Joint Committee interim report in the matter of Hon'ble National Green Tribunal (NGT), Southern Bench, Chennai order dated.23.11.2021 in O.A. No. 227 of 2021;

Sri Battu Satish Reddy, Pattivanipalem Village, Visakhapatnam District has filed an application in Hon'ble NGT regarding the non-compliance of the conditions imposed in the Environmental Clearance (EC) granted to the M/s. Simhadri Super Thermal Power Project (Stage-I&II), NTPC Limited, Parawada (M), Visakhapatnam District and also the conditions imposed by the Andhra Pradesh Pollution Control Board (APPCB) in Consents granted. Further on account of non-maintenance of the pollution control mechanism in a proper way and also mismanagement of the fly ash generated and pollution caused to air, water & soil resulting in huge health hazards to the people in the locality.

The Hon'ble NGT order dated. 23.11.2021 has appointed a Joint Committee consisting of (i) The District Collector, Visakhapatnam District; (ii) a Senior Officer from Ministry of Environment Forest and Climate Change (MoEF&CC), Integrated Regional Office, Vijayawada; (iii) a Senior Officer from the Central Pollution Control Board (CPCB), Regional Office, Chennai and (iv) a Senior officer from the Andhra Pradesh Pollution Control Board (APPCB) to inspect the area in question and submit a factual as well as action taken report if there is any violation found with a direction as to ascertain following:

i. *Whether there was any violation of Environmental Clearance(EC) and consent conditions committed by the first respondent / NTPC unit,*

ii. *Whether the pollution control mechanism provided are sufficient to mitigate the situation of causing pollution of air, water and soil,*

iii. *Whether the ash pond maintained by the first respondent are being properly maintained as directed by the Andhra Pradesh Pollution Control Board to avoid percolation of the fly ash to contaminate the ground water,*

iv. *Whether the first respondent unit is complying with in the 100% disposal of fly ash generated and if not, what is the percentage (%) of disposal achieved by them*

and what is the nature of action taken by the regulators for non-compliance of the same,

v. *Whether the Ambient Air Quality (AAQ), Ground Water and the soil quality has been affected on account of any of the activities of the first respondent and if any contamination has been caused, what is the nature of remediation to be taken for the purpose of mitigating the situation,*

vi. *If any damage has been caused to the environment on account of the violations committed, then the committee is directed to assess the damage caused and also environmental compensation payable by the first respondent,*

vii. *If there is any further study to be conducted for carrying out the remediation process in an effective manner, the committee is at liberty to suggest and co-opt any expert in this field for the purpose of suggesting the remediation method.*

viii. *When they are conducting the study regarding the area unit affected on account of the pollution, they are directed to ascertain the impact of pollution on water, air and soil pollution within the project area and also a reasonable distance outside the project area and if there is any damage caused to the agricultural operation on account of the air pollution/dust pollution, that aspect also is directed to be considered by the committee while submitting the report and also including the compensation if any payable on that aspect considering the nature of damage caused to the fertility of the land, affecting the productivity.*

The copy of the NGT order dated. 23.11.2021 is submitted as Annexure I.

In compliance with the Hon`ble NGT order dated.23.11.2021 the following members were nominated:

i. Sri. M. Venugopal Reddy, Joint Collector & Additional District Magistrate, Visakhapatnam – Nominee of the District Collector, Visakhapatnam*

ii. Dr. Suresh Babu Pasupuleti, Scientist-D, Integrated Regional Office (IRO), Ministry of Environment, Forest and Climate Change, Vijayawada – Senior officer from MoEF&CC, Vijayawada.

iii. Sri S. Karthikeyan, Scientist-C, Central Pollution Control Board, Regional Office, Chennai – Nominated by CPCB, Chennai.

iv. Sri M. Pramod Kumar Reddy, Environmental Engineer, AP Pollution Control Board, Regional Office, Visakhapatnam – Nominated by APPCB.

v. Dr. Shaik Basha, Scientist & Head, CSIR-NEERI Zonal Center, CSIR-National Environmental Engineer Research Institute, IICT Campus, Tarnaka, Hyderabad – Expert Member

*The District Collector has nominated the Joint Collector & Addl. District Magistrate as member of the Joint Committee as the District Collector is pre-occupied with the meetings.

The committee met in the chambers of the Joint Collector & Additional District Magistrate on 28.12.2021 at 12:15 PM along with the District officers of Agriculture Department & Ground water Department. The committee discussed the issue elaborately and decided to carry-out the inspection of the committee on 29.12.2021. The joint Committee along with District officials from Agriculture Department & Ground water Department inspected M/s. Simhadri Super Thermal Power Project (Stage-I&II), NTPC Limited, and its surrounding area on 29.12.2021.

The joint Committee also visited the villages namely Pittavanipalem, Devada & Marada Dasaripeta and heared the version of complainant Sri Battu Satish Reddy, Pittavanipalem at Ramalayam. During the visit, group of villagers met the committee and mainly the following villagers informed their problems due to operation of M/s. Simhadri Super Thermal Power Project, NTPC Limited to the committee members:

1. Sri B. Satish Reddy, Pittavanipalem.
2. Smt B. SuryaKumari, Corporator, 77th Ward GVMC, Pittavanipalem.
3. Sri Pitta Naringa Rao, Pittavanipalem
4. Sri A. Ramu, Pittavanipalem.
5. Sri A. Payad Raju, Pittavanipalem.
6. Sri D. Thata Rao, Marada Dasaripeta.
7. Sri D. Govinda, Marada Dasaripeta.
8. Sri K. Appa Rao, Devada.

The main problems/issues informed by the villagers to the committee are:

1. Huge dust emissions emanates from ash pond particularly during the summer season.
2. Suffering with health issues like skin allergies, breathing problems and cancer due to pollution from M/s. Simhadri Super Thermal Power Project, NTPC Limited.
3. The ground water in surrounding villages is contaminated due to pollution from M/s. Simhadri Super Thermal Power Project, NTPC Limited.
4. Not providing proper medical health facilities to the villagers.
5. Not providing job opportunities to the villagers.
6. Ash (Cenosphere) from NTPC entering into creek during heavy rains leading to the Sea, thereby decreasing the fish catch and affecting fishermen livelihood.
7. Dust pollution due to vehicular movement while transporting the ash from ash ponds which are located within 300 m from habitation.
8. The villagers submitted representations (2no.s) to the committee are submitted as Annexure II.

The joint committee further interacted with Dr. Ravindra, Community Health Centre, Pattivanipalem during the visit and he informed the committee that the villagers are approaching Health Centre with dermatitis & psoriasis skin allergic problems.

M/s. Simhadri Super Thermal Power Project (Stage-I&II), NTPC Limited, is operating at Parawada, Visakhapatnam District and generating electricity of 2000 MW (4 X 500 MW) using indigenous coal. The Stage -1 was established in the year 2002 and Stage-II in the year 2011. The Power Plant has established in an extent of 3384 Acres (Plant Area: 1976 Acres, Green Belt – about 650 Acres (20%), Reservoir of 45 days capacity: 200 Acres (approx.), Township: 311 Acres and Ash Pond: 605 Acres. At present the industry is generating the electricity from 1930 MW to 1960 MW in an average. A copy of the Environmental Clearances issued by MoEF&CC and CFO order dated.31.07.2017 of APPCB which is valid up to 31.08.2022 are submitted as Annexure-III.

The observations of the Joint Committee are submitted below:

NGT Direction No. i	**Whether there was any violation of Environmental Clearance (EC) and consent conditions committed by the first respondent / NTPC unit,**
	The Joint Committee inspected M/s. Simhadri Super Thermal Power Project (Stage-I&II), NTPC Limited and verified the present compliance status with the conditions stipulated in the Environmental Clearance (EC) granted by MoEF&CC & Consents granted by Andhra Pradesh Pollution Control Board(APPCB) to M/s. Simhadri Super Thermal Power Project (Stage-I&II), NTPC Limited, Parawada, Visakhapatnam District. The following *non-compliances* of the main conditions of Environmental Clearance orders to control pollution observed by the Committee: 1. Detailed implementation status of Rehabilitation Master Plan for rehabilitation of 150 families, compensation package, training facilities etc., not submitted. 2. The industry has not installed adequate high pressure mist spray sprinklers at coal storage yard to control fugitive emissions effectively and they have provided only few mechanical water sprinklers at coal stock yards which are not sufficient. 3. The industry has not adopted mechanism for continuous monitoring of ground water establishing good network of observation wells in consultation with the Central Ground Water Board. Not submitting the results and data to ascertain the status of water quality and findings for evaluation. 4. Not carried leachate collection through Lysimeter at 6-10 locations around the ash dyke and not submitting monitoring report for ascertaining its change in water quality. 5. Not developed green belt around the ash dyke for controlling fugitive dust emission. 6. Not submitting half yearly report on the status of implementation of the conditions and environmental safeguards to the MoEF&CC, Regional Office.

	7. As per GSR.02 (E), dated 02.01.2014, the analysis report of the ash & sulphur content present in the coal is not being submitted in quarterly basis to the MoEF&CC. 8. Uploading of EC letter's, six monthly compliance report along with all monitoring data and Environmental Statement in Form-V is not being uploaded in the company website for public transparency. **The following non-compliances of the main conditions of consent for Operation of APPCB to control pollution observed by the Committee:** 1. The industry is not maintaining permanent mechanical sprinklers for suppression of dust on the haul roads in between the villages. 2. The industry has not maintaining water cover in the ash pond area to prevent fly ash from getting air borne and air pollution in the surrounding area especially to the residents of Pittavanipalem. 3. During heavy rains, the industry has failed to collect the total cenosphere which is very light weight air entrapped ash particle in overflow lagoons thereby the cenosphere particles find its way to creek along with storm water. 4. The industry has developed the greenbelt to the extent of 20% of total area against the consent condition of 33% of total area of 3384 Acres. In order to meet 33% of the green belt development as per the conditions imposed by APPCB. M/s. Simhadri Super Thermal Power Project, NTPC Limited, has reported that they have planted 5,50,000 saplings under Green Visakha Programme and also planted around 2.8 Lakh saplings in paderu under accelerated afforestation Programme. The representative of the industry has informed that they have complied with the 33% of the green belt of total plant area excluding ash pond area, reservoir area & Township area.
NGT Direction No. ii	**Whether the pollution control mechanism provided are sufficient to mitigate the situation of causing pollution of air, water and soil,**
	Pollution control mechanism provided w.r.t air, water & soil: **Air:** M/s. Simhadri Super Thermal Power Project, NTPC Limited, has installed

	4 No. of Boilers of capacity 1675 tons per hour (TPH) each using pulverized coal as fuel which contains about 40% ash and 0.28 % of Sulphur and provided with Electro Static Precipitators as air pollution control equipment to the Boilers and provided 2 Nos. of bi-flue stacks of 275 M height each to disperse the emissions. The Ash generated from the boilers is collected in ash silos and issued to brick and cement manufacturers, remaining ash being sent to Ash Ponds in the form of slurry. Once the ash is settled in Ash Ponds, the water is recollected for making ash slurry. During the process of power generation about 33,000 MT of coal burns per day and results in generation of about 9000 MT of fly ash & 2000 MT of bottom ash per day and the uses Sea water for ash slurry making. The industry has provided 3 Nos. of Silos (500 Tons each) for collection of dry ash for Phase - I and 3 Nos. of Silos (1200 Tons each) for stage - II and Dry ash system stage - I is being augmented with 2 X 1200 Tons + 1 X 500 MT Silos for better fly ash collection. M/s. Simhadri Super Thermal Power Project, NTPC Limited has provided dust suppression systems at coal handling sections to avoid fugitive emissions. Conocorpus species of tree plantation developed in around coal piles to mitigate fugitive dust emissions. Dust extraction systems have been provided in coal handling area including coal stock yard. Flue Gas Desulphurization (FGD) is under implementation, to be commissioned on or before December 2022. Combustion modification (De-NO_x /Low NO_x) is under implementation, to be completed on or before December 2022. **Continuous air quality monitoring Station:** M/s. Simhadri Super Thermal Power Project, NTPC Limited has installed 3 continuous ambient air quality monitoring stations at Pittavanipalem, Devada, Marada Dasaripeta for PM_{10}. The industry has installed 3 No. Continuous Ambient Air Quality Monitoring stations at the periphery of the industry and connected to the CPCB/APPCB web site as per the directions of the Board. M/s. Simhadri Super Thermal Power Project, NTPC Limited has installed on-line stack analyzers for all four stacks of 4 x 500 MW units. The

	continuous emission monitoring system connected to APPCB/CPCB website to upload the data continuously. **Water:** M/s. Simhadri Super Thermal Power Project, NTPC Limited consumes 4,29,240 KLD of Sea water as make up water for industrial cooling and 21,600 KLD of Fresh water. The industry generates about 2,68,810 KLD wastewater (Once through cooling tower blow downs, Boiler blow downs etc., of 2,10,220 KLD discharge into sea & DM plant regeneration/ash pond effluent etc. of 48280 KLD are being re-circulated for ash slurry preparation & for dust suppression at coal stock yards). M/s. Simhadri Super Thermal Power Project, NTPC Limited has provided Effluent Treatment Plant consisting of Neutralization pond, Tube settler and Coal settling pond for treating the DM plant regeneration effluents, CHP effluent etc.,. M/s. Simhadri Super Thermal Power Project, NTPC Limited has provided 2 no. of STPs of 1700 KLD capacity for township and 65 KLD capacities for Plant. The treated sewage effluents utilized for on land irrigation within the industry premises. The main plant effluent, which consists of the sea water (to the extent of 99.9%) that is used for cooling purpose, in the Cooling water circulation system. The steam used for Power generation gets cooled in the Condenser by way of seawater based Circulating Cooling water system and the sea water again gets cooled in the Cooling Towers. The cold water from Cooling Towers is required to be blow down and replaced with makeup water to maintain required COC (Cycles of Concentration). The seawater blow down from the Cooling water circuit is sent to the Common Monitoring Basin from where a combined treated effluent having parameters within the limits is sent to Marine out Fall (MOF) located 750 meters from the sea shore. This marine outfall is designed with the help of National Institute of Oceanography (NIO), Goa and National Institute of Ocean Technology (NIOT), Chennai and Tokyo KYUEI Co. Ltd., Japan. **Continuous effluent quality monitoring station:** M/s. Simhadri Super Thermal Power Project, NTPC Limited has installed

