

Compliance to the Conditions Stipulated in the Environmental Clearance (if any) of the Existing Units.

The existing units of Talcher TPS were installed in 1968 much before the enactment of EIA Notification and Environmental Acts in India. Hence, no Environmental Clearance/NOC documents are available for existing Talcher Thermal Power Station as Environmental Clearance/NOC was not required at that time. Talcher TPS was taken over by NTPC from erstwhile OSEB in 1995. Similarly Consent to Establish was not available during taken over. However, Consent to Operate order has been issued by State Pollution Control Board, Odisha vide letter dated 15.02.2016 with a validity upto 31.03.2018, under section 25/26 of Water (Prevention & Control of Pollution) act, 1974 and under section 21 of air (Prevention & Control of Pollution) Act, 1981.

As per MOEF&CC, Office Memorandum no. J-11013/41/2006/-IA.II(I) dated 01.07.2011, such projects do not have formal Environmental Clearance, compliance of NOC conditions stipulated by SPCB will be discussed during EAC meetings. Testing/verification undertaken for the compliance shall be from the Recognized Laboratory.

Since, Consent to Establish was not required to obtain at that time (1965) for existing Talcher TPS (Stage-I & II). Therefore, pointwise compliance report by existing Talcher Thermal Power Plant, Stage-I&II (460 MW) with 'Consent to Operate' order as issued by SPCB, Odisha vide letter dated 15.02.2016 is given as below. All testing/verification of compliance of Environmental Standards and norms are being done by Recognised Laboratory and by SPCB, Odisha State.

STATUS OF POINTWISE COMPLIANCE BY TALCHER THERMAL POWER PLANT (460 MW) WITH CONSENT ORDER'S CONDITIONS, ISSUED BY STATE POLLUTION CONTROL BOARD, ODISHA VIDE LETTER DATED 15.02.2016 UNDER SECTION 25/26 OF WATER (P&CP) ACT, 1974 AND UNDER SECTION 21 OF AIR (P&CP) ACT, 1981

E. GENERAL CONDITIONS FOR ALL UNITS

S.N	GENERAL CONDITIONS	Compliance by Talcher TPS
1	The consent is given by the Board in consideration of the particulars given in the application. Any change or alternation of 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.	Agreed.
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 of quantity /quality of the	Agreed.

S.N	GENERAL CONDITIONS	Compliance by Talcher TPS
	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 of the route of discharge without the previous written permission of the Board.	Being complied, There is no effluent discharge from plant. Cooling towers have been provided to reduce the temperature of cooling tower blow down.
4	The application shall comply with and carry out the directives/ orders issued by the Board in this consent order and at all subsequent time 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.	Will be complied.
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.	This consent order is valid upto 31.12.2017. Fresh consent application will be submitted before expiry of 90 days of this consent order.
6	The issuance of this consent does not convey any property right in either real or proposal 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.	Noted.
7	This consent does not authorise or approve the construction of any physical structure or facilities or the undertaking of any work in any natural water course.	Noted.
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.	Being displayed at the entrance of the plant main gate for public and Board officers.
9	An inspection book shall be opened and made available to Board's Officers during the visit to the factory.	Inspection file is being maintained by Talcher TPS and the inspection reports are made available to OSPCB as and when required.
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.	Agreed.

S.N	GENERAL CONDITIONS	Compliance by Talcher TPS
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 tapped by the consumer for utilisation for any purposes whatsoever.	The meters are available after the pipe lines enter in to the plant premises.
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.	Available.
	b) Domestic purpose	Available.
	c) Process	Available.
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 in not fit for the domestic use/bathing.	Existing Talcher TPS plant is Zero Discharge Plant. However display boards provided at effluent discharge point.
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.	Complied.
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.	Housekeeping staff is already working in plant and pipes, valves, sewers and drains are being inspected periodically for leakages. Effluent streams do not meet with storm water drains.
16	The applicant shall at all times maintain in good working order and operate as efficiently as possible all treatment of control facilities or systems install or used by him to achieve with the terms(s) and conditions of the consent.	All pollution control system are maintained in good working conditions.
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.	Anaerobic lagoons are not present in Talcher TPS. However, sewage from plant and township is being treated biologically by Activated sludge treatment.
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.	Existing Talcher TPS plant is Zero Discharge Plant and no effluent is discharged into natural water bodies.
19	The effluent disposal on land, if any, should be done without	Existing Talcher TPS plant is Zero

