

BEFORE THE NATIONAL GREEN TRIBUNAL, New Delhi

O.A. NO. 181 OF 2022

IN THE MATTER OF

Dinesh Prasad Chaurasia & Ors.

..... Applicant.

Versus

State of Bihar

.....Respondent(s)

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agricultural land due to which the private lands of farmers are getting flooded and is becoming infertile.

3. That the Hon'ble Tribunal vide its order dated 19.04.2022 constituted a committee consisting of representatives from CPCB; Regional Office of MOEF&CC, Ranchi; State PCB; and District Magistrate, Muzzafarpur, to look into the grievances of the applicant and take remedial measure. The State PCB was made nodal agency for coordination and compliance.
4. That the said joint committee visited the site on 19.05.2022 and based on the observations made, filed a report dated 29.06.2022. The Hon'ble Tribunal upon considering the said report by its order dated 11.07.2022 has been pleased to direct personal appearance of the Director (O) NTPC & Chairman, KBUNL and the Member-Secretary, Bihar State Pollution Control Board to assist the Hon'ble Tribunal in just and proper adjudication of the questions involved in the case.

5. That pursuant to passing of the order dated 11.07.2022, the Member Secretary, BSPCB; Board Analyst, BSPCB; Scientific Advisor, BSPCB, visited KBUNL and carried a thorough inspection on 30.07.2022. The findings of the inspection are produced below in tabular form.

Sl. No.	Directions	Compliance (as on 30.07.2022)
1.	Complete the work of separation of process drain and storm water drain by 31.12.2020;	Complied.
2.	Make effort for installation of FGD and low NOx burner in both Stage-I & II units by 31.12.2020 and complete the work latest by 30.06.2021;	<p>Partly complied.</p> <ul style="list-style-type: none"> ➤ Stage-I units (2x110 MW) have been de-commissioned/retired from 08.09.2021, hence non-operational. Therefore, the compliance w.r.t. installation of FGD and low NOx burner for Stage-I units are not applicable. ➤ The installation of FGD and low NOx burner are required to ensure compliance of emission standards for Thermal Power Plants notified by MoEF&CC, Govt. of India dated-07.12.2015, amended vide notification dated-31.03.2021. ➤ The installation of low NOx burner have been completed. The installation of FGD is under progress. The installation of FGD to be ensured by 31.12.2022 as per CPCB direction dated-11.12.2017. The amended MoEF&CC, GoI notification dated-31.03.2021 permits

		<p>the category-B Thermal Power Plant (located within 10 Km. radius of non-attainment city-Muzaffarpur) to comply with the emission norms up to 31.12.2023.</p> <ul style="list-style-type: none"> ➤ MTPS comes under category B TPP. It is located within 10 Km. from the limits of non- attainment city-Muzaffarpur.
3.	<p>Ensure regular and adequate sprinkling of water on peripheral road of ash-dyke upon which heavy vehicles ply by 31.03.2020;</p>	<ul style="list-style-type: none"> ➤ The TPP was using ash pond no. 1 & 2 for the collection of ash slurry from units of Stage-I. These units have been de-commissioned/ retired from 08.09.2021 and now not being used for collection of ash slurry (wet ash). ➤ The legacy ash from these ponds are excavated and being used by the NHAI, the identified and awarded agency of TPP. ➤ The peripheral kachcha embankments-cum-roads of these ash ponds are being used for transportation of ash by the agency. ➤ There is no static/ permanent water sprinkler in and around ash pond no. 1 & 2. However, the unit uses mobile water tankers for sprinkling of water on peripheral roads. ➤ The ash dyke no. 3, an engineered dyke, is being used for wet ash/ash slurry collection with over flow lagoon and Ash Water Recirculation System (AWRS) to reuse the water from ash