	Continuous Effluent Quality Monitoring (CEQMS) System for monitoring the effluent quality in real time basis, and all the parameters such pH, TSS, Temperature and conductivity data is uploaded to CPCB / APPCB on continuous basis. **Solid Waste Management:** There are four lagoons are existing and the lagoon 1 & 3 covered in an area of 85 acres each and lagoon 2 & 4 covered in an area of 115 acres each. Each lagoon is provided with separate garland drains which are connected to Toe drains around dykes for collection of seepage water which is pumped back for recirculation for ash slurry preparation and dust suppression in ash pond area. Garland drains which are connected to toe drains around dykes for collection of seepage water which is pumped back for recirculation to avoid soil contamination in surrounding area. The Joint Committee carried out the ambient air quality and collected ground water & soil Samples during the visit on 29.12.2021. The Ground water Department, Visakhapatnam has collected the ground water samples and Department of Agriculture, Visakhapatnam collected the soil samples in Pittavanipalem, Devada & Marada Dasaripeta villages. APPCB has monitored the ambient air quality monitoring, Source emission monitoring and collected Wastewater samples for analysis. The samples analysis is under progress and it may take 3-4 weeks.
NGT Direction No. iii	**Whether the ash pond maintained by the first respondent are being properly maintained as directed by the Andhra Pradesh Pollution Control Board to avoid percolation of the fly ash to contaminate the ground water**
	There are four lagoons are existing and the lagoon 1 & 3 covered in an area of 85 acres each and lagoon 2 & 4 covered in an area of 115 acres each. Seawater is being used to mix ash and then transport it to ash ponds as ash slurry through pipes. After discharge to ash ponds, water is decanted through decant wells and collected in Overflow lagoons (OFL). There are two overflow lagoons OFL-1 and OFL-2 each have an area of 19 and 18 acres respectively with a depth of 4-5 meters. The decanted water

	collected in the OFLs is pumped back to plant, re-circulated and used in ash slurry again. Toe drain arrangement is there to collect seepage water which is also reused with decanted water. Garland drain provided which is connected to Toe drains around dykes for collection of seepage water which is pumped back for recirculation. Storm water drains are connected to creek and is controlled using sluice gate which is kept closed in normal conditions. Cenosphere is a very light weight air entrapped particle. Due to heavy rains in ash dyke, some of the cenosphere particles escaped to creek along with storm water which was cleaned immediately. Cenosphere is used in oil and gas exploration industry and has international market. Recently observed cenosphere is discharging along with storm water to the sub-creek and issued directions after reviewing in Task force committee on 21.12.2021. APPCB also imposed BG of 1.28 Crores towards compliance of the conditions / directions stipulated by APPCB and yet to submit the Bank Guarantee to APPCB. Now the industry collecting Cenosphere material by providing additional screen with mesh to stop spill over of any cenosphere. M/s. Simhadri Super Thermal Power Project, NTPC Limited, has not provided HDPE liner in ash ponds as per the recommendations of the National Institute of Hydrology, Roorkee and with the approval of MoEF&CC vide letter No.J-13011/19/94-IA.II (T) dt:20.05.2002. A copy of the letter is submitted as Annexure-IV.
NGT Direction No. iv	**Whether the first respondent unit is complying with in the 100% disposal of fly ash generated and if not, what is the percentage (%) of disposal achieved by them and what is the nature of action taken by the regulators for non-compliance of the same,**
	Ash generation and utilization details for the year 2016 to 2022(upto October) are submitted as follows:

Year	Ash Generation	Ash Utilization	% of Ash Utilization
2016-17	3058234	2558190	84%
2017-18	3010763	3058021	102%

	2018-19	2975585	2979991	100%
	2019-20	2641122	4430120	168%
	2020-21	2448817	3033286	124%
	Apr-21 to Oct-21	1986578	1609698	81%

From 2017 to 2020, the industry has achieved 100% utilization of fly ash. Total stock in ash pond as on Oct 2021 is 12.07 Million MT. The representative of M/s. Simhadri Super Thermal Power Project, NTPC Limited informed that the power plant facing difficulties in achieving the 100% ash utilization due to providing the fly ash to end users through a transparent bidding process only as per recent guidelines issued by Ministry of Power, Government of India. A copy of the letter issued by Ministry of Power, Government of India dated.22.09.2021 is herewith submitted as Annexure-V.

NGT Direction No. v

Whether the Ambient Air Quality (AAQ), Ground Water and the soil quality has been affected on account of any of the activities of the first respondent and if any contamination has been caused, what is the nature of remediation to be taken for the purpose of mitigating the situation,

APPCB has conducted ambient air quality monitoring on 15.12.2021 to 17.12.2021 on the terrace of complainant's house, D.No.6-10, Back side of the Ramalayam Temple, Pittavanipalem(V), Parawada, Visakhapatnam and also conducted mobile continuous ambient air quality monitoring station at the following locations of M/s. Simhadri Super Thermal Power Project, NTPC Limited:

1. Pump house.
2. Administration Building.
3. Sarada guest house, Township.

As per the analysis results of ambient air quality, the PM_{10} values are exceed the APPCB norms.

Location	Date of monitoring	PM_{10} in ($\mu g/m^3$)
Complainant's house	15.12.2021 to 16.12.2021	120
	16.12.2021 to 17.12.2021	127
Pump Station.	16.12.2021 to 17.12.2021	131
Administration Building.	17.12.2021 to 18.12.2021	126

	Sarada guest house, Township	18.12.2021 to 19.12.2021	118
		Standard(24 Hrly average)	**100**
	APPCB has conducted stack monitoring for the stack attached to coal fired boilers of unit I, II, III & IV on 16.12.2021 to 20.12.2021 and as per the analysis results the Particulate Matter (PM) values are within the APPCB norms. APPCB has also collected ground water samples from the borewells on 15.12.2021 at Pittavanipalem (Complainants village), Devada, Marada Dasaripeta villages, which are nearer to the ash ponds. The analysis reports of air & water monitoring conducted by APPCB are submitted as Annexure VI. As per the analysis results of the water samples collected by APPCB from bore wells on 15.12.2021 to 19.12.2021 all the parameters are within the drinking water specification IS10500:2012. The Total Dissolved Solids, Total Hardness (as CaCO3) & Nitrate (as NO3) for the bore well samples collected at hand pump-3 at Beri Ayyanna house Pittavanipalem village and Total Hardness (as CaCO3) & Nitrate (as NO3) hand pump-2 at Post office Devada village are slightly exceeded the drinking water specification IS10500:2012. The joint committee monitored the ambient air quality, stacks, ground water from piezo wells & borewells and soil quality, during the visit on 29.12.2021. The Ground water Department, Visakhapatnam has collected the ground water samples and Department of Agriculture, Visakhapatnam collected the soil samples. APPCB has monitored the ambient air quality, stacks and effluent samples collected for analysis. The samples analysis is under progress and it may take 3-4 weeks.		
NGT Direction No. vi	**If any damage has been caused to the environment on account of the violations committed, then the committee is directed to assess the damage caused and also environmental compensation payable by the first respondent,**		
	1. Not provided mechanical water sprinkling system at haul roads. 2. Not developed 33% greenbelt in the factory premises. 3. Not maintained water curtains in the ash ponds.		

	4. The industry is discharging cenosphere from ash ponds nearby sub creek even after issuing several notices from 2019 onwards. Recently observed cenosphere is discharging along with storm water to the sub-creek and issued directions after reviewing in Task force committee on 21.12.2021. APPCB also imposed BG of 1.28 Crores towards compliance of the conditions / directions stipulated by APPCB. *Environmental compensation will be estimated based on the violations committed and will be submitted in final report.*
NGT Direction No. vii	**If there is any further study to be conducted for carrying out the remediation process in an effective manner, the committee is at liberty to suggest and co-opt any expert in this field for the purpose of suggesting the remediation method.**
	The District Collector has nominated Dr. Shaik Basha, Scientist & Head, CSIR-NEERI Zonal Center, CSIR-National Environmental Engineer Research Institute, IICT Campus, Tarnaka, Hyderabad as expert to assist the committee. The expert from NEERI suggested to conduct long term impact assessment study to ascertain the impact of pollution on water, air and soil within 5 Km radius of the project area including ash pond area through any reputed institutions and also assessment of impacts on human health due to pollution of M/s. Simhadri Super Thermal Power Project, NTPC Limited, if any, through reputed organization. Based on the study report, necessary remediation methods shall be suggested to M/s. Simhadri Super Thermal Power Project, NTPC Limited.
NGT Direction No. viii	**When they are conducting the study regarding the area unit affected on account of the pollution, they are directed to ascertain the impact of pollution on water, air and soil pollution within the project area and also a reasonable distance outside the project area and if there is any damage caused to the agricultural operation on account of the air pollution/dust pollution, that aspect also is directed to be considered by the committee while submitting the report and also**

	including the compensation if any payable on that aspect considering the nature of damage caused to the fertility of the land, affecting the productivity.
	In order to ascertain the impact of pollution on water, air, and soil pollution in both project and surrounding areas, the Joint Committee recommends the following measures/studies to be taken up by the M/s. Simhadri Super Thermal Power Project, NTPC Limited immediately: 1. The industry shall avoid the excavation operations in ash ponds during heavy winds. 2. The industry shall install micro meteorological station to monitor wind velocity and wind direction, accordingly, the industry shall handle the excavation operations in ash ponds 3. The industry shall install adequate high pressure mist spray sprinklers at coal storage yard and also develop thick greenbelt with tall growing trees to control fugitive emissions effectively. 4. The industry shall provide bitumen / concrete to the haul roads in ash pond area where the heavy vehicular movement is there for transporting pond ash and also install mechanical water sprinklers along the haul road to control fugitive dust emissions in surrounding area. 5. The industry shall provide truck-tyre washing facility near ash pond area to avoid dust emissions during the movement of the trucks. 6. The industry shall develop atleast 10 rows of tall growing trees all around the ash ponds which may act as wind barrier. 7. The industry shall conduct long term impact assessment study to ascertain the impact of pollution on water, air and soil within 5 Km radius of the project area including ash pond area through NEERI/any reputed institutions and also conduct assessment study of impact on human health due to pollution of M/s. Simhadri Super Thermal Power Project, NTPC Limited if any.

The joint committee visited the M/s. Simhadri Super Thermal Power Project, NTPC Limited site on December 29, 2021 and monitored ambient air quality for 24 hours at two locations, two flue gas stacks and also collected groundwater and soil from three villages (Pittavanipalem, Devada and Dasaripet). Final treated wastewater samples from STPs (two in township and one in plant) were also collected. The analysis of samples for various parameters is under progress and may take 3-4 weeks for completion of the same. Further, the environmental compensation is to be estimated based on the violations committed. Various information/documents are required to be collected from different agencies and to be verified. In view of this, the joint committee requests Hon'ble NGT to grant 12 weeks time for the submission of the final report.

Sri. M. Venugopal Reddy,
Joint Collector & Additional District Magistrate,
Visakhapatnam

Dr. P. Suresh Babu
Scientist-D,
MoEF&CC, Vijayawada

Sri. S. Karthikeyan
Scientist-C, CPCB, Chennai

Dr. Shaik Basha,
Scientist & Head, CSIR-NEERI
Zonal Center, Hyderabad

Sri. M. Pramod Kumar Reddy,
Environmental Engineer,
APPCB, Visakhapatnam

Item No.01:

BEFORE THE NATIONAL GREEN TRIBUNAL

SOUTHERN ZONE, CHENNAI

Original Application No. 227 of 2021 (SZ)

(Through Video Conference)

IN THE MATTER OF:

Battu Satish Reddy,
Andhra Pradesh. ...Applicant(s)

Versus

National Thermal Power Corporation Ltd.,
Simhadri Plant,
Andhra Pradesh and others. ...Respondent(s)

Date of hearing: 23.11.2021.

