenue forest land which has been verified by a committee of Forest and Revenue Officials based on joint verification conducted on 26th & 28th April 2023. The details of illegal construction taken up by M/s Ind-Barath Energy (Utkal) Ltd in revenue forest land is as follows:

SL No.	Mouza	Khata No.	Plot No.	Encroached area in Ac	Kisam	Remarks
1	Sahajbahal	161	660	0.60	Gramya Jungle	Construction of Railway track by IBEUL
2		161	595/ 1739	0.08	Gramya Jungle	02 nos of IBEUL' s quarter was constructed over the plot
3		163	975	1.54	Patra Jungle	The plot is coming inside the boundaries of IBEUL
4		163	980	1.33	Patra Jungle	The plot is coming inside the boundaries of IBEUL
5		163	1114	1.33	Patra Jungle	The plot is coming inside the boundaries of IBEUL. Chimney has been constructed over 0.33 ac area in the plot area.
Sub Total				**4.88 Ac**		
1	BArpali	185	106	0.03	Gramya Jungle	Railway track of IBEUL has been made over the said plot
2			6(P)	0.08		2 nos of HT Grid Tower
3			107	0.10		Railway track of IBEUL has been made over the said plot

4			108	0.04		Railway track of IBEUL has been made over the said plot
5			109	0.03		The plot is coming inside the boundaries of IBEUL
6			157	0.04		1 nos of HT Grid Tower
7			181	1.08		The plot is coming inside the boundaries of IBEUL
8			183	0.69		The plot is coming inside the boundaries of IBEUL
9			184	0.90		Railway track of IBEUL
10			181/ 1605	0.73		The plot is coming inside the boundaries of IBEUL
11			179/ 1740	0.74		The plot is coming inside the boundaries of IBEUL
Sub Total				**4.46 Ac**		
Total				**9.34 Ac (3.78 ha)**		

Earlier (in 2014), it was reported by the DFO, Jharsuguda that 14.52 acres of forest land has been used by the M/s Ind-Barath Energy (Utkal) Limited). During site visit it was informed that some temporary infrastructure/ construction was removed by the UA and at present total encroached becomes 9.34 acres i.e. 3.78 ha).

It was also informed that in view of the fact that un-authorized encroachment of forest land has been taken place in this project and departmental officials have failed to bring it to the notice to proper quarter and also have failed to prevent such encroachment of forest land by the project proponent, the concerned Forest Guard, Tilia Beat and Forester, Bandhabahal Section were called upon to explain regarding not reporting the unauthorized encroachment and failing to prevent such encroachment of forest land by the proponent vide DFO, Jharsuguda memo No.06 dated 01.01.2014 and No.04 dated 01.01.2014 respectively. Departmental Proceeding have already been initiated against them. Eleven (11) no of

offence cases have been booked by the Forest department against the M/s Ind-Barath Energy (Utkal) Limited or removal of tree growth, which were subsequently compounded at a penalty of Rs.33,000/-.

Further, the encroached forest land is revenue forest land and hence, the Tahasilder, Lakhanpur has booked 8 nos of encroachment cases with levy of assessment and fine under OPLE Act against the M/s Ind-Barath Energy (Utkal) Limited and same has been deposited with Revenue Department.

It was also reported that non-permissible works in the proposed forest land have been stopped by the proponent since 31.01.2014. However, the 3.78 ha forest land is under possession of the User Agency i.e. coming inside the boundaries of M/s Ind-Barath Energy (Utkal) Limited.

10. Whether proposal involves rehabilitation of displaced persons. If yes, whether rehabilitation plan has been prepared by the State Government or not:

During site visit, it was informed by the User Agency that at present no displacement of human habitation is required. As per old records of the Tahasildar, Lakhanpur, the people of ST community who were residing illegally in Barapali mouza having Kisam Gramya Jungle, have vacated the land and have been rehabilitated in rehabilitation colony constructed by the UA. R&R Plan has been reportedly provided to Collector, Jharsuguda.