		<p>pond in the TPP.</p> <ul style="list-style-type: none"> ➤ Water Sprinkling System has been provided on the road existing between pond no. 2 and ash dyke no. 3. ➤ Construction of Water Sprinkling System along with embankments of ash dyke no. 3 was found under progress. ➤ Road connecting NH-28, Kanti to Kothiya Village and passing between ash pond no. 2 and ash dyke no. 3 is presently kachcha. TPP has requested District Planning Officer, Muzaffarpur for construction of PPC road (Pucca road) along with deposit of Rs. 22 lakh as an advance amount. As reported, tender has been floated by the concerned department. The completion of construction of pucca road is expected by March, 2023, as reported.
4.	Ensure transportation of fly-ash/soil by covered vehicle with immediate effect;	Being complied.
5.	Ensure fencing, lighting and adequate security around the ash-pond/dyke by the end of 30.06.2020;	<p style="text-align: center;">Complied.</p> <ul style="list-style-type: none"> ➤ Wire fencing with cemented pillars has been done around the embankments of ash dyke no. 3. ➤ Lighting has been done nearby AWRS pump house. ➤ Regular watching by the manpower to ensure security around the ash dyke is

		done.
6.	Ensure construction of toe-drain and peripheral drain around ash-pond/dyke to stop seepage of water into farmer's field and also to ensure the there is no breach of ash-pond/dyke in the rainy season by 30.06.2020;	<p style="text-align: center;">Complied.</p> <ul style="list-style-type: none"> ➤ Toe-drain and peripheral around the ash dyke no. 3 has been constructed.
7.	Ensure green belt around the peripheral drain of ash-dyke as well as inside and around the plant, wherever space is available by 31.03.2021;	<ul style="list-style-type: none"> ➤ Plantation has been done in the available space in the plant as well as outside near Stage-II ash dyke under construction at Naryar-Morsanda village between Panapur-Motipur. ➤ In addition of the above, 40,000 trees have been planted under Jal-Jeevan-Hariyali Mision, Govt. of Bihar, as reported.
8.	Ensure compliance of the conditions imposed in the environmental clearance/CTO and directions given by the Central Pollution Control Board and State Pollution Control Board; and	<ul style="list-style-type: none"> ➤ The unit has been regularly submitting the compliance of the conditions of EC to this Board as well as MoEF&CC, Govt. of India & CPCB. The unit has complied the EC conditions except (a) installation of silos for collection of dry ash (b) commissioning of STP and (c) proper control of fugitive emission around the ash pond no. 1 & 2 from where legacy ash is excavated and transported for its use. ➤ The conditions of CTOs are also being complied except installation of FGD.

		The Govt. of India has extended time for compliance of emission norms for category-B plant by 31.12.2023.
9.	Installation of dry fly ash silo.	<ul style="list-style-type: none"> ➤ TPP was in process of installation of silos (2x900 tone capacity) for collection of dry fly ash from Stage-II units. ➤ Due to COVID-19 and other contractor's issues it has not been completed yet. ➤ Piling and foundation works have been completed. ➤ Presently, unit is collecting dry ash from 4 nos. of buffer hoppers and associated system for its channelization to the users.
10.	Rain water harvesting	<p style="text-align: center;">Complied.</p> <ul style="list-style-type: none"> ➤ The consent of Central Ground Water Authority has been received and scheme has been implemented in plant and township area. ➤ Rain water harvesting system consisting of ground water recharge pits (18 nos. in plant and colony), surface water storage pond (02 nos.) have been implemented.
11.	Sewage Treatment Plant (STP).	<ul style="list-style-type: none"> ➤ The work order for construction of STP has been awarded. ➤ Civil work is under progress.
12.	Charging of lagoon no. 3 (ash dyke) of Stage-I.	<p style="text-align: center;">Complied.</p> <ul style="list-style-type: none"> ➤ The pond no. 3 of Stage-I, now engineered ash dyke, is being used for collecting the wet ash/ash slurry from Stage-II units. ➤ State-I units has been retired from

		08.09.2021.
13.	Charging of ash dyke of Stage-II.	<ul style="list-style-type: none"> ➤ Ash dyke with over flow lagoon and AWRS are still under construction at Panapur area for Stage-II units. ➤ There are land acquisition issues on part land of ash pipe corridor. ➤ Presently, ash dyke no. 3 constructed for Stage-I, having sufficient area (approx 80 acres) is being used for collecting the ash.
14.	Raising of Stage-I (pond 1 & 2).	<ul style="list-style-type: none"> ➤ Not required in view of the retirement of units I & II of Stage-I. Legacy ash is being utilized from these ponds.
15.	Coal handling plant of Stage-II.	<p style="text-align: center;">Complied.</p> <ul style="list-style-type: none"> ➤ Presently, coal requirement of Stage-II is being catered through existing CPH having adequate dust suppression/ extraction system which includes cyclone at crusher house, pre weighting water sprinkler during coal wagon unloading at wagon tippler, movable water tanker to meet any contingency requirement etc.
16.	Ash utilization.	<p style="text-align: center;">Complied.</p> <ul style="list-style-type: none"> ➤ The unit is presently collecting the dry ash from 4 nos. of buffer hoppers and associated system for its channelization to users. ➤ Two nos. dry ash silos having capacity of 900 MT each are still under construction stage. ➤ The ash as slurry is collected in ash dyke no. 3.