CORAM:

HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER

HON'BLE DR. K. SATYAGOPAL, EXPERT MEMBER

For Applicant(s): Mr. Sravan Kumar

For Respondent(s): Mrs. Maduri Donti Reddy for R3, R5 & R6

ORDER

1. The grievance in this application is regarding the non-compliance of the conditions imposed in the Environmental Clearance (EC) granted to the first respondent/National Thermal Power Corporation Ltd (NTPC), Simhadri Power Plant at Visakhapatnam of Andhra Pradesh and also the conditions of imposed by the Andhra Pradesh Pollution Control Board (APPCB) in

Consents granted. Further on account of non-maintenance of the pollution control mechanism in a proper way and also mismanagement of the fly ash generated, pollution is caused to air, water and soil resulting in huge health hazards to the people in the locality. Though on the basis of the complaints, certain inspections were conducted and found that there are certain violations of Environmental Clearance (EC) conditions and consent conditions and the pollution control mechanism is not properly maintained by them, certain directions were issued, but there was no improvement in the situation there, in respect of pollution being caused in the locality on account of their operation.

2. Further, on account of non-maintenance of the Ash pond by the National Thermal Power Corporation Ltd (NTPC), in the Simhadri Thermal Power Plant, it causes ground water pollution as well. They have not even utilised the necessary Corporate Social Responsibility (CSR) fund expected to be used by them for the development of the areas around the plant for dealing with the problems of the project affected people, they are also not filing the Half–Yearly statements as per the Environmental Clearance (EC) conditions and the Ministry of Environment, Forests and Climate Change (MoEF&CC), Regional Office has found some dissatisfaction regarding the non-compliance of conditions, but no serious action was taken against them. So the applicant has no other remedy except to approach this Tribunal seeking the following reliefs:-

(1) *Direct the Union Ministry of Environment, Forest & Climate Change and AP Pollution Control Board to initiate action against Respondent No. 1 for violating the Conditions No. (VII), (IX), (X), (XI), (XII), (XIII), (XV), (XVII), (XVIII) of the Environment Clearance dated 23.07.1996 according to the clause 3 of the EC and Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution), 1981, Environment (Protection) Act, 1986, The Public Liability Insurance Act, 1991;*

(2) *Direct the Respondents No. 1 to pay appropriate compensation, rehabilitation and resettlement to the residents of Pittavaripalem Village of Visakhapatnam District as per condition No. (IX) of the Environment Clearance dated 23.07.1996 and implement Rehabilitation and Resettlement Policy of 2017 to the affected people of Simhadri Thermal Power Plant of NTPC at Pittavani Palem near Visakhapatnam of Andhra Pradesh;*

(3) *Direct Respondent No. 1 to submit the report to this Tribunal on Rs. 301.55 Crores, 270.42 Crores money spent for the implementation of environmental mitigative and environmental protection as mandated in EC dated 23.07.1996 and 01.08.2007;*

(4) *Direct the Respondent No. 1 to provide mandatory Green Belt in the Unit around Ash pond according to the*

Environment Clearances dated 23.07.1996 and 01.08.2007.

If sufficient land is not available the project may be restricted according to the availability of natural resources for implementing environment mitigation measures;

3. On going through the allegations made in the application, we are satisfied that there arises a substantial question of environment which requires the interference of this Tribunal for resolving the same. So, the application is admitted.
4. Issue notice to the respondents by Registered post with acknowledgement due, by e-mail and also by dusthi if possible and produce proof of service on them by filing proof affidavit as per rules.
5. The learned standing counsel appearing for the official respondent submitted 3, 5 & 6 submitted that they have received the copy of the application.
6. The applicant is also directed to produce necessary requisite along with postal cover and the necessary postal stamps before this Tribunal within a week, so as to enable this Tribunal to send notice to the respondents through Tribunal, to ensure service on them to proceed against them if they did not appear, in their absence in accordance with law.
7. In order to ascertain the genuineness of the allegations made in the application, we feel it appropriate to appoint a Joint Committee consisting of **(1)** The District Collector, Visakhapatnam District **(2)** a Senior Officer from Ministry of Environment Forests and Climate Change (MoEF &CC),

Integrated Regional Office, Vijayawada, **(3)** a Senior Officer from Central Pollution Control Board (CPCB), Regional Office, Chennai, and **(4)** a Senior Officer from Andhra Pradesh Pollution Control Board (APPCB), Head Office, Vijayawada, Andhra Pradesh to inspect the area in question and submit a factual as well as action taken report, if there is any violation found.

8. The committee is directed to ascertain as to:

i) Whether there was any violation of Environmental Clearance (EC) and Consent conditions committed by the first respondent/NTPC unit,

ii) Whether the pollution control mechanism provided are sufficient to mitigate the situation of causing pollution of air, water and soil,

iii) Whether the ash pond maintained by the first respondent are being properly maintained as directed by the Andhra Pradesh Pollution Control Board to avoid percolation of the fly ash to contaminate the ground water,

iv) Whether the first respondent unit is complying with the 100% disposal of fly ash generated and if not, what is the percentage (%) of disposal achieved by them and what is the nature of action taken by the regulators for non-compliance of the same,

v) Whether the Ambient Air Quality (AAQ), Ground Water and the soil quality has been affected on account of any of the activities of the first respondent and if any contamination has been caused, what is the nature of remediation to be taken for the purpose of mitigating the situation,

vi) If any damage has been caused to the environment on account of the violations committed, then the committee is directed to assess the damage caused and also environmental compensation payable by the first respondent,

vii) If there is any further Study to be conducted for carrying out the remediation process in an effective manner, the committee is at liberty to suggest and co-opt any expert in this field for the purpose of suggesting the remediation method.

viii) When they are conducting the study regarding the area unit affected on account of the pollution, they are directed to ascertain the impact of pollution on water, air and soil pollution within the project area and also a reasonable distance outside the project area and if there is any damage caused to the agricultural operation on account of the air pollution/dust pollution, that aspect also is directed to be considered by the committee while submitting the report and

also including the compensation if any payable on that aspect considering the nature of damage caused to the fertility of the land, affecting the productivity.

9. The Andhra Pradesh Pollution Control Board (APPCB) will be the nodal agency for co-ordination and for providing necessary logistics for this purpose.

10. Considering the gravity of the allegations made and also the nature of pollution alleged, the District Collector himself/herself is directed to participate in the inspection instead of deputing any other Junior Officer for this purpose.

11. The Committee is also directed to submit the report to this Tribunal on or before ***07.01.2022*** by e-filing in the form of searchable PDF/OCR Supportable PDF and not in the form of Image PDF along with necessary hardcopies to be produced as per rules.

12. The applicant is directed to serve a set of papers to the members of the Committee within a week, so as to enable them to comply with the direction without delay. If the committee is not able to submit the final report within the time specified above, then they are directed to file the Interim report regarding the violations committed by them and the probable damage, if any, caused to the water quality, air quality and soil quality in that area before the next hearing date.

13. The Registry is directed to communicate this order to the members of the committee and also to the official respondents immediately through e-mail, so as to enable them to comply with the direction for filing independent response as well as report directed by this Tribunal.

14. For appearance of parties, filing their independent response and also for consideration of report, post on ***07.01.2022.***

.....J.M.

(Justice K. Ramakrishnan)

Sd/-

.....E.M.

(Dr. K. Satyagopal)

O. A. No.227/2021, (SZ)
23.11.2021,Sr.

తేది: 29-12-2021

మహారాజ శ్రీ గౌరవనీయులైన విశాఖపట్నం జిల్లా కలెక్టర్ వారికీ మరియు పొల్యూషన్ బోర్డు వారికీ దివ్యసముఖమునతో పెదగంట్యాడ మండలం 77వ వార్డ్ పిట్టవానిపాలెం మరడదాసరిపేట దేవాడ గ్రామాలప్రజలు నమస్కరించి వ్రాసుకున్న విన్నప్పం.

విషయం:- **NTPC కాలుష్యం నుండి పిట్టవానిపాలెం మరడదాసరిపేట దేవాడ గ్రామాలను కాపాడండి.**

అయ్యా : NTPC నుండి వెలువడే విద్యుత్ తయారికి ఉపయోగించే బొగ్గు వ్యర్థాలు మా గ్రామాలకు అతి దగ్గరగా సుమారు 50 నుండి 100మి॥ దూరంలోఉన్న యాస్ పాండ్ కి విడుదల చేస్తారు. దానివలన భుగార్భాజలలు కలుషితం అయిపోయినవి. ఇక్కడ ఉన్న నీరు మనుషులు గాని, పశువులు గాని, తాగడానికి గాని, వాడుకోవడానికి సైతం పనికిరావు. NTPC ప్రారంభించి సుమారు 25 సంవత్సరాలు పైచిలుకు అవుతుంది. యాస్ పాండ్లు ప్రభావం ప్రత్యక్షంగా చూస్తేగాని అర్థం కాదు. సుమారు వేల టన్నుల బొగ్గు వ్యర్థాలను ఇసుక కంటే మెత్తగా ఉండే తెల్లటి బూడిదను సముద్రపు నీటిలో కలిపి పైపుల ద్వార పిట్టవానిపాలెం, మరడదాసరిపేట, దేవాడ గ్రామాలకు అనుకోనిఉన్న ఈ యాస్ పాండ్ కి వస్తుంది. 1000 ఎకరాల విస్తిరణంగల ఈ యాస్ పాండ్ 25మి॥ ఎత్తుగల చెరువులో ఈ బూడిద వచ్చి చేరుతుంది. ప్రతిరోజు ఎండ త్రివర్తను బట్టి, గాలివాటం బట్టి చుట్టుపక్కల ఉన్న గ్రామాలకు ఈ యాస్ ఎగిరిపడుతుంది. ఈ బూడిదలో అనేకరకమైన ప్రమాదకరమైన రసాయనలు వాతావరణంలో వేదజల్లుపడుతున్నయి. MERCURY SULPHUR DIOXIDE వంటి ఆరోగ్యనికి హానికరమైన వ్యర్థాలను మేము పిల్చే గాలి ద్వార త్రాగునీటి ద్వార శేరిరంలోకి చేరి అనారోగ్యం పాలవున్నాం. ఈ బూడిద వలన ప్రజలు భయంకరమైన అంతుచిక్కని వ్యాదులకు గురవుతున్నారని అన్వేర్మేంట్ సైన్సెస్ నివేదికలో పొందిపరచింది. NTPC ద్వార వచ్చే కాలుష్యం వలన చాలామందికి వంటిపై దద్దుర్లు పెద్ద పెద్ద పున్ను వచ్చి చర్మం అంత పాడైపోతుంది. పసిపల్లలో ఎదుగుదల కనిపించడం లేదు. గర్భశ్రావాలు ఉపిరితిత్తుల వ్యాదులు కిడ్న్, కేన్సేర్, అస్మా వంటి మరెన్నో వ్యాదులులతో ఇక్కడ ప్రజలు బాధపడుతున్నారు. వృద్దులు లేచి నిలపడలేనంత బలహీన పడుతున్నారు. ఈ సమస్య నందు ప్రభుత్వంవారు గాని NTPC వారు గాని పట్టించుకోవడం లేదు. ఇంతటి ప్రభావాన్ని కలిగిస్తున్న ఈ యాస్ పాండ్ నుండి ఈ గ్రామాలను సురక్షిత ప్రాంతానికి తరలించ్చామని ప్రజలు వేడుకుంటున్నారు.

2004వ సంవత్సరంలో అప్పటి MLA తిప్పల గురుమూర్తి రెడ్డి గారు శాసన సభ్యుగా ఉన్న సమయంలో మా గ్రామస్తులు అంత కలిసి NTPC కంపెనీ పనులు నిలిపివేసి ధర్నాలు చేసాము. అయితే ఆనాడు కంపెనీ పనులను ఆపవద్దు అని గ్రామాలను తరలించే బాధ్యత నేను తీసుకుంటానని MLA తిప్పల గురుమూర్తి రెడ్డి గారు మా ధర్నాలను విరమింప చేసారు.