S.N	GENERAL CONDITIONS	Compliance by Talcher TPS
	creating any nuisance to the surroundings or inundation of the lands at any time.	Discharge Plant and no effluent is discharged on land.
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.	No disposal of effluents on land is being done.
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.	It is already in practice.
22	The effluent treatment units and disposal measures shall become operative at the time of commencement of production.	Wastewater treatment measures are already in operation.
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 of the applicant at any time in accordance with the provision of the Act or Rules made therein.	Port holes & platforms have been provided in all stacks.
24	The applicant shall provide all facilities and render required assistance to the Board staff for collection of samples/stack monitoring/inspection.	All resources and facilities will be provided during inspection of plant.
25	The applicant shall not change or alter either the quality or quantity or rate of emission of 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.	Without prior permission of board no change will be made in pollution control equipment or manufacturing process.
26	No control equipment's 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.	Without prior permission of board no change will be made in chimney and pollution control equipment.
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 provision of Water (Prevention and Control of Pollution) Act, 1974 (as amended).	The scrub liquid from bag filter of crusher house is being collected in a pit and reused for dust suppression in the coal yard.
28	The stack and ambient monitoring system installed by the applicant shall be opened for inspection to this Board at any time.	All monitoring system are already available for inspection of Board.
29	There shall not be any fugitive or episodal discharge from the premises.	All fugitive emission control systems are in place to control

S.N	GENERAL CONDITIONS	Compliance by Talcher TPS
		emissions. Various safety measures has been taken to prevent 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.	Various safety measures has been taken to prevent episodal discharge from the premises. However, in case of disaster/ episodal discharge all measures as per an Emergency Disaster Plan will be followed and reported to Board also.
31	The applicant shall keep the premises of the industrial plant and air pollution control equipment's clean and make all hood, 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.	Air pollution control system is leak proof and its sampling points are easily accessible.
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.	Noted.
33	The industry has to ensure that minimum three varieties 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.	NTPC TTPS has planted about 3,78,354 nos. seedlings in and around Talcher TPS up to 31 August 2017. Therefore no more space available for planation/afforestation, however mass plantation will be carried out at nearby villages of Talcher TPS.
34	The solid waste such as sweeping, wastage packages, empty containers residues, sludge including that from air pollution control equipment's collected within the premises of the industrial plants shall be disposed off scientifically to the satisfaction of the Board, so as not cause fugitive emission, dust problems through leaching etc. of any kind.	Recyclable waste is being sent to authorised recyclers. Other wastes are being dumped in an area earmarked for waste storage.
35	All solid wastes arising in the premises shall be properly classified and disposed off to the satisfaction of the Board by:	Organic and inorganic waste is being classified and disposed off accordingly. Bio-degradable waste is composted and manure is

S.N	GENERAL CONDITIONS	Compliance by Talcher TPS
		prepared for plantation.
	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.	As per scientific studies by NEERI, BARC and CMPDIL, there is no significant impact on ground water due to filling of ash into mine voids.
	ii) Controlled incineration, wherever possible in case of combustible organic material.	Not Applicable
	iii) Composting, in case of bio-degradable material.	Complied.
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.	No toxic material is generated.
37	If due to any technological improvement of 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 and 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.	Agreed.
38	The applicant, his/hers/legal representatives or assignees shall have no claim whatsoever to the condition or renewal of this consent after the expiry period of this consent.	Agreed.
39	The Board reserves the right to review, impose additional conditions or condition, revoke change or alter the terms and conditions of this consent.	Agreed.
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 and 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.	Agreed.
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.	Agreed.
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)	Guidelines under Charter on Corporate Responsibility for Environmental Protection (CREP) are being complied.

S.N	GENERAL CONDITIONS	Compliance by Talcher TPS
43	The industry shall comply to the conditions stipulated in CTE order issued by ODISHA State Pollution Control Board.	Plant is very Old, hence CTE is not available.
44	The industry shall abide by E(P) Act, 1986 and Rules framed there-under.	All provisions and rules under Environmental (P) Act, 1986 is being complied.
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.	Agreed.
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.	Agreed.

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

S.N	GENERAL CONDITIONS	Compliance by Talcher TPS
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.	Analysis of the effluent/emissions and Ambient Air Quality is being done at every month through approved laboratory/ in-house for parameters as prescribed by Board.
2	The following information shall be forwarded to the Member Secretary on or before 10 th of every month.	All information is being submitted to MS, OSPCB every month before 10 th of every month.
	a) Performance/ Progress of the treatment plant.	Being Complied.
	b). Monthly statement of daily discharge of domestic and/or trade effluent.	- Being Complied.
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.	Existing Talcher TPS plant is Zero Discharge Plant and no effluent is discharged into natural water bodies.