		<ul style="list-style-type: none"> ➤ The legacy ash available in pond no. 1 & 2 is being utilized by the NHAI in construction of roads (NH 527C and NH319). ➤ As reported, the unit has 8 lakh MT legacy ash in pond no. 1 & 2. ➤ The estimated total ash generation is 7.5 lakh MT/ year. ➤ The unit has tie-up with the NHAI for the utilization of 8.3 lakh pond ash from ash pond no. 1 & 2. ➤ The unit utilized ash 105.53% during 2020-21 and 167% during 2021-22. ➤
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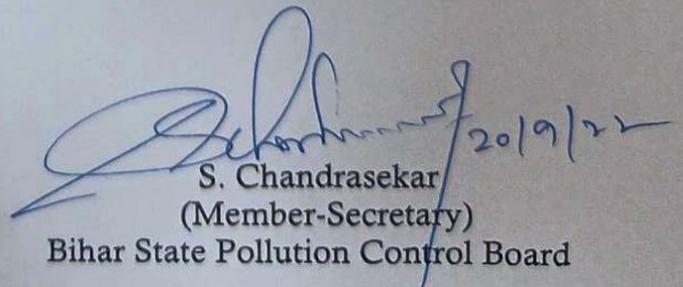
6. That Earlier, the TPP was using ash pond no. 1 & 2 for the collection of ash slurry from units of Stage-I. These units have been de-commissioned from 08.09.2021. The aforesaid ash ponds are now not being used for collection of ash slurry (wet ash).

7. That the legacy ash from these ponds are excavated and being used by the NHAI, the identified and awarded agency of TPP.

8. That the peripheral kachcha embankments-cum-roads of these ash ponds are being used for transportation of ash by the agency.
9. The Narsanda village is located in the south direction from the ash pond no. 1 & 2 with legacy ash.
10. There was no any discharge from these ponds to any adjoining agricultural land. However, the run- off water during rain with ash available on the peripheral kachcha embankments-cum-roads may go to nearby agricultural land.
11. The TPP has a proposal for installation of solar PV plant through its Renewable Energy Department in the ash pond no. 1 & 2 after utilization of available legacy ash/ stabilization/reclamation.
12. That I have read the contents of the report and have understood the same.

S. Chandrasekar
(Member-Secretary)
Bihar State Pollution Control Board

8. That the peripheral kachcha embankments-cum-roads of these ash ponds are being used for transportation of ash by the agency.
9. The Narsanda village is located in the south direction from the ash pond no. 1 & 2 with legacy ash.
10. There was no any discharge from these ponds to any adjoining agricultural land. However, the run- off water during rain with ash available on the peripheral kachcha embankments-cum-roads may go to nearby agricultural land.
11. The TPP has a proposal for installation of solar PV plant through its Renewable Energy Department in the ash pond no. 1 & 2 after utilization of available legacy ash/ stabilization/reclamation.
12. That I have read the contents of the report and have understood the same.


S. Chandrasekar
(Member-Secretary)
Bihar State Pollution Control Board

Pictorial representation of site: Ash Pond 1 & 2



Ash Pond-2: This ash pond was in use when Stage-I unit was in operational, since stage-I unit is not-operational since 08.09.2021, therefore ash slurry is now not being deposited here and now here only remains legacy waste (Ash). The legacy ash is now being used by NHAI in road construction, and they lift and carry ash from here. Also, local villagers take ash from this ash pond. The inspecting team was informed that one tractor is sold for Rs. 300-400/-





Ash Pond-1: This is a way adjacent to ash pond 1. This is an ash wall between ash pond and villagers/ farmers land. There is no deliberate dumping of ash on lands of farmer, however, rain water runoff or due to some other reason ash enters into farmers/villagers land.