2008వ సంవత్సరంలో గౌరవనీయులు సర్గియ ముఖ్యమంత్రి వై ఎస్ రాజశేఖర్ రెడ్డి గారు NTPC 2వ యూనిట్ ప్రారంభనికి వచ్చినప్పుడు యాస్ పాండ్ కు అనుకోని ఉన్న మూడు గ్రామాలను సురక్షితమైన ప్రాంతానికి తరలిస్తామని హామీఇచ్చారు. అప్పటి కేంద్ర విద్యుత్ శాఖ మంత్రి సుసిల్ కుమార్ సిండే గారు కూడా చెప్పి ఉన్నారు. దురదృష్టవశాత్తూ ముఖ్యమంత్రి వై ఎస్ రాజశేఖర్ రెడ్డి గారు మరణించాడం వలన తరలింపు ఆగిపోయినది. తరువాత ప్రస్తుత ముఖ్యమంత్రి వర్యులు వై ఎస్ జగన్మోహన్ రెడ్డి గారు కూడా సబ్బవరం బహిరంగంగా సభలో మాట ఇవ్వడం జరిగింది. మా నియోజకవర్గ MLA అన్నంరెడ్డి అదీప్ రాజు గారు కూడా మా గ్రామాలను తరలించాలని అసంబ్లిలో మాట్లాడటం కూడా జరిగింది. కానీ ఇప్పటివరకు ఎటువంటి చర్యలు తీసుకోలేదు. మా గ్రామాలయండు దయుంచి మా ఈ సమస్యను పరిష్కరించమని కోరుతున్నాం.

ఇట్లు

పిట్టవానిపాలెం, మరడదాసరిపేట, దేవాడ గ్రామా ప్రజలు

ISSUES IN PITTAVANIPALEM H/o. DEVADA VILLGE OF PEDAGANTYADA MANDAL

@@@

1) FLY ASH

2) GROUND WATER

3) HEALTH PROBLEM

4) AGRICULTURE

5) GVMC WATER

6) BREATHING PROBLEM

7) LANDS – WAKF BOARD LANDS

24/12/2018

TAHSILDAR
PEDAGANTYADA MANDAL
VISAKHAPATNAM DISTRICT

ANDHRA PRADESH POLLUTION CONTROL BOARD

ZONAL LABORATORY, VISAKHAPATNAM

D.No. 39-33-20/1/4,Behind RTA Office,
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ANALYSIS REPORT

Sample No. : **2019 – 02 – W – 96 to 101**

Sample location/Address : Pittavanipalem (V), Visakhapatnam.

Sample Source :
2019 – 02 – W – 96: Open well sample near Sri A. Appa Rao House, D.No.6–84
2019 – 02 – W – 97: Bore well sample near Sri K. Appa Rao House, D.No. 4–64
2019 – 02 – W – 98: Hand Bore well sample near Sri P. Appa Rao House, D.No.4–55
2019 – 02 – W – 99: Bore well sample near Sri B. Appala Reddy, House, D.No.5–55
2019 – 02 – W – 100: Open well sample near MPP School
2019 – 02 – W – 101: Bore well sample near Pydimamba Temple

Sample collected on : 07.02.2019

Sample received on : 08.02.2019

Sample collected by : Junior Scientific Officer, Regional Office, Visakhapatnam

Sl. No.	Parameters	2019 02 W-96	2019 02 W-97	2019 02 W-98	2019 02 W-99	2019 02 W-100	2019 02 W-101	Drinking water Standards: (Permissible Limit) IS:10500:2012
1.	pH	8.15	7.98	7.14	7.33	8.54	7.56	6.5-8.5
2.	Conductivity (µS/cm)	2460	2990	18250	14330	2250	41800	--
3.	Total Dissolved Solids at 105^0C	1812	2304	17312	9852	1644	37284	2000 mg/L
4.	Chlorides a Cl^-	538	782	7143	3816	489	17514	1000 mg/L
5.	Total Hardness as CaCO3	640	788	8000	5100	472	14000	600 mg/L
6.	Total Alkalinity	368	308	212	288	360	160	600 mg/L
7.	Phosphates as $PO4^{3-}$	0.03	0.02	0.02	0.02	0.04	0.03	--
8.	Sulphates as $SO4^{2-}$	139	139	580	345	107	2669	400 mg/L
9.	Fluorides as F^-	0.78	0.33	1.13	0.88	0.96	1.22	1.5 mg/L
10.	Nitrates as NO3	38.82	50.30	34.41	55.58	40.14	7.19	45 mg/L
11.	Calcium as Ca^{+2}	160	184	2240	1056	104	2000	200 mg/L
12.	Magnesium as Mg^{+2}	58.3	79.7	583.2	597.7	51.51	2187	100 mg/L
13.	Lead (as Pb)	0.001	0.001	0.001	ND	ND	ND	0.01 mg/L
14.	Zinc (as Zn)	0.007	0.073	0.186	0.025	0.004	0.021	0.5 mg/L
15.	Nickel (as Ni)	0.001	0.002	0.006	0.008	0.001	0.002	0.02 mg/L
16.	Copper (as Cu)	0.001	0.001	0.004	0.012	0.003	0.001	0.5 mg/L
17.	Chromium (as Cr)	0.001	ND	ND	ND	0.001	ND	0.05 mg/L
18.	Iron (as Fe)	0.070	0.086	0.810	0.385	0.033	0.462	0.3 mg/L
19.	Manganese (as Mn)	0.003	0.006	0.013	0.003	0.001	0.060	0.3 mg/L
20.	Mercury (as Hg)	0.001	0.001	0.001	ND	0.001	ND	0.001 mg/L
21.	Arsenic (as As)	0.001	ND	ND	ND	0.001	ND	0.05 mg/L
22.	Cadmium (as Cd)	ND	ND	ND	ND	ND	ND	0.003 mg/L

Note: - All values are expressed in mg/l except pH
ND : Not Detectable

20.2.19

SENIOR ENVIRONMENTAL SCIENT

Water Quality

Station Code	Sampling Date	Sampling time
3090	03.04.2019	02.00PM

Name of monitoring station: Hand Pump at Pittavanipalem, Visakhapatnam

Type of the water body:	Borewell
Name of the water body:	
Name of river basin:	Lake
Name of sub-basin:	
District: Visakhapatnam	State: Andhra Pradesh
Name of monitoring agency:	ANP
Frequency of monitoring: Half yearly	Stn.Short name:
Use based class: C	

Field Observations:

Weather:	Clear	
Depth of water body:		
Human activities:	Others	
Floating matter:	None	
Colour:	Clear	
Odor:	None	
Flow:		(m^3/Sec)
W.Temp.	28.0	(°C)
DO:	5.8	(mg/l)

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Major polluting sources:		Industrial	√	Domestic
		Agriculture		Other

Use of water at or in down stream of monitoring station:

Washing purposes

Core parameters:

pH:	7.67	
Conductivity:	4652.0	(µS/cm)
BOD:	1.6	(mg/L)
Nitrate-N:	18.05	(mg/L)
Nitrite-N:	5.8	(mg/L)
Fecal Coli:	15	MPN/100 ml
Total Coli:	150	MPN/100 ml

Bio-monitoring:

Saprobity Index:	
Diversity Index:	
P/R Ratio:	

General Parameters:

Turbidity:	1.79	NTU
Phenophthalein alkalinity as CaCO3:	0.0	(mg/L)
Total Alkalinity as CaCO3:	304.0	(mg/L)
Chlorides:	910.0	(mg/L)
COD:	20.0	(mg/L)
Total Kjeldahl-N:	0.58	(mg/L)
Ammonia-N:	0.01	(mg/L)
Hardness as $CaCO_3$:	640.0	(mg/L)
Calcium as $CaCO_3$:	420.0	(mg/L)
Magnesium as $CaCO_3$:	220.0	(mg/L)
Sulphate:	493.4	(mg/L)
Sodium:	685.6	(mg/L)
Total Dissolved Solids:	3024.0	(mg/L)
Fixed Dissolved Solids:	2994.0	(mg/L)
Total Suspended Solids:	14.0	(mg/L)
Phosphate:	0.01	(mg/L)
Boron:	0.264	(mg/L)
Potassium:	14.92	(mg/L)
Fluoride:	0.47	(mg/L)
% Sodium:	69.38	(meq/L)
SAR:	11.80	(meq/L)
Any other:		(mg/L)

Specific parameters:(mg/L)

Arsenic:	ND
Cadmium:	ND
Copper:	0.002
Lead:	ND
Chromium:	ND
Nickel:	0.005
Zinc:	0.452
Mercury:	0.006
Iron(Total):	0.100
Cyanide:	
Any other	
****Pesticide:**	
BHC(Total):	
DDT(Total):	
Endosulphan:	
Dieldrin:	
Aldrin:	
Carbamate:	
2,4-D:	
Any other:	

SENIOR ENVIRONMENTAL SCIENTIST

ANDHRA PRADESH POLLUTION CONTROL BOARD
ZONAL LABORATORY, VISAKHAPATNAM
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ANALYSIS REPORT

Sample No. : **2019 – 01 – W – 140**

Sample location/Address : Pittavanipalem (V), Visakhapatnam.

Sample Source : Bore well at Pittavanipalem

Sample collected on : 09.01.2019

Sample received on : 11.01.2019

Sample collected by : Analyst (C), Regional Office, Visakhapatnam

Sl. No.	Parameters	Values
1.	pH	7.31
2.	Conductivity (µS/cm)	3410
3.	Total Dissolved Solids at 105^0C	1940
4.	Chlorides a Cl^-	558
5.	Total Hardness as CaCO3	740
6.	Total Alkalinity	320
7.	Phosphates as $PO4^{3-}$	BDL
8.	Sulphates as $SO4^{2-}$	123
9.	Fluorides as F^-	0.75
10.	Nitrates Nitrogen as NO3-N	14.7
11.	Nitrites Nitrogen as NO2-N	1.26
12.	Ammonical Nitrogen as NH3-N	BDL
13.	Calcium as Ca^{+2}	152
14.	Magnesium as Mg^{+2}	87.48
15.	Lead (as Pb)	ND
16.	Zinc (as Zn)	0.004
17.	Nickel (as Ni)	0.002
18.	Copper (as Cu)	0.001
19.	Chromium (as Cr)	ND
20.	Iron (as Fe)	0.008
21.	Manganese (as Mn)	0.001
22.	Mercury (as Hg)	0.017