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	<p>i. Causes of non-compliance</p> <p>ii. A description of the non-compliance discharge including its impact on the receiving waters.</p> <p>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.</p> <p>iv. Steps to be taken by the applicant to reduce and eliminate the non-complying discharge and.</p> <p>v. Steps to be taken by the applicant to prevent the condition of non-compliance.</p> <p>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 determine the nature and impact of the non-complying discharge.</p> <p>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.</p>	<p>However in case of emergency conditions, if there is any non-compliance then these instructions of OSPCB will be complied.</p>
4	Proper housekeeping shall be maintained inside the factory premises including process areas by a dedicated team.	A dedicated team for Housekeeping inside the plant is engaged through contractor.
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.	An Operation and Maintenance (O&M) team of qualified engineers is working for round the clock (including night hours). Contact details of HOP (Talcher TPS) and AGM (EMG) is already available with board.
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	Environmental Management Department having qualified and experienced manpower is looking after these work. Real time data are being transferred to SPCB.

S.N	GENERAL CONDITIONS	Compliance by Talcher TPS
	case of non-compliances and to respond to the instructions of SPCB in this matter.	

F. SPECIAL CONDITIONS

F - 1 (AIR Pollution Control)

S.N	GENERAL CONDITIONS	Compliance by Talcher TPS
1	The unit shall complete renovation work of ESPs at Unit-VI by March 2016. Till such time it is required to optimize flue gas conditioning through ammonia dosing in the ESP and optimizing power generation to keep the emission within prescribed standard. In no case emission is allowed to go beyond prescribed limit.	OSPCB granted extension to TTPS for completions of R&M of ESP of unit-VI by 31.12.2016. The work was completed on 28.12.16. Till 28.12.2016, skid mounted ammonia dosing was done to keep stack SPM within prescribed limit.
2	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 100 mg/Nm ³ .	Stg- I (4X60MW): PLC based Ammonia Flue Gas Conditioning (AFGC) system in operation in all four units of Stg-I. Stack SPM is within limit. Stg- II (2X110MW): ESP Augmentation of Unit V already completed in July 2015 & stack SPM is within limit. During work of Augmentation of ESP of unit-VI, stack SPM was kept within limit through skid mounted ammonia dosing system. ESP Augmentation of unit-VI completed on 28.12.2016 & stack SPM is within limit.
3	Air pollution control measure installed at different potential dust generating points shall be operated continuously and effectively to control fugitive dust emission.	Covering of belt conveyors and Dust suppression measures are being adopted to control fugitive emissions.
4	All the online continuous stack emission monitoring system (CEMS) for measurement of particulate matter and gaseous pollutants shall be operated effectively and uninterrupted. The online monitoring data so generated shall be transmitted to SPCB and CPCB server on a continuous basis.	Online continuous stack emission monitoring instruments are working and real time data is transmitted to OSPCB/CPCB.
5	All the online continuous Ambient Air Quality Monitoring	Continuous Ambient Air Quality

S.N	GENERAL CONDITIONS	Compliance by Talcher TPS
	Stations (CAAQMS) shall be operated effectively and uninterruptedly and the online monitoring data so generated shall be transmitted to OSPCB and CPCB server on a continuous basis.	Monitoring Stations (CAAQMS) are being operated efficiently and real time data is transmitted to OSPCB and CPCB.
6	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.	Dust extraction system and dust suppression system are working at all potential dust generating points. Ambient Air Quality within plant premises is being monitored and action is taken accordingly.
7	Proper dust extraction system and dry fog system shall be installed in the coal handling plant to control fugitive emission.	Dust extraction system is already working in Coal Handling Plant.
8	Adequate water sprinkling arrangement shall also be made at coal handling area as stand by measures to control generation of fugitive emission.	Water sprinkling is being done at coal handling plant wherever required.
9	All the internal roads of the unit shall be black topped/concreted.	Internal roads at Talcher TPP are black topped/concreted.
10	Proper housekeeping shall be maintained by a dedicated team.	A dedicated team for Housekeeping inside the plant is engaged through contractor and housekeeping is monitored by Administration Department.
11	Separate energy meter shall be installed for all the pollution control equipment's and the records shall be maintained for verification of the Board from time to time.	Energy meters have been installed for all major pollution control equipment.
12	All raw material product and waste material shall be transferred through covered vehicles without any spillage or leakages on the way, in case any accidental spillage on the road, waste shall be lifted by the industry and suitably disposed off in designated solid waste dumping area.	Domestic Solid waste is transported into covered vehicles only and disposed off in designated dumping area.
13	Appropriate devices like pneumatic dust handling system shall be provided at the hoppers of ESPs and pulse jet bag filters for continuous evacuation of dust from the hoppers without creating fugitive emission near the ESP and bag filter area. The collected dusts from air pollution control equipment's shall be utilized or disposed off in abandoned mine pit of MCL or at designed land fill area. Until capping of land fill, the dust shall be kept in wet condition with water sprinklers to avoid re-entrainment into the surrounding area due to wind.	Adequate fugitive dust handling/ dust suppression system has been provided. The fly ash is being utilized in abandoned mine void of MCL. Mine pits are kept in wet condition up to ash filled area.