11. Reclamation Plan:

Not applicable.

12. Details on catchment and command area under the project:

NA

Catchment area treatment plan to prevent siltation of reservoir:

NA

13. Cost Benefit Ratio:

The Cost: Benefit Ratio has been reported by the User Agency as 1:637 (as submitted by the State Government in the year 2015)

14. Recommendations of the Principal Chief Conservator of Forests/State Government:

Recommended for 34.63 ha forest land.

15. Dy. Director General of Forests (Central) shall give detailed comments on whether there are any alternative routes/alignment for locating the project on the non-forest land:

Attached separately.

16. Utility of the project:

Odisha state is endowed with valuable mineral resources like coal, iron ore, bauxite etc. Efficient utilization of these mineral resources through establishment of industries concerning power, steel, alumina etc will lead to development of the State. Security in the electrical energy sector is a major requirement to the desired industrial and economic growth of a State. In this context, the Odisha State Government is making continuous endeavour to encourage the private enterprises for establishment of Power Plants to ensure availability of power at affordable rates not only to industrial houses but to the individual consumers as well. In this sequel of development, M/s Ind-Barath Energy (Utkal) Limited has come forward and signed MoU with the Government of Odisha on 7.02.2009 for setting up 700 MW (2 x 350 MW) Coal Based Thermal Power Plant at Sahajbahal & Barpali villages in Jharsuguda district.

17. (a) Whether land being diverted has any socio-cultural/ religious value:

Not reported.

(b) Whether any sacred grove or very old growth trees/forests exist in the areas proposed for diversion:

Not reported.

(c) Whether the land under diversion forms part of any unique eco-system:

Not reported.

18. Situation with respect to any Protected Area:

Proposed forest area does not touch any Protected Area within 10 Km. The proposed area is located at a distance of 14.1 Km from the ESZ of Hirakud Wildlife Sanctuary.

19. Any other information relating to the project:

- The proposal involved diversion of 34.63 ha revenue forest land excluding 1.355 ha of forest land (earlier proposal was 35.985 ha) since the Collector,

Jharssuguda has issued FRA certificate only for 34.63 ha forest land as the remaining land are under occupation by Village Temple and ST people.

- Compensatory afforestation is proposed in two contiguous patches. Between the both proposed CA patches, puca/ kacha road is passing through.
- At present actual encroachment of 3.78 ha (9.34 ac) of revenue forest land is reported which has been verified by a committee of Forest and Revenue Officials based on joint verification conducted on 26th & 28th April 2023.

  It is reported that non-permissible works in the proposed forest land have been stopped by the proponent since 31.01.2014. However, the 3.78 ha forest land is under possession of the User Agency i.e. coming inside the boundaries of M/s Ind-Barath Energy (Utkal) Limited. Eleven (11) no of offence cases have been booked by the Forest department against the M/s Ind-Barath Energy (Utkal) Limited or removal of tree growth, which were subsequently compounded at a penalty of Rs.33,000/-. Further, the encroached forest land is revenue forest land and hence, the Tahasilder, Lakhanpur has booked 8 nos of encroachment cases with levy of assessment and fine under OPLE Act against the M/s Ind-Barath Energy (Utkal) Limited and same has been deposited with Revenue Department.
- During Site Visit it was informed by the User Agency that only 3.78 ha forest land (encroached area) shall be used by the User Agency and balance forest land shall be maintained as Green Belt.

Since the 700 MW coal-based Thermal Power Plan has already been set up on the land in question and at the edge of commissioning, it will be forward-looking to considering the land in question for regularization of encroachment and ex-post facto approval under the Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 for diversion of 34.63 ha forest land. The proposal may be recommended for regularization of encroachment and ex-post facto approval.

Sujoy Dutta
28/03/2024

(Sujoy Dutta)
Assistant Commissioner (F)