Note: - All values are expressed in mg/l except pH
ND: Not Detectable

16.2.19

SENIOR ENVIRONMENTAL SCIENT

ప్రజలే ముందు
PEOPLE FIRST

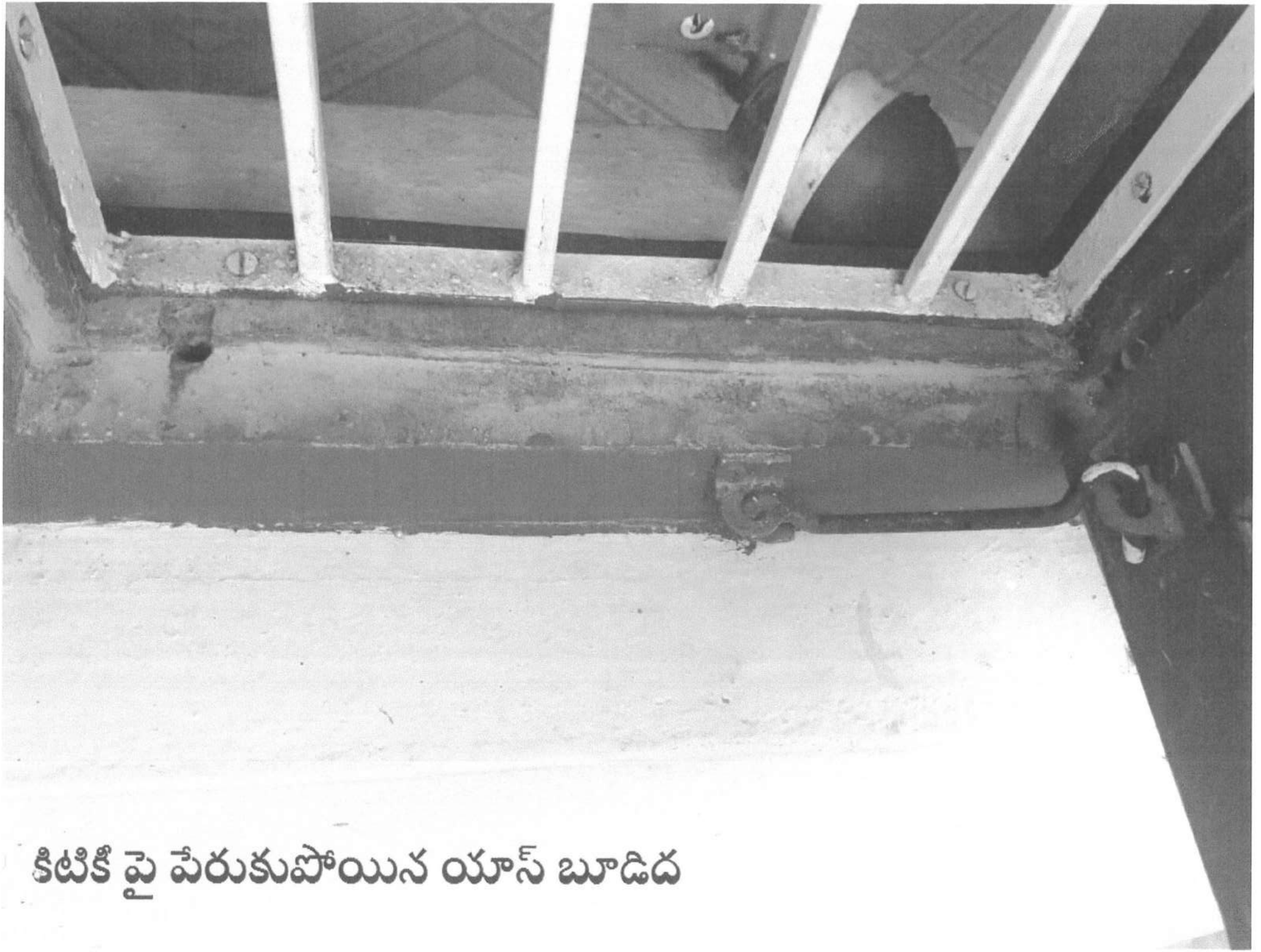
పీ.ఎమ్.జీ.ఎస్.వై ఆర్డీ రశీదు

శ్రీ నారా చంద్రబాబు నాయుడు
గౌ. ముఖ్యమంత్రి వర్యులు ఆంధ్రప్రదేశ్

VISHAKAPATNAM

ఆర్డీ సంఖ్య	2018-16128141	తేది	25-6-2018
ఆర్డీ రకం	REVENUE-->LOCAL BODIES EXCEPT MUNICIPALITES > MISAPPROPRIATION FUNDS ENQUIRY		
పేరు	Battu Satish Reddy	c/o పేరు	-
జిల్లా	VISHAKAPATNAM	మండలము	PEDAGANTYADA
గ్రామము	PEDAGANTYADA	ఆర్డీ కోడ్	2018062851702
ఫోను	9492787243		
ప్రస్తుత నివాసం	మాత్రమేను		
సమస్య వివరాలు	MISAPPROPRIATION FUNDS ENQUIRY		
పరిష్కరించు	[illegible]		
అధికారి	[illegible]		
గడువు	30 రోజులు		
ఎస్కలేషన్	[illegible]		


కాలుష్యం వాళ్ళ ఏర్పడిన చర్మ వ్యాదులు
Vivo V11Pro
AI Dual Camera



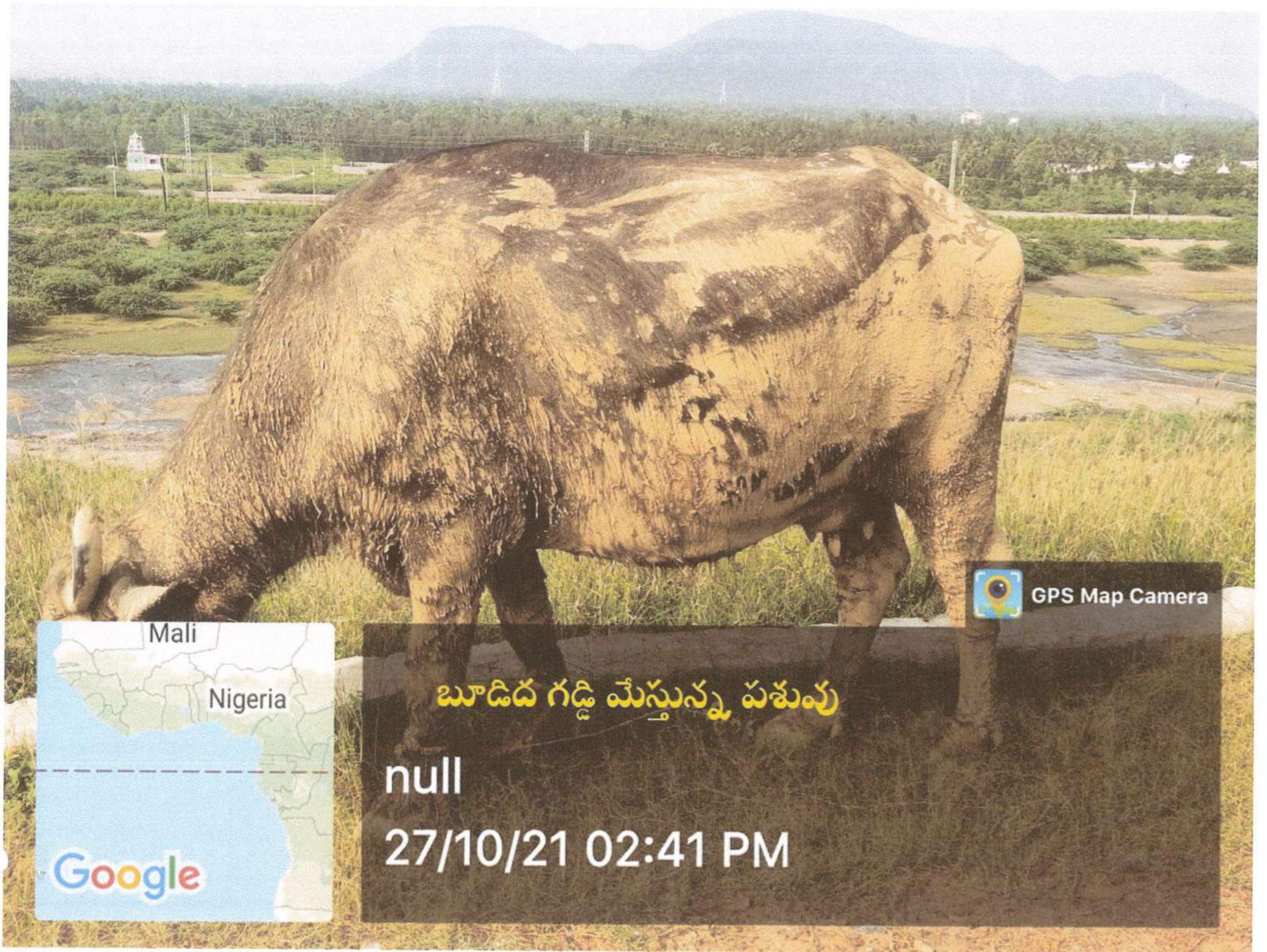
కిటికీ పై పేరుకుపోయిన యాస్ బూడిద

కిటికీ పై పేరుకుపోయిన బూడిద


ఎగసిపడుతున్న యూఫో బూడిద
Vivo V11Pro
AI Dual Camera


Vivo V11Pro
AI Dual Camera


ఇంటిలోపల పేరుకుపోయిన బూడిద


GPS Map Camera
Mali
Nigeria
Google
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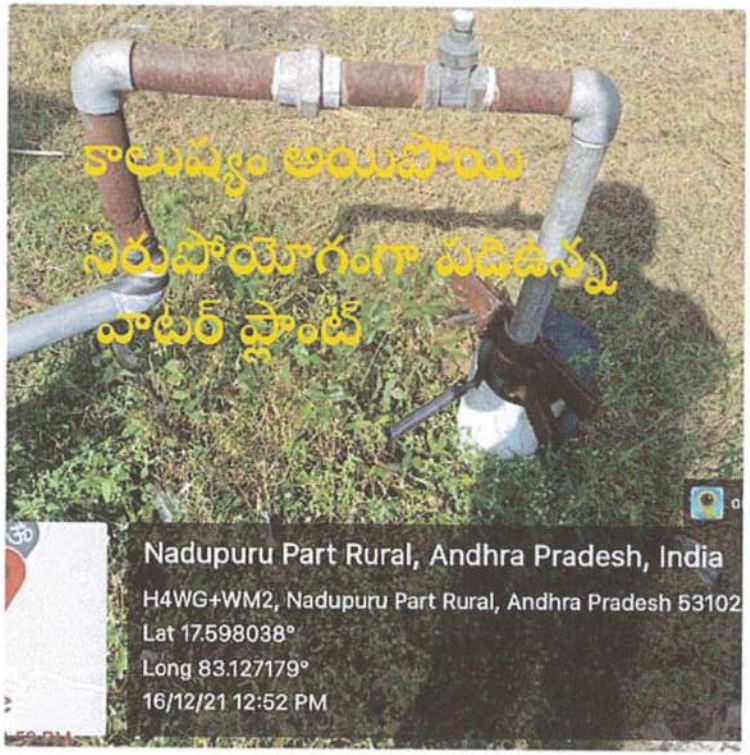
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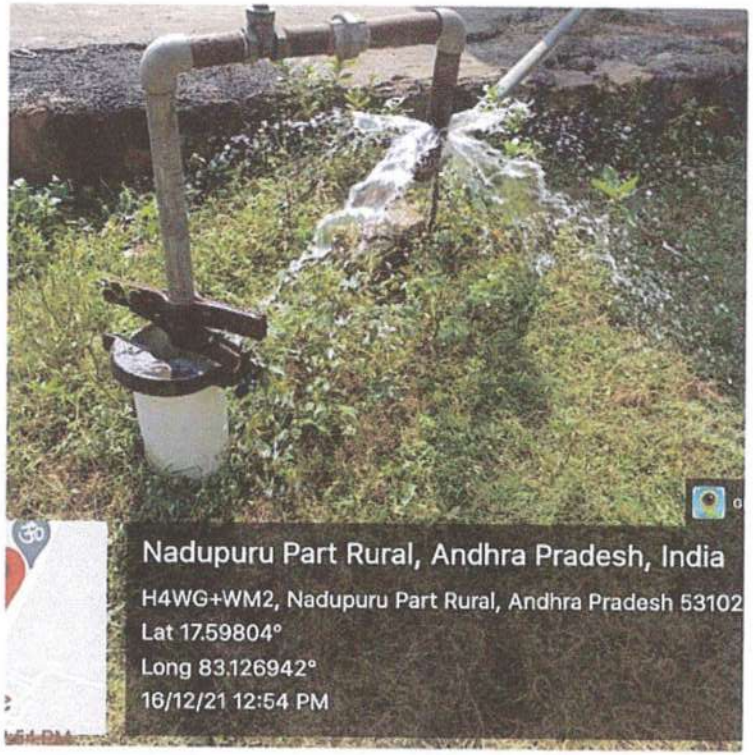
నీరుపోయేరంగా పడిఉన్న
వాటర్ ప్లాంట్
Nadupuru Part Rural, Andhra Pradesh, India
H4WG+WM2, Nadupuru Part Rural, Andhra Pradesh 53102
Lat 17.598038°
Long 83.127179°
16/12/21 12:52 PM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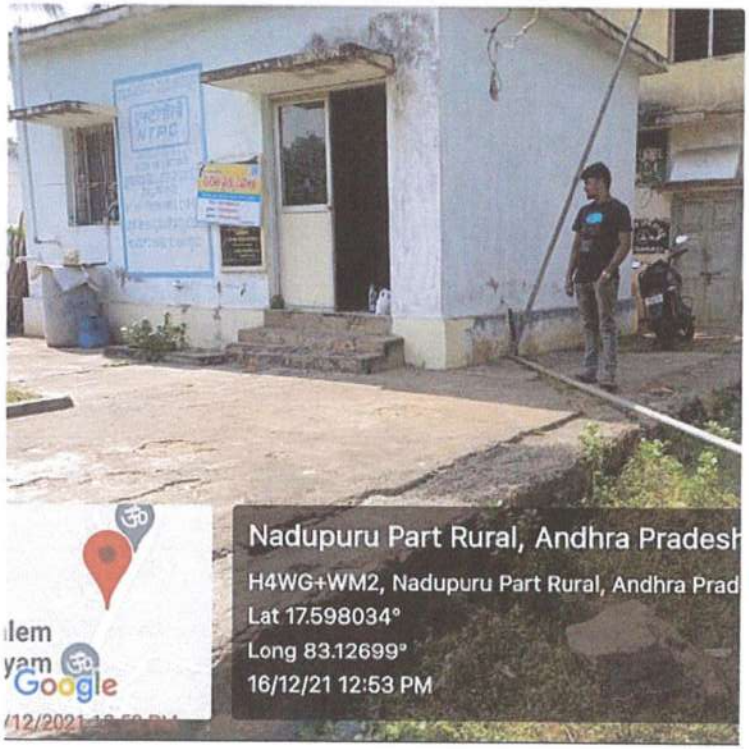
Nadupuru Part Rural, Andhra Pradesh
H4WG+WM2, Nadupuru Part Rural, Andhra Prad
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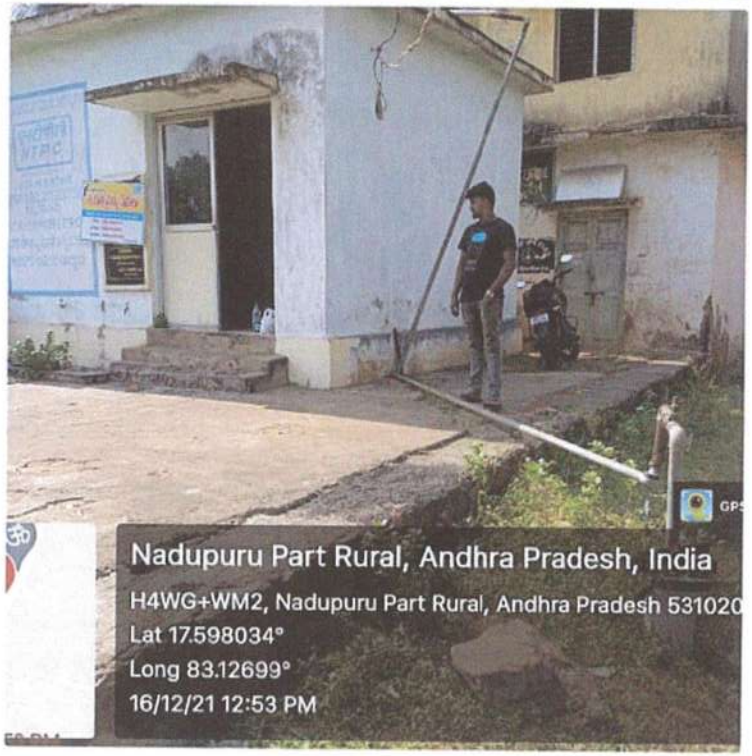
16/12/21 12:53 PM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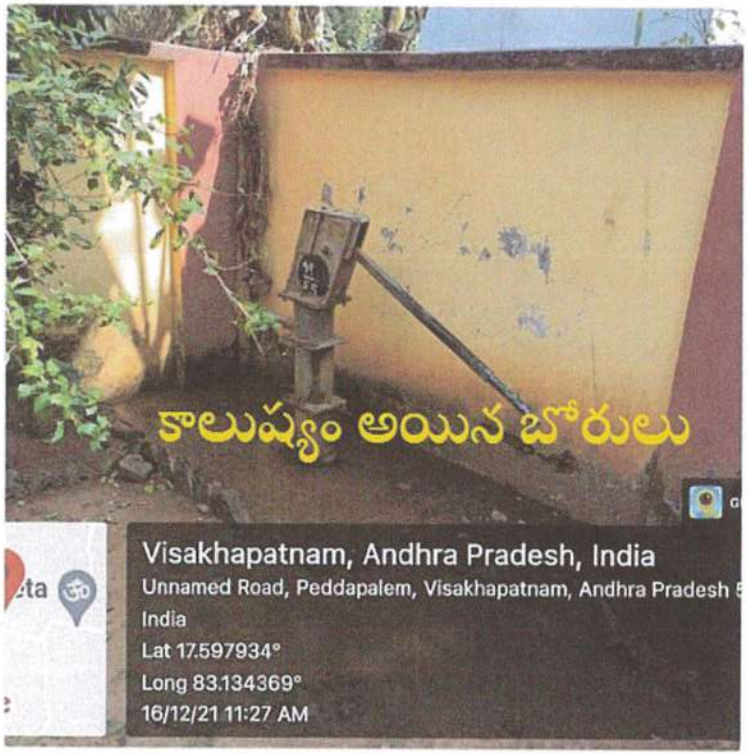
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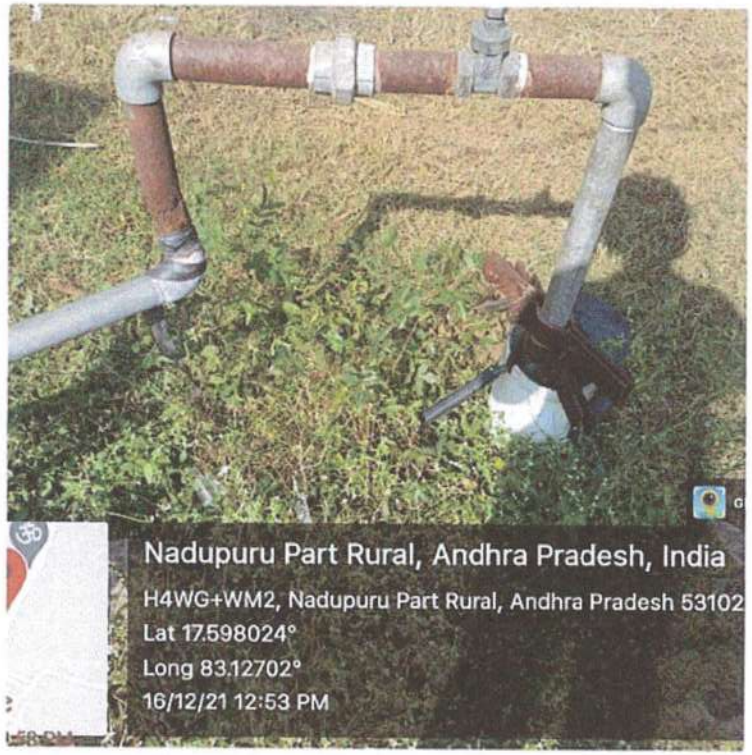
Visakhapatnam, Andhra Pradesh, India
Unnamed Road, Peddapalem, Visakhapatnam, Andhra Pradesh
India
Lat 17.597934°
Long 83.134369°
16/12/21 11:27 AM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H4WG+WM2, Nadupuru Part Rural, Andhra Pradesh 53102
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Long 83.12702°
16/12/21 12:53 PM