This is the common road between ash pond 1 and ash pond 2. The trucks of NHAI, tractors of local villagers go through this road while carrying ash pond from ash pond 1 or 2. Since several trucks passes from here on daily basis therefore due to spillage from these trucks the road is covered with ash. KBUNL has not installed permanent water sprinkling system here, but they do water sprinkling through means of mobile water tankers.



Ash Pond 1.



Ash Pond 1: Ash wall and adjacent to it lays villagers/farmers land. It can be seen that ash has passed onto adjacent lands mostly due to wind and rain.



Ash Pond 1: JCB and trucks can be seen, legacy ash is being lifted.



Ash Dyke No.3: This is functional and it can be seen that ash slurry is falling in ash dyke. Also fencing has been done.



Some more images of Ash Dyke 3.





Ash Slurry falling in ash dyke no. 3.





Toe drain.



Fencing in ash dyke-3.

Permanent Water Sprinkling System in Ash Dyke-3.



Fencing and water sprinkling at ash dyke no. 3.



New State of Art ash dyke.



New Ash Dyke.

Inspection report of M/s Muzaffarpur Thermal Power Station, a unit of Kanti Bijalee Utpadan Nigam Limited, NTPC Ltd., Kanti, Muzaffarpur.

A. Introduction & Background:

1. The unit was inspected on 30.07.2022 by the undersigned along with Board's officials. Sri Partha Nag, GM (O) & I/c (EMG), Sri Anand Kumar Jha, AGM (AUD), Sri Manish Kumar Pandey, DGM (CCD) and Sri V.K. Pandey, DGM (EMG) were present during the inspection.
2. Muzaffarpur Thermal Power Station (MTPS) is a coal based Thermal Power Plant. It is an unit of Kanti Bijalee Utpadan Nigam Limited, Wholly-Owned Subsidiary of NTPC Ltd. Initially, this TPP was established for 2x110 MW power generation from Unit-I & II under Stage-1 programme in 1985-86. The unit has been expanded by establishing 2x195 MW power generation from Unit-III & IV under Stage-2 programme.
3. The old units (I & II) of Stage-1 are non-operational and have been retired from 08.09.2021, as reported by the representatives of KBUN Ltd. The new units (III & IV) of Stage-2 are only operational as of now.
4. The unit uses water from Burhi Gandak river for industrial and domestic purposes. The water is used for cooling purpose, ash slurry preparation etc., DM water preparation and domestic purposes. The cooling water is kept in closed circuit.
5. The Stage-2 units (2x195 MW) were established after obtaining Environmental Clearance from MoFE&CC, Govt. of India vide ref. no. J13012/98/2008-1A.II(M), dated-09.11.2009 and further J13012/98/2008-1A.I(T), dated-31.12.2014 with conditions mentioned therein.
6. Bihar State Pollution Control Board issued consent-to-establish (CTE) vide ref. no. T-14042, dated-30.11.2009 for setting up of 2x195 MW (Stage-II) coal based thermal power plant in the existing premises of the MTPS. The validity of the CTE was dully extended.
7. Bihar State Pollution Control Board has granted consent-to-operate (CTOs) vide ref. no. 3191, dated-01.10.2018 (emission consent) and 3192, dated-01.10.2018 (discharge consent) for operation of 2x195 MW (Stage-II) coal based thermal power plant located at Kanti, Muzaffarpur with conditions mentioned therein.
8. The Hon'ble NGT, New Delhi registered a complaints case (O.A. No. 272/2019) based on letter received by post from the local resident of Kanti, Mr. Satya Narayan Sahni with the allegation that pollution caused by

fly ash dump set up by MTPS, Kanti, Muzaffarpur causing damage to public health, animal health and ecology in the area.