S.N	GENERAL CONDITIONS	Compliance by Talcher TPS
14	Ambient air quality shall conform to the National Ambient Air Quality standards as prescribed under E (P) rules, 1986.	Ambient air quality is being monitored continuously and action is taken as per AAQ levels.
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 through 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.	33% of TTPS land is covered with Greenbelt/plantation with local species.
16	The unit shall submit fly ash utilisation status to the Board annually to the Board and shall comply to the provisions of fly ash Notification No.SO.2804 (E),dt. 03/11/2009 of MOEF, Govt. of India.	Most of the fly ash is being used in Mine voids filling. Fly ash is also being supplied to fly ash brick manufacturers. Status of fly ash utilization is submitted on regular basis.
17	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.	Fly ash is being supplied free of cost to fly ash brick manufacturers. Transportation subsidy presently being given to fly ash based construction material manufacturers.
18	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.	Agreed
19	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.	Agreed

F-2 (Water Pollution Control)

S.N	GENERAL CONDITIONS	Compliance by Talcher TPS
1	Under no circumstances there shall be any discharge of effluent to outside the factory premises.	Talcher TPS plant is Zero Discharge Plant and no effluent is discharges into natural water bodies.
2	There shall not be any discharge of effluent from CHP area by passing the coal settling tanks.	Treated effluent from Coal settling tanks is recycled and reused in ash slurry making.
3	<p>The blow down of power plant shall meet the following standards before it is discharged to the common monitoring basin and shall be reused for ash handling, dust suppression and green belt.</p> <p><u>Boiler Blow Down:</u></p> <p>Suspended Solids 100.0 mg/l (Max.) Oil & Grease 20.0 mg/l (Max.) Copper (Total) 1.0 mg/l (Max.) Iron (Total) 1.0 mg/l (Max.)</p> <p><u>Cooling Tower Blow down:</u></p> <p>Free available Chlorine 0.5 mg/l (Max.) Zinc 1.0 mg/l (Max.) Chromium (Total) 2.0 mg/l (Max.) Phosphate 5.0 mg/l (Max.)</p>	Station is complying with zero discharge condition. Monthly Environmental monitoring reports are being submitted to OSPCB.
4	Domestic effluent generated from the plant and township shall be properly treated in Sewage treatment plant and shall be reused for gardening after meeting with the prescribed standard of Board. The industry shall ensure continuous power supply for proper treatment of effluent in STP.	S.T.P is in operation and treated wastewater after meeting prescribed standards is being used in horticulture and in ash slurry making. D.G. set installed at S.T.P for continuous power supply.
5	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.	Effluent quality (pH, TSS, BOD, COD, and Temperature) is being monitored by online EQMS and data is transmitted to CPCB/OSPCB.