GPS Map Camera
Nadupuru Part Rural, Andhra Pradesh, India
Unnamed Road, Visakhapatnam, Andhra Pradesh 531020,


Nadupuru Part Rural, Andhra Pradesh, India
H4WG+WM2, Nadupuru Part Rural, Andhra Pradesh 53102
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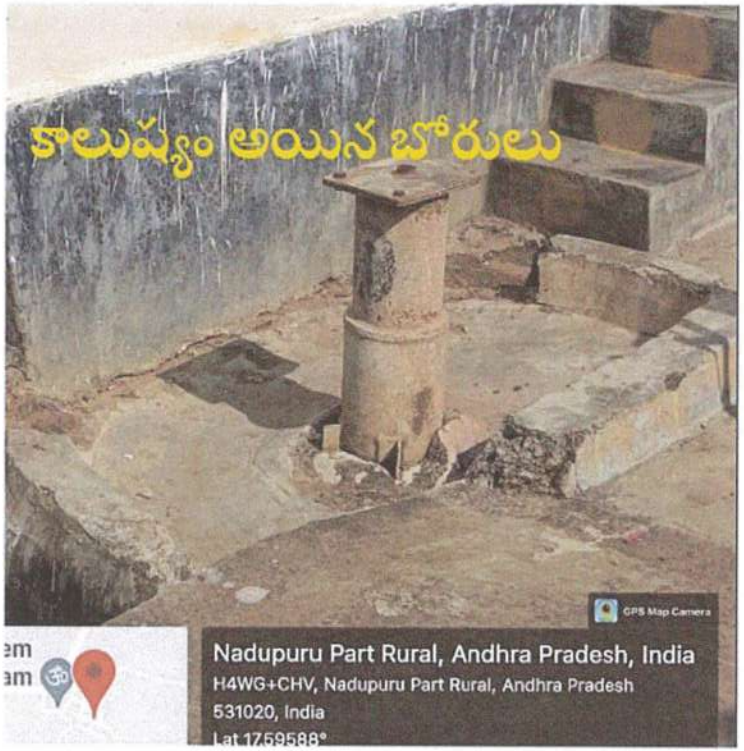
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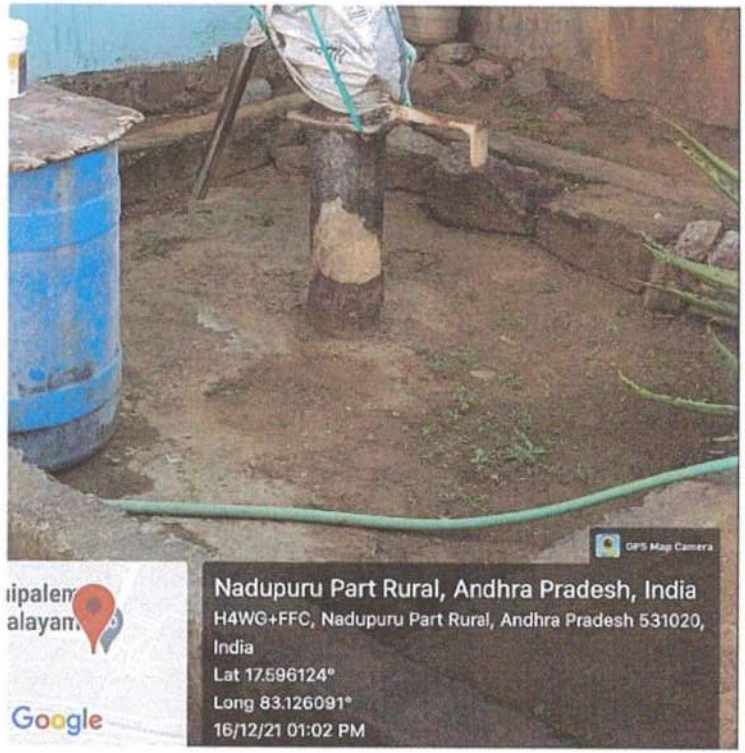
H4WG+CHV, Nadupuru Part Rural, Andhra Pradesh
531020, India
Lat 17.59588°


GPS Map Camera
Nadupuru Part Rural, Andhra Pradesh, India
H4WG+FFC, Nadupuru Part Rural, Andhra Pradesh 531020,
India
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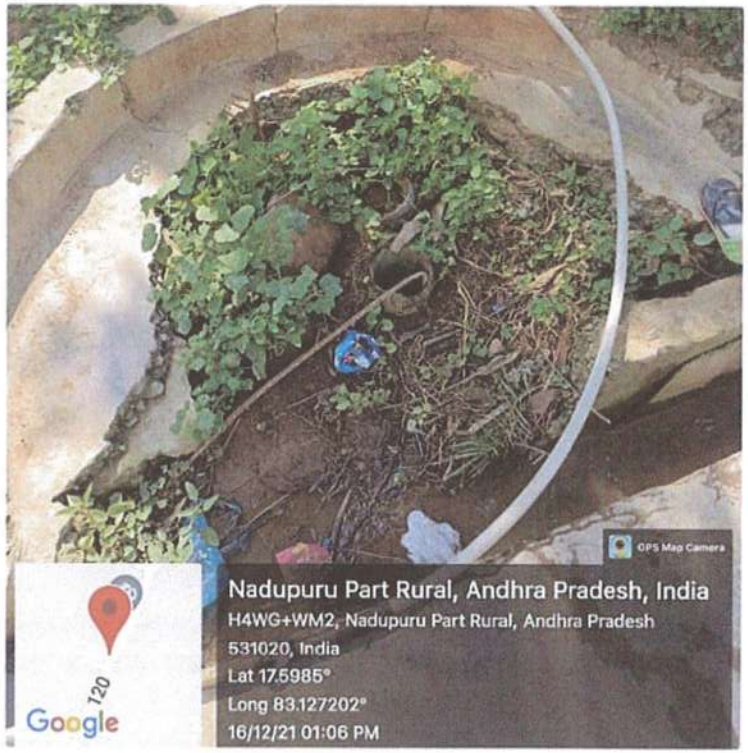
Long 83.126091°
16/12/21 01:02 PM
Google


GPS Map Camera
Nadupuru Part Rural, Andhra Pradesh, India
H4WG+WM2, Nadupuru Part Rural, Andhra Pradesh
531020, India
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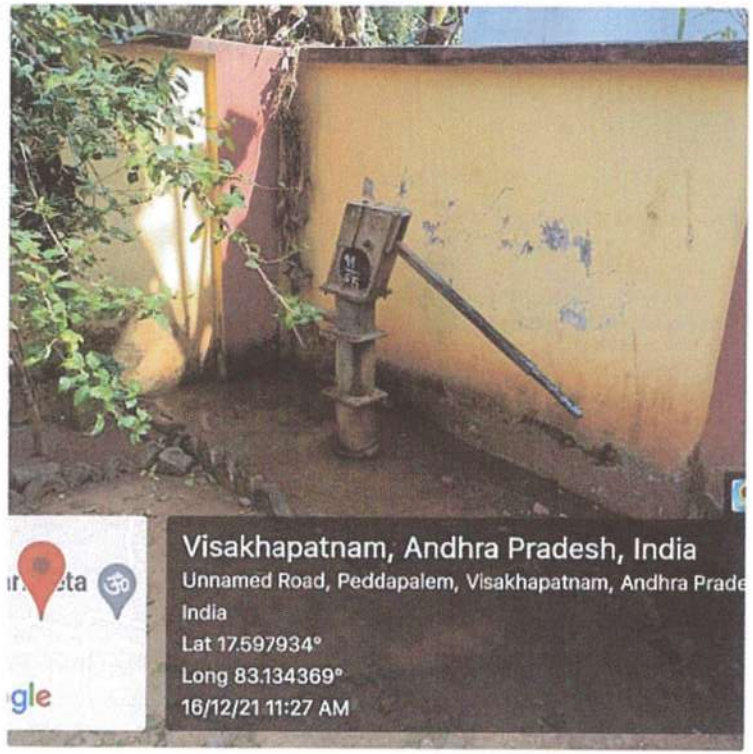
Google