9. Based on the above complaints, the Hon'ble NGT vide order dated-16.04.2019 directed the District Magistrate, Muzaffarpur and Bihar State Pollution Control Board to look into the matter and take appropriate action in accordance with law.
10. In compliance of the above, the Board along with representative of DM, Muzaffarpur conducted inspection of TPP and ash ponds adjacent to the Kothiya Village, Kanti on 06.12.2019 and 07.12.2019.
11. Based on the observations of the inspection team, proposed direction under section 33A of the Water Act, 197 and 31A of the Air Act, 1981 was issued by the Board vide ref. no.7310, dated-19.12.2019.
12. M/s KBUN Ltd. submitted its submission/compliance status vide its letter no.72706, dated-31.12.2019 along with the timelines for its compliance. BSPCB conducted a meeting with representatives of TPP on 28.01.2020 and the directed TPP to reduce the proposed timelines. Accordingly, KBUN Ltd. submitted an undertaking vide its letter no. 42986, dated-30.01.2020 with the supplementary information on utilization of ash vide its letter no. 43028, dated-08.02.2020.
13. The Hon'ble NGT further in its order dated-03.02.2020 directed for furnishing status report on the action taken in light of the proposed direction issued by the Board.
14. BSPCB further served directions to the TPP vide its letter no. 1313, dated-25.02.2020 including furnishing a bank guarantee for Rs. 05 Crores to ensure performance of the works as per timeline submitted by the unit.
15. BSPCB after considering the request of the TPP in light of COVID-19, vide its letter no. 3607, dated-21.08.2020, further allowed for submission of revised timeline provided the unit furnish the following:-
 - a. Physical and administrative progress report of compliance of this Board's direction dated-25.02.2020 with the documents to support the extent of compliance made; and
 - b. Specific date with reason for the compliance of the remaining incomplete job.
16. The Thermal Power Plant vide its letter dated-02.07.2020 further submitted physical and progress report of works and revised target date with reason for consideration along with request for waiving bank guarantee of Rs. 05 Crore. The Board communicated that the revised timeline may be

considered only after submission of bank guarantee (performance guarantee) with its validity till December, 2022.

17. The Thermal Power Plant submitted a bank guarantee from Canara Bank for Rs. 05 Crore (Rupees Five Crores) only valid up to 31.12.2022 vide its letter no. 44643, dated-09.03.2021 to BSPCB (receipt on 12.03.2021).
18. In view of the Bank Guarantee (BG) furnished by the unit, BSPCB approved the timelines submitted by the unit dated-02.07.2020 and directed to complete the work within the said period, vide Board's ref. no. 692, dated-11.04.2021.
19. The Hon'ble NGT has further registered a complaint case (O.A. No. 181/2022) based on the letter petition sent by Mr. Dinesh Chaurasiya and other residents of Vilage-Narsanda, P.O.-Kanti, Dist-Muzaffarpur with the allegation that fly ash is dumped and effluent is discharged by KBUN Ltd., NTPC Ltd on adjoining agriculture land in village Narsanda causing flooding of farmer's private land and making the same infertile.

The Hon'ble NGT in its order dated-19.04.2022 in the aforesaid matter directed to ascertain the factual position in the matter through a joint committee of representative of CPCB; Regional Office, MoEF&CC, GoI, Ranchi; State PCB; and DM, Muzaffarpur.

In compliance of the above, the joint committee inspected the site on 19.05.2022 and based on the observations, factual position and action taken report was submitted to the Hon'ble NGT vide Board's e-mail dated-29.06.2022.

20. The unit has installed online emission monitoring system and ambient air quality monitoring station at four (4) locations (a. CW pump house, b. BHEL site office, c. Near Porta office and d. DAV school).

B. Observations:

1. Compliance of the directions of the Board issued vide ref. no. 1313, dated-25.02.2020 and revised timelines submitted by the unit dated-02.07.2020, dully approved by the Board vide ref. no. 692, dated-11.04.2021 are hereunder:-

Sl. No.	Directions	Revised timelines	Compliance (as on 30.07.2022)
1.	Complete the work of separation of process drain and storm water drain by 31.12.2020;	Revised completion date: 31.03.2021.	Complied.