S.N	GENERAL CONDITIONS	Compliance by Talcher TPS
6	All the cooling water shall be completely re-circulated.	Cooling water is being re-circulated.
7	Waste water generated from leakages, blow down and D.M. Plant shall be treated individually to meet the prescribed standard of effluent discharged to inland surface water and stored in a common basin (i.e., guard pond) for utilization for plantation, dust suppression ash handling and green belt purpose inside the factory premises. Lining shall be provided in group pond to prevent any seepage into ground to avoid ground water contamination.	No Separate treatment at present. However total waste water is being connected to drain water recirculation sump. This wastewater of plant is reused for ash slurry making.
8	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.	All drains in plant area has concrete walls and cleaned regularly.
9	All the safety measures applicable in mines as per DGMS shall be implemented during disposal of fly ash in abandoned coal mine void.	All safety measures have been taken as prescribed.
10	The settling tank provided in the track hopper area shall be cleaned regularly and made functional all the time.	Being complied.
11	Ground water monitoring around the solid waste disposal site/secured land fill shall be carried out regularly and report submitted to the Ministry's Office at Bhubaneswar, CPCB, OSPCB.	Being done by M/s. Envomin Consultants (Pvt) Ltd., Bhubaneswar & M/s NEERI, Nagpur and reports are being sent to regulatory authorities.
12	Rain water harvesting structure shall be developed inside the plant premises and maximum effort shall be made to reuse harvesting rain water with a definite plan and programme to reduce the drawl of fresh water from water bodies.	The strata is rocky, hence creation of rain water harvesting structure is difficult. However, Talcher TPS has installed rain water harvesting system near service building.
13	Oil catch pits shall be provided in oil handling area of power plant for collection of spillage.	Oil separators has been provided to remove oil & grease from effluents.
14	Storm water drain shall be maintained separately without being mixed up with the industrial effluent or sewage effluent.	Storm water drain is being maintained separately without

S.N	GENERAL CONDITIONS	Compliance by Talcher TPS
		being mixed with the industrial effluent or sewage effluent.
15	The runoff water from the factory premises and solid waste dumping area generated during rainy season shall be adequately treated in a series of settling tanks so as to meet the prescribed standard of the Board before discharged to outside/reused.	Runoff from factory premises are collected in tank before the same flows out of the plant premises. The quality of run-off water is monitored and is within permissible limits.
16	The industry shall directly adhere to the conditions and stipulation made by MCL authorities for dumping of ash in abandoned mine pit.	Complied.
17	The industry shall abide by E(P) Act, 1986 and Rules framed there-under.	Being complied.
18	The industry is required to submit a water balance diagram, affix separate water meter at the intake points/ for different purposes of consumption, furnishes monthly returns in prescribed format every month and make up-to-date payment against the assessment made by the Board.	Water balance diagram has been submitted to OSPCB. Water meters has been installed wherever required. Monthly return under Water Cess act, 1977 is being submitted to OSPCB every month.
19	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.	Agreed.
20	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.	Agreed.
21	The industry shall take steps for fulfilment of all the stipulations and necessary measures to check pollution.	Agreed.
22	Consent to Operate is subject to availability of all other statutory clearances required under relevant Acts/Rules and fulfilment of	Agreed.

S.N	GENERAL CONDITIONS	Compliance by Talcher TPS
	required procedural formalities.	

G). Additional Condition:

a)	The industry shall keep the emission level with the prescribed standard through operational discipline and ammonia dosing in the flue gas.	Emission levels are kept within the prescribed standard through operational discipline, ESP and ammonia dosing etc.
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Note: All testing/verification of compliance of Environmental Standards and norms is being done by Recognised Laboratory and by OSPCB.

**Half yearly Compliance of MOEF&CC Environmental Clearance letter no. J-11015 / 276 /2011-IA.II (M)
dated 19.04.2017**

Compliance status up to 19.01.2018

Half Yearly Compliance of Environmental Clearance dated 19.04.2017 for permission of disposal of fly ash (1.2 MTPA) generated from 460 MW Talcher TPP of M/s NTPC Ltd. into mine void of South Balanda OPC of M/s Mahanadi Coalfields Ltd., in Talcher Coalfields, District, Angul, Odisha. Last Half yearly compliance of said permission has been submitted to Regional Office MOEF&CC , Bhubneshwar on 04.12.2017. Latest status of Half yearly compliance as on 19.01.2018 are as below.

Sr. No	EC Stipulation in EC letter dated 19.04.2017	NTPC Talcher TPP response as on 19.01.2018
10	The matter was placed before the Re-constituted Expert Appraisal Committee (Thermal Power) in its 4 th Meeting held on 16.03.2017. In acceptance of the recommendation of the Re-constituted Expert Appraisal Committee (Thermal Power) and in view of the information / clarification furnished by you, with respect to the above project, the Ministry hereby accords the permission to continue the disposal of fly ash for the maximum quantity of 1.2 MTPA on temporary basis for a further period of five years w.e.f. from 10.04.2017 subject to following conditions.	
i.	A pilot project shall be explored for implementation for Cenosphere extraction from flyash and manufacturing of by-products in consultation with organizations like CSIR, ISM (IIT) Dhanbad.	A pilot study has already been awarded.
ii.	As recommended by NEERI, Ash characterisation, hydro-geological studies, leachability of trace metals, monitoring of trace elements in the supernatant, pH of the water and the piezometers on a quarterly basis and reports shall be submitted to the Ministry and it's regional office annually.	The recommended studies has already been awarded.
iii.	Radio tracer studies shall be continued once in six months and the findings of the study shall be submitted to the Ministry and its Regional office annually.	The Radio tracer studies are under tendering process. The work is expected to be awarded shortly.
iv.	Bioaccumulation and bio-magnification tests shall be conducted on surrounding flora and fauna (tree leaves, vegetation, crop yields and cattle	The study has already been awarded to NBRI , Lucknow.