Visakhapatnam, Andhra Pradesh, India
Unnamed Road, Peddapalem, Visakhapatnam, Andhra Prade
India
Lat 17.597934°
Long 83.134369°
16/12/21 11:27 AM


Vivo V11Pro
AI Dual Camera

P. [illegible]

G. chinnaRavana

S. [illegible]

B. [illegible]

P. [illegible]

[illegible]

B- [illegible]

B. Laxmi

B. Pydikonda

B. [illegible]

B. [illegible]

K. [illegible]

P. [illegible]

B. [illegible]

B. [illegible]

B. [illegible]

B. Venkata Laxmi

B. Govindini

B. [illegible]

B. Tejasri

B. Appala Raju

[illegible]

S. [illegible]

S. Brahmaiah

K. Madhavi

S. [illegible]

P. Pavankumar

[illegible]

[illegible]

[illegible]

[illegible]

A. [illegible]

[illegible]

O. SANTOSH

[illegible]

A. NOOKARAJU

A. Vara Laxmi

A. Lalitha

A. APPARAO

A. [illegible]

A. POLAYYA

A. [illegible]

A. Chandu

A. Varalakshmi

B. [illegible]

B. Raj

B. Pentamma

B. Varadakshmi

P. సత్యనారాయణ

B. ఉప్పలయ్య

G. Lavanya Devi

G. Appalaswamy

P. Laxmi

P. Ramya

K. Vara Lakshmi

M. Bhavani

B. సుశీల

A. [illegible]

M-[illegible]

A. Laxman.

A. RAMU.

A. Ramu

B. Venkata Rathnam.

P. వెంకటయ్య

2 A. Srinu
3 A. పాండురంగ
4 S [illegic] రెడ్డి.
5 A. లక్ష్మి
6. B. Appal Reddy
7. B. Santosh Rao
8. Y. Appala raju
9. A అరుణ కుమార్
10 A సింహాద్రి
11. O లక్ష్మి
12. కంచెర్ల వీరన్న సుబ్బమ్మ
13. O. Lakshmi
14. A. రాజు
15. M. Lavanya
16. M. వెంకటలక్ష్మి
17 M. వసంత
18. M. కళ్యాణి
19. M నాంచారమ్మ
20. ~~A~~
V కనకదుర్గ
(21) K. Vamshara Reddy
(22) K. Narsimha Reddy
R పాపయ్య

B. Lakshmi devi
K. SRINU
P. Devi
P. Anand
K. అప్పలనాయుడు
R Pydithalli
B. Leela
P. Laxmi
P. Simhachalam
P. Ramu
[illegic] Lakshmi
P. Demudu
వీరభద్రుడు
[illegic]
K. Pydi Babu

రాజ్యలక్ష్మి
B. [illegic]
B. అప్పన్న
Bకృష్ణ

B. Lithar

B.

B.

P. RAVAHAMMA

B. Sasi Priya.

R.

P.

P.

P.

P.

G. (G.A. Reddy)

G.

M. Sravani

M.

R.

P. KONDA BABU

M-

M.

G.

B.

P.

B.

P. Tata Reddy

Ch Nookla Reddy
BPY dt Re 114

P. Simhachalam

P. Lakshmi

K. Laxmi

M. Bhavani

S. Adilaxmi

B [illegible]

[illegible]

S. Vadhel

D. Gurumurthy

[illegible]

Ramana.

A. RAMANA

D. Appala Reddy

[illegible]

Ex. [illegible]

D. D. Reddy

Narayan.

A Rama.

B. Sanyasi Rao

3
N. Vijay
P. Ramanna
P. Divya
N. Laxmi
3. Raj Kumar
2) D. APPALA Swami
3) R. Pydi RAJU
4) A. Appala Reddy

పరవాడ,
29.12.2021.

మహారాజశ్రీ గౌరవనీయులైన జిల్లా కలెక్టర్ గారికి,
ముత్యాలమ్మపాలెం మండల ప్రాదేశిక సభ్యురాలైన (MPTC)
బొంది. దేవి w/o రవి నేమస్కరించి ప్రసుతున్న విన్నపం.

అయ్యా!

విషయం:- NTPC కాలుష్యం మరియు మత్స్యకార ఉపాధి కొరకు

విశాఖపట్నం జిల్లా, పరవాడ మండలం, ముత్యాలమ్మపాలె
-లో గల ఉప్పుటేరు నుండి NTPC ఫ్లై యాష్‌ను సముద్రంలోనికి
పంపిస్తున్నారు. ఈ ఫ్లై యాష్ వలన ఉప్పుటేరు మొత్తం పూడికపో
ఉప్పుటేరులో గల జలజీవరాసులు కాలుష్యానికి గురై చనిపోతున్నా
ఉప్పుటేరుపై ఆధారపడి, జీవిస్తున్న మత్స్యకారులు ఉపాధి
లేక ఇబ్బందులకు గురౌతున్నారు.

అలాగే NTPC నుండి విడుదలయిన వ్యర్థాలతో
కూడిన వేడినీటిని సముద్రంలోనికి విడుదల చేయడం వలన
మత్స్యసంపద నశించి, స్థానిక మత్స్యకారులకు ఎటువంటి
ఉపాధి తారకటం లేదు.
NTPC వలనే ఉపాధిని కోల్పోయిన మేము గతంలో చాలా
ధర్నాలు చేసినే 2012లో 63 మందికి ఉపాధి కల్పిస్తామని
లిఖిత పూర్వక హామీ ఇచ్చియున్నారు. కానీ ఇప్పటి వరకు
ఎటువంటి ఉపాధిని కల్పించలేదు.

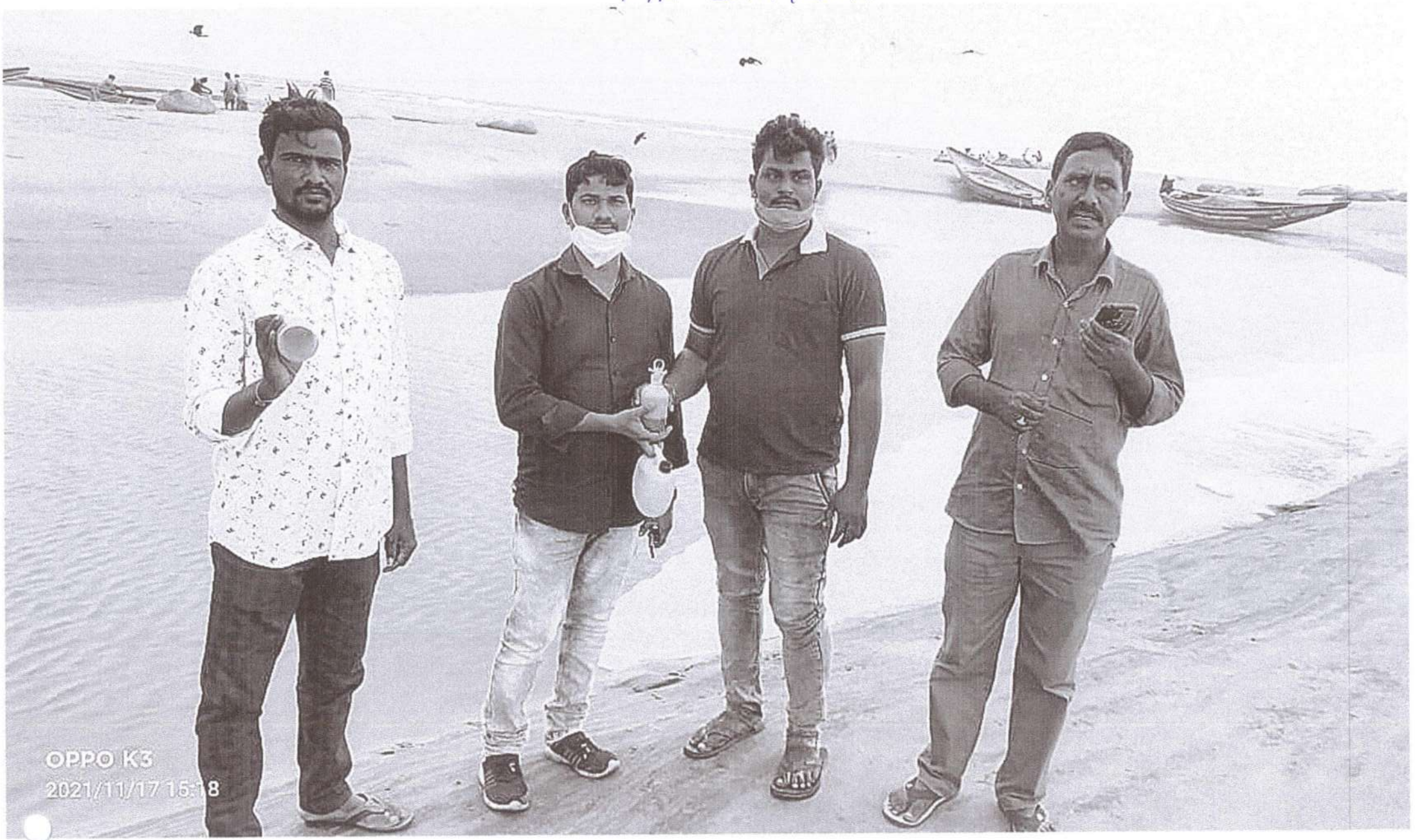
కావున శ్రీవారు మా యందు దయయుంచి,
ఉప్పుటేరులో పూడిక పోయిన ఫ్లై యాష్‌ను Dredging చేసి,
స్థానిక మత్స్యకారులకు NTPCలో ఉపాధి కల్పించి, వారి
మత్స్యకారులకు న్యాయం చేయవలసిందిగా కోరుచున్నాను.

ధన్యవాదములు.

ఇట్లు
బొంది. దేవి
ముత్యాలమ్మపాలెం MPTC
Ph: 9701730683

SAMPLE COLLECTION POLLUTION ENGINEER

Mr. SHAYAM.