2.	Make effort for installation of FGD and low NOx burner in both Stage-I & II units by 31.12.2020 and complete the work latest by 30.06.2021;	Revised completion date for Stage-1: 31.12.2021. Revised completion date for Stage-2: 31.12.2022.	<p>Partly complied.</p> <ul style="list-style-type: none"> ➤ Stage-I units (2x110 MW) have been de-commissioned/retired from 08.09.2021, hence non-operational. Therefore, the compliance w.r.t. installation of FGD and low NOx burner for Stage-I units are not applicable. ➤ The installation of FGD and low NOx burner are required to ensure compliance of emission standards for Thermal Power Plants notified by MoEF&CC, Govt. of India dated-07.12.2015, amended vide notification dated-31.03.2021. ➤ The installation of low NOx burner have been completed. The installation of FGD is under progress. The installation of FGD to be ensured by 31.12.2022 as per CPCB direction dated-11.12.2017. The amended MoEF&CC, GoI notification dated-31.03.2021 permits the category-B Thermal Power Plant (located within 10 Km. radius of non-attainment city-Muzaffarpur) to comply with the emission norms up to 31.12.2023. ➤ MTPS comes under category B TPP. It is located within 10 Km. from the limits of non-attainment city-Muzaffarpur.
3.	Ensure regular and adequate sprinkling of water on peripheral road of ash-dyke upon which heavy vehicles ply by 31.03.2020;	-	<ul style="list-style-type: none"> ➤ The TPP was using ash pond no. 1 & 2 for the collection of ash slurry from units of Stage-I. These units have been de-commissioned/retired from 08.09.2021 and now not being used for

			<p>collection of ash slurry (wet ash).</p> <ul style="list-style-type: none"> ➤ The legacy ash from these ponds are excavated and being used by the NHAI, the identified and awarded agency of TPP. ➤ The peripheral kachcha embankments-cum-roads of these ash ponds are being used for transportation of ash by the agency. ➤ There is no static/permanent water sprinkler in and around ash pond no. 1 & 2. However, the unit uses mobile water tankers for sprinkling of water on peripheral roads. ➤ The ash dyke no. 3, an engineered dyke, is being used for wet ash/ash slurry collection with over flow lagoon and Ash Water Recirculation System (AWRS) to reuse the water from ash pond in the TPP. ➤ Water Sprinkling System has been provided on the road existing between pond no. 2 and ash dyke no. 3. ➤ Construction of Water Sprinkling System along with embankments of ash dyke no. 3 was found under progress. ➤ Road connecting NH-28, Kanti to Kothiya Village and passing between ash pond no. 2 and ash dyke no. 3 is presently kachcha. TPP has requested District Planning Officer, Muzaffarpur for construction of PPC road (Pucca road) along with deposit of Rs. 22 lakh as an advance amount. As reported, tender has been floated by the concerned
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			department. The completion of construction of pucca road is expected by March, 2023, as reported.
4.	Ensure transportation of fly-ash/soil by covered vehicle with immediate effect;	-	Being complied.
5.	Ensure fencing, lighting and adequate security around the ash-pond/dyke by the end of 30.06.2020;	-	Complied. <ul style="list-style-type: none"> ➤ Wire fencing with cemented pillars has been done around the embankments of ash dyke no. 3. ➤ Lighting has been done nearby AWRS pump house ➤ Regular watching by the manpower to ensure security around the ash dyke is done.
6.	Ensure construction of toe-drain and peripheral drain around ash-pond/dyke to stop seepage of water into farmer's field and also to ensure the there is no breach of ash-pond/dyke in the rainy season by 30.06.2020;	Revised completion date: 30.09.2020.	Complied. <ul style="list-style-type: none"> ➤ Toe-drain and peripheral around the ash dyke no. 3 has been constructed.
7.	Ensure green belt around the peripheral drain of ash-dyke as well as inside and around the plant, wherever space is available by 31.03.2021;	Revised completion date: 30.06.2021.	<ul style="list-style-type: none"> ➤ Plantation has been done in the available space in the plant as well as outside near Stage-II ash dyke under construction at Naryar-Morsanda village between Panapur-Motipur. ➤ In addition of the above, 40,000 trees have been planted under Jal-Jeevan-Hariyali Mision, Govt. of Bihar, as reported.
8.	Ensure compliance of the conditions imposed in the environmental clearance/CTO and directions given by	-	<ul style="list-style-type: none"> ➤ The unit has been regularly submitting the compliance of the conditions of EC to this Board as well as MoEF&CC, Govt. of India & CPCB. The unit has