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	population etc) during pre-monsoon and post monsoon to find out any trace metals escaped through groundwater or runoff and the reports shall be submitted to the Ministry annually.	
v.	Surface runoff and supernatant water, in any case shall not be let into surroundings. It shall be collected by providing adequate drains around the mine. As proposed the supernatant water along with surface runoff shall be treated and re-used for ash mixing and plant operations. Surface and ground water quality along with existing piezometric wells shall be monitored quarterly and the reports shall be submitted to the Ministry annually.	The study has already been awarded.
vi.	After the mine void reaches its full capacity, 30 cm sweet soil lining and proper compacting be provided on the top to avoid any wash off during rainy season. Reclamation activities along with greenbelt development shall be carried out in consultation with M / s MCL in accordance with approved Mine Closure Plan. An action plan in this regard shall be submitted to the Ministry and its Regional Office.	Shall be complied at the time of mine closure in consultation with M/s MCL in accordance Mine Closure Plan.
vii	<p>Only decanted water from mine, make up water from treated effluents such as cooling tower blow down and treated sewage water shall be used from making ash slurry. Raw water withdrawal from Brahmani river for purpose of making ash slurry shall be minimized.</p> <p>Downstream impacts of water withdrawal from Brahmani River shall be studied and report submitted to the Ministry.</p>	<p>Decanted water from mine, make up water from treated effluents such as cooling tower blow down and treated sewage water are being used for making ash slurry. Raw water withdrawal from Brahmani river for purpose of making ash slurry has already been minimized/optimized.</p> <p>Study has already been awarded.</p>

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viii.	Mercury in flyash shall be periodically monitored by Inductively Coupled Plasma Mass Spectrometry (ICP-MS)	Being taken up with Sr. No. ii under Ash characterisation, hydro-geological studies, leachability of trace metals, monitoring of trace elements in the supernatant.
ix.	Details of month-wise quantity of flyash disposed and water consumption along with nature of water shall be submitted to Ministry.	<p>Annual report of Ash utilization is being submitted to MOEF&CC.</p> <p>Beside this, Annual Environmental Statement containing ash utilization and Water consumption for various purposes is being submitted to SPCB, Odisha.</p> <p>However monthly reports of Fly ash and Water consumption will be submitted to RO, MOEF&CC.</p>
x.	Half-yearly Compliance report for all the stipulated condition in this permission shall be submitted to the Ministry and its Regional Office	Being complied. The latest half yearly compliance report has been submitted on 04.12.2017.
xi.	The flyash utilization shall be in compliance with Flyash Notification and its amendments issued from time to time by the Ministry.	Fly ash is being used in preparation fly ash bricks and supply to other user industries. Balance ash is being utilized in filling of abandoned South Balanda Mine Voids of MCL.
xii.	Third party evaluation / Environment Audit shall be conducted annually form reviewing the compliance conditions stipulated in the clearances along with the baseline data / studies to be carried out during the period of temporary permission.	Third party Audit shall be carried out and report will be submitted to Ministry.
xiii.	Compliance of EC / amendment conditions, Environment (Protection) Act. 1986, Rules and MoEF&CC Notifications issued time to time shall be done by an Environment Officer to be nominated by the Project Head of the Company	Head (Env. Management Group/Ash Utilization) department is responsible for

Sr. No	EC Stipulation in EC letter dated 19.04.2017	NTPC Talcher TPP response as on 19.01.2018
	who shall be responsible from implementation and necessary compliance timely.	implementation & necessary compliance timely.
11.	All other studies & conditions prescribed in the earlier permissions dated 05.09.2013, 02.03.2015 and 11.04.2016 shall also be complied with by NTPC and other concerned, as applicable.	All other studies & conditions prescribed in the earlier permissions dated 05.09.2013, 02.03.2015 and 11.04.2016 are being complied.
12.	Any appeal against this permission shall lie with the National Green Tribunal, of preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act. 2010.	Noted.