	the Central Pollution Control Board and State Pollution Control Board; and		<p>complied the EC conditions except (a) installation of silos for collection of dry ash (b) commissioning of STP and (c) proper control of fugitive emission around the ash pond no. 1 & 2 from where legacy ash is excavated and transported for its use.</p> <ul style="list-style-type: none"> ➤ The conditions of CTOs are also being complied except installation of FGD. The Govt. of India has extended time for compliance of emission norms for category-B plant by 31.12.2023.
9.	Installation of dry fly ash silo.	Revised completion date: 31.03.2022.	<ul style="list-style-type: none"> ➤ TPP was in process of installation of silos (2x900 tone capacity) for collection of dry fly ash from Stage-II units. ➤ Due to COVID-19 and other contractor's issues it has not been completed yet. ➤ Piling and foundation works have been completed. ➤ Presently, unit is collecting dry ash from 4 nos. of buffer hoppers and associated system for its channelization to the users.
10.	Rain water harvesting	Revised completion date: 31.12.2020.	<p style="text-align: center;">Complied.</p> <ul style="list-style-type: none"> ➤ The consent of Central Ground Water Authority has been received and scheme has been implemented in plant and township area. ➤ Rain water harvesting system consisting of ground water recharge pits (18 nos. in plant and colony), surface water storage pond (02 nos.) have been implemented.
11.	Sewage Treatment Plant (STP).	Revised completion date:	<ul style="list-style-type: none"> ➤ The work order for construction of STP has been awarded.

		30.06.2021.	➤ Civil work is under progress.
12.	Charging of lagoon no. 3 (ash dyke) of Stage-I.	Revised completion date: 30.09.2020.	Complied. ➤ The pond no. 3 of Stage-I, now engineered ash dyke, is being used for collecting the wet ash/ash slurry from Stage-II units. ➤ State-I units has been retired from 08.09.2021.
13.	Charging of ash dyke of Stage-II.	Revised completion date: 31.12.2021.	➤ Ash dyke with over flow lagoon and AWRS are still under construction at Panapur area for Stage-II units. ➤ There are land acquisition issues on part land of ash pipe corridor. ➤ Presently, ash dyke no. 3 constructed for Stage-I, having sufficient area (approx 80 acres) is being used for collecting the ash.
14.	Raising of Stage-I (pond 1 & 2).		➤ Not required in view of the retirement of units I & II of Stage-I. Legacy ash is being utilized from these ponds.
15.	Coal handling plant of Stage-II.	Revised completion date: 31.12.2021.	Complied. ➤ Presently, coal requirement of Stage-II is being catered through existing CPH having adequate dust suppression/ extraction system which includes cyclone at crusher house, pre weighting water sprinkler during coal wagon unloading at wagon tippler, movable water tanker to meet any contingency requirement etc.
16.	Ash utilization.	Revised completion date: 30.09.2021.	Complied. ➤ The unit is presently collecting the dry ash from 4 nos. of buffer hoppers and associated system for its channelization to users. ➤ Two nos. dry ash silos having capacity of 900 MT

			<p>each are still under construction stage.</p> <ul style="list-style-type: none"> ➤ The ash as slurry is collected in ash dyke no. 3. ➤ The legacy ash available in pond no. 1 & 2 is being utilized by the NHAI in construction of roads (NH 527C and NH319). ➤ As reported, the unit has 8 lakh MT legacy ash in pond no. 1 & 2. ➤ The estimated total ash generation is 7.5 lakh MT/year. ➤ The unit has tie-up with the NHAI for the utilization of 8.3 lakh pond ash from ash pond no. 1 & 2. ➤ The unit utilized ash 105.53% during 2020-21 and 167% during 2021-22.
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C. Observations with respect to allegation in O.A. No. 181/2022:

1. Earlier, the TPP was using ash pond no. 1 & 2 for the collection of ash slurry from units of Stage-I. These units have been de-commissioned from 08.09.2021. The aforesaid ash ponds are now not being used for collection of ash slurry (wet ash).
2. The legacy ash from these ponds are excavated and being used by the NHAI, the identified and awarded agency of TPP.
3. The peripheral kachcha embankments-cum-roads of these ash ponds are being used for transportation of ash by the agency.
4. The Narsanda village is located in the south direction from the ash pond no. 1 & 2 with legacy ash.
5. There was no any discharge from these ponds to any adjoining agricultural land. However, the run- off water during rain with ash available on the peripheral kachcha embankments-cum-roads may go to nearby agricultural land.
6. The TPP has a proposal for installation of solar PV plant through its Renewable Energy Department in the ash pond no. 1 & 2 after utilization of available legacy ash/ stabilization/reclamation.

D. Conclusion:

1. Earlier, The TPP was using ash pond no. 1 & 2 for the collection of ash slurry from units of Stage-I. These units have been de-commissioned from

08.09.2021. The aforesaid ash ponds are now not being used for collection of ash slurry.

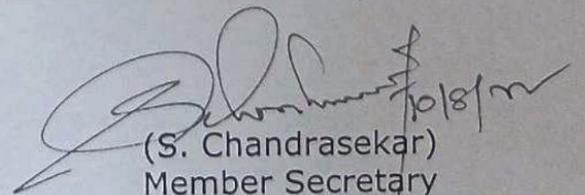
2. The Stage-II units (2x195 MW) are only operational. The unit is presently discharging its ash slurry to ash dyke (engineered ash dyke in pond no. 3) with over flow lagoon and Ash Water Recirculation System (AWRS) to reuse the water from ash pond/dyke in TPP.
3. The legacy ash from ash pond no. 1 & 2 is excavated and transported for its use by the NHAI and other identified agency of TPP.
4. The peripheral kachcha embankments-cum-roads of ash ponds no. 1 & 2 are being used for transportation of ash by the agency.
5. There is no any discharge from ash ponds (1 & 2) and ash dyke (3) to any adjoining agricultural land. However, the run-off water during rain with ash available on the peripheral kachcha embankments-cum-roads may go to nearby agricultural land.
6. There was no static/ permanent water sprinkler in and around ash pond no. 1 & 2. The unit uses mobile water tankers for sprinkling of water on peripheral roads. In-spite of the fact, there was no proper control of fugitive emission around the ash pond no. 1 & 2 from where legacy ash is being excavated and transported for its use, presently.
7. The installation of low NOx burner have been completed. The installation of Flue Gas De-sulphurization (FGD) is under progress. The installation of FGD to be ensured by 31.12.2022 as per CPCB direction dated-11.12.2017. The amended MoEF&CC, GoI notification dated-31.03.2021 permits the category-B Thermal Power Plant (located within 10 Km. radius of non-attainment city-Muzaffarpur) to comply with the emission norms up to 31.12.2023. MTPS comes under category B- TPP. It is located within 10 Kms. from the limits of non- attainment city-Muzaffarpur.
8. TPP was in process of installation of silos (2x900 tone capacity) for collection of dry fly ash from Stage-II units. Presently, unit is collecting dry ash from 4 nos. of buffer hoppers and associated system for its channelization to the users.
9. Road connecting NH-28, Kanti to Kothiya Village and passing between ash pond no. 2 and ash dyke no. 3 is presently kachcha. TPP has requested District Planning Officer, Muzaffarpur for construction of PPC road (Pucca road) along with deposit of Rs. 22 lakhs as an advance amount. As reported, tender has been floated by the concerned department. The

completion of construction of pucca road is expected by March, 2023, as reported.

10. STP is under construction. Liquid Waste Water Treatment Plant is operational. Storm water and process water drains are separated. The cooling water is kept in closed circuit.
11. Rain water harvesting system consisting of ground water recharge pits (18 nos. in plant and colony), surface water storage pond (02 nos.) have been implemented.
12. The unit has complied the directions of the Board and conditions of EC and CTOs except (a) installation of silos for dry fly ash collection and installation of STP. These are expected to complete by 31.03.2023.
13. The TPP has a proposal for installation of solar PV plant through its Renewable Energy Department in the ash pond no. 1 & 2 after utilization of available legacy ash/ stabilization/reclamation.

E. Recommendation:

1. The unit shall submit plan for (a) utilization of all legacy ash available in the ash pond no. 1 & 2 in accordance with the MoEF&CC, GoI notification no. 5481 (E), dated-31.12.2021 or (b) stabilization/reclamation of ash pond no. 1 & 2 on or before 31.12.2022.
2. The unit shall complete installation of silos for dry ash collection and STP by 31.03.2023 and FGD by 31.12.2023 in compliance with MoEF&CC, GoI notification dated-31.03.2021.
3. TPP shall ensure that excavation, loading, unloading and storage of ash are done in environmentally sound manner with all precautions to prevent air & water pollution such as regular water sprinkling and transportation of ash in covered vehicles and shall submit the status in the prescribed format as per MoEF&CC, GoI notification no. 5481 (E), dated-31.12.2021.


 (S. Chandrasekar)
 Member Secretary
 BSPCB, Patna.