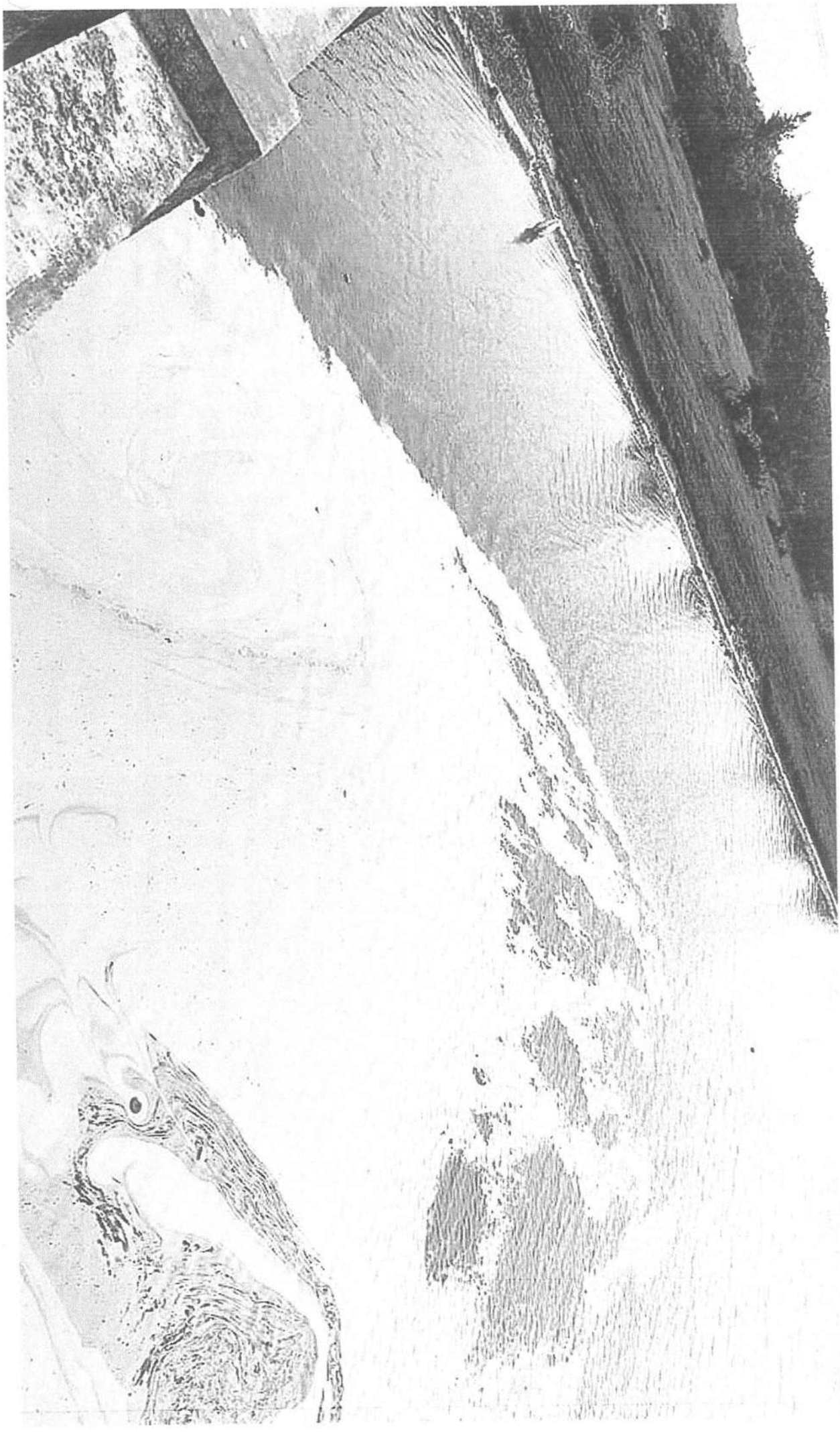
OPPO K3
2021/11/17 10:23

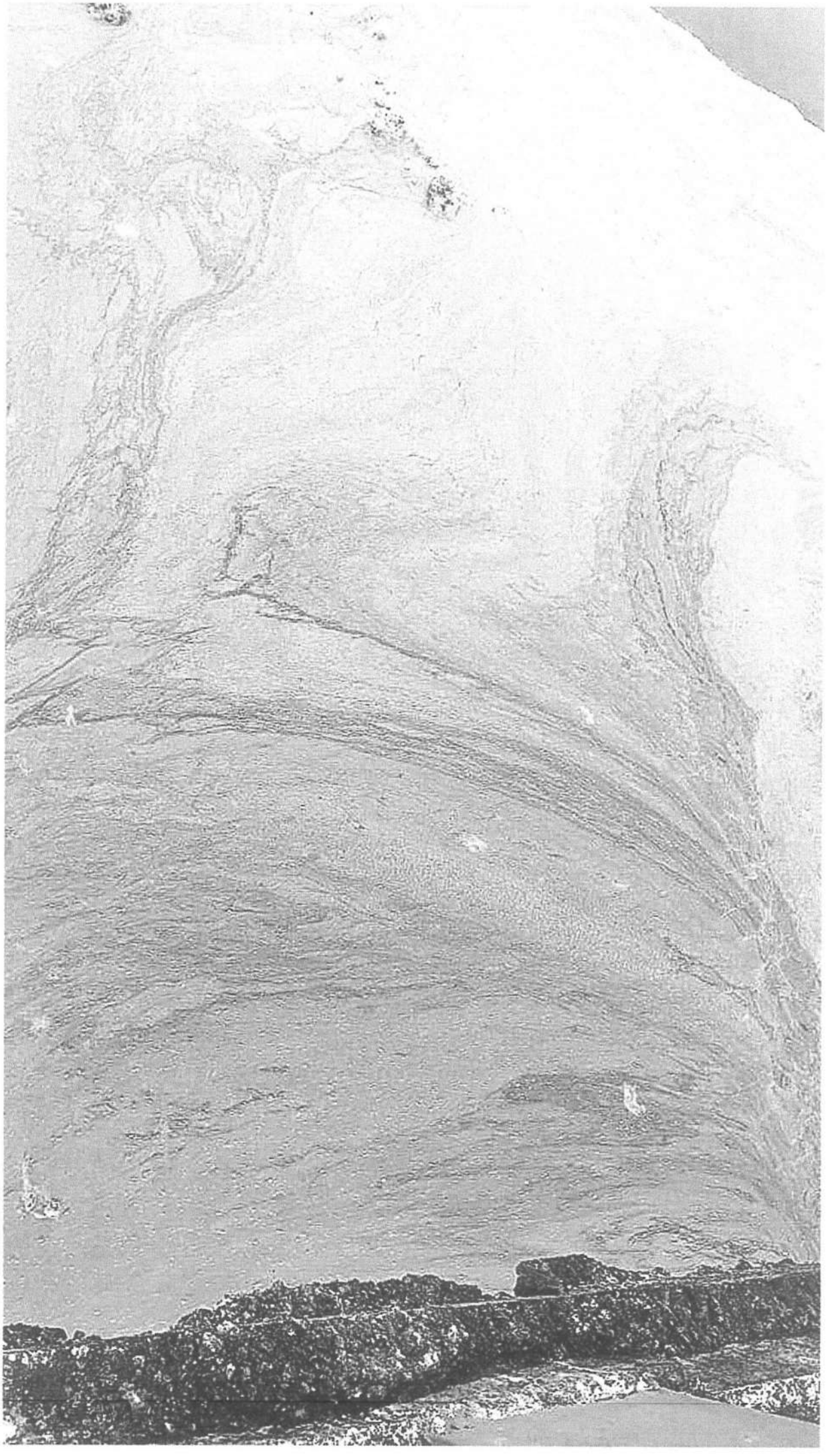

OPPO K3
2021/11/17 10:25

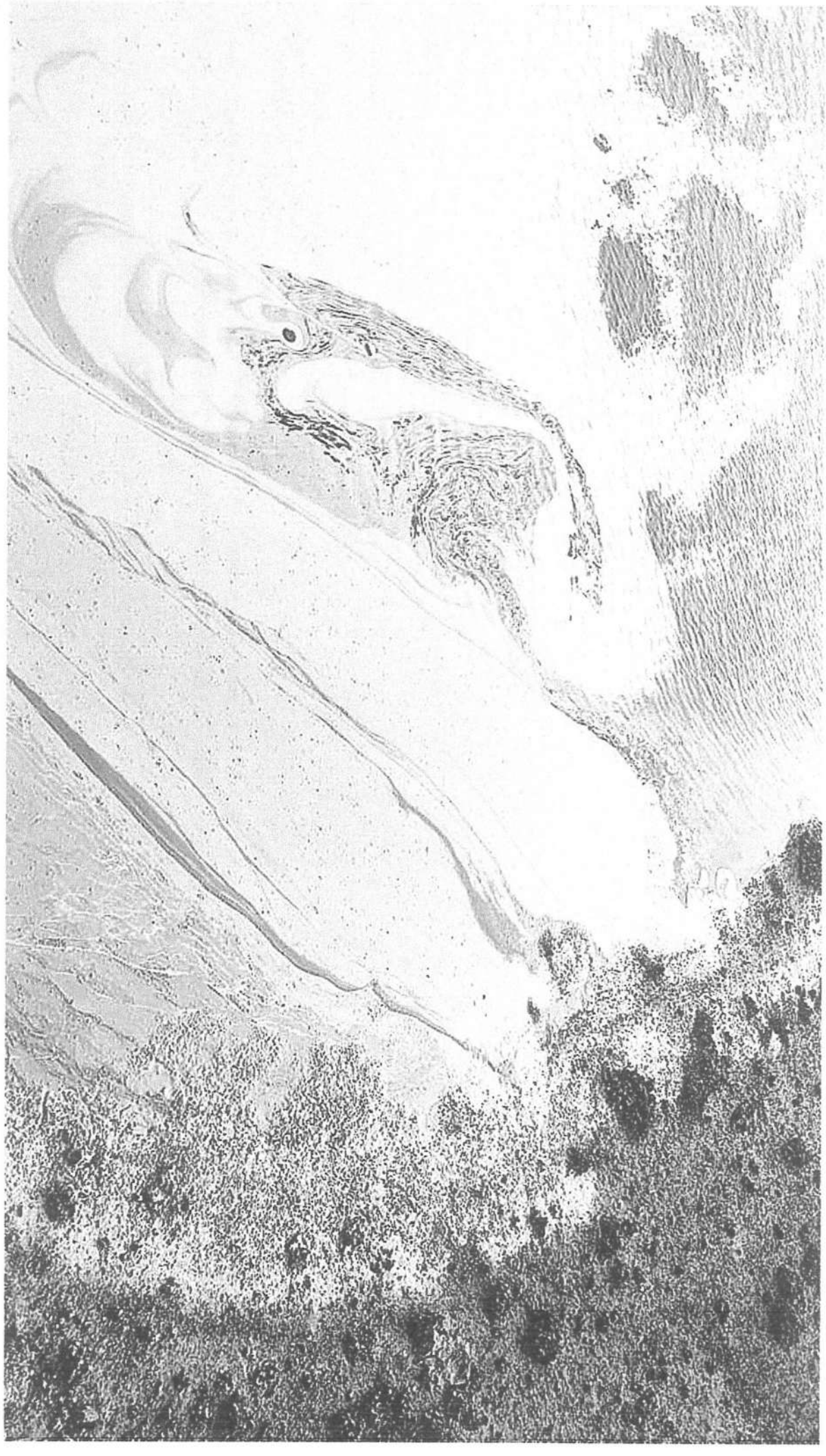
DUE TO FIY ASH PUMPING THROUGH UPPUTERU SUFFERING BY FISHER MAN.

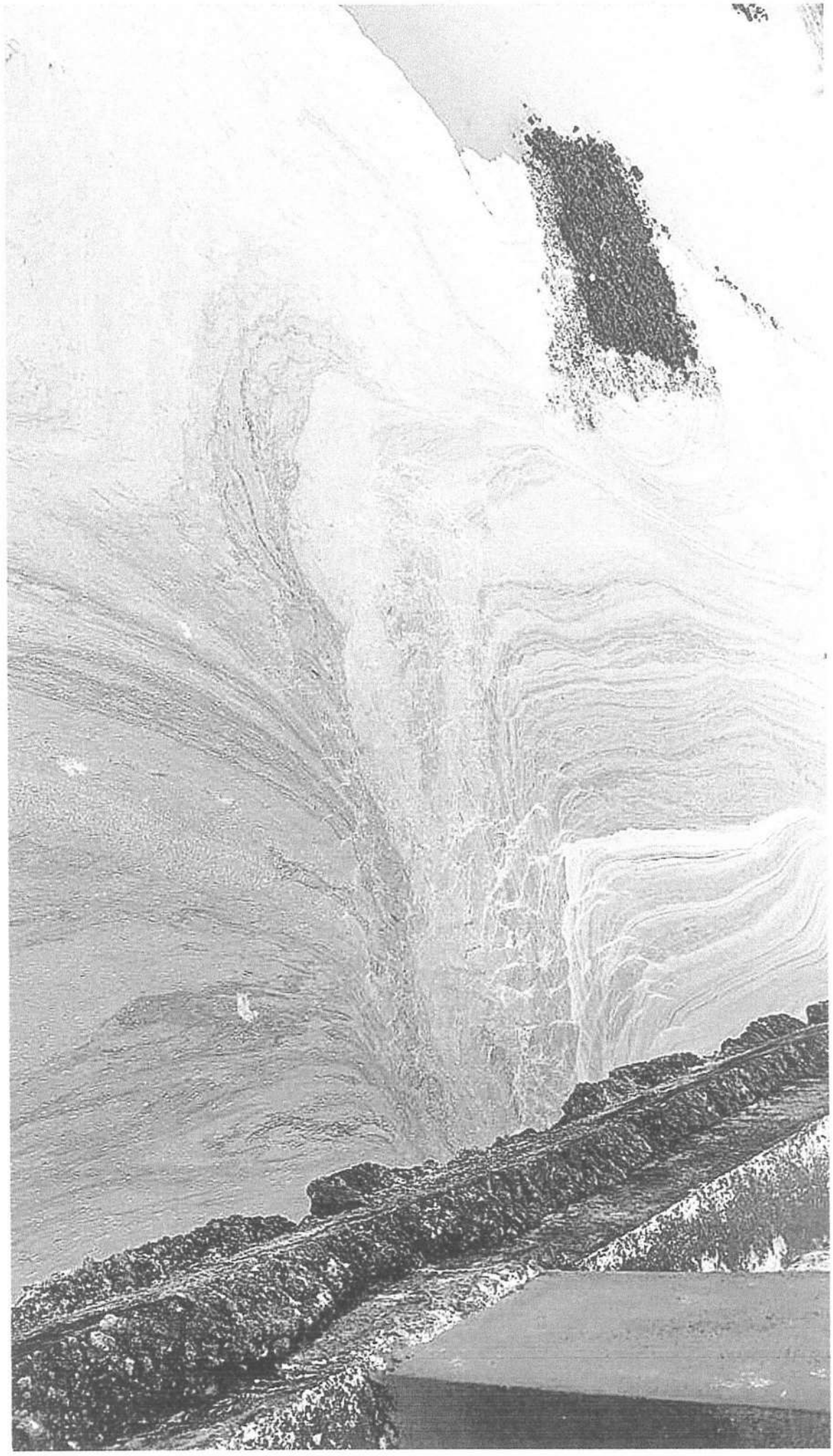
PO K3
21/11/17 10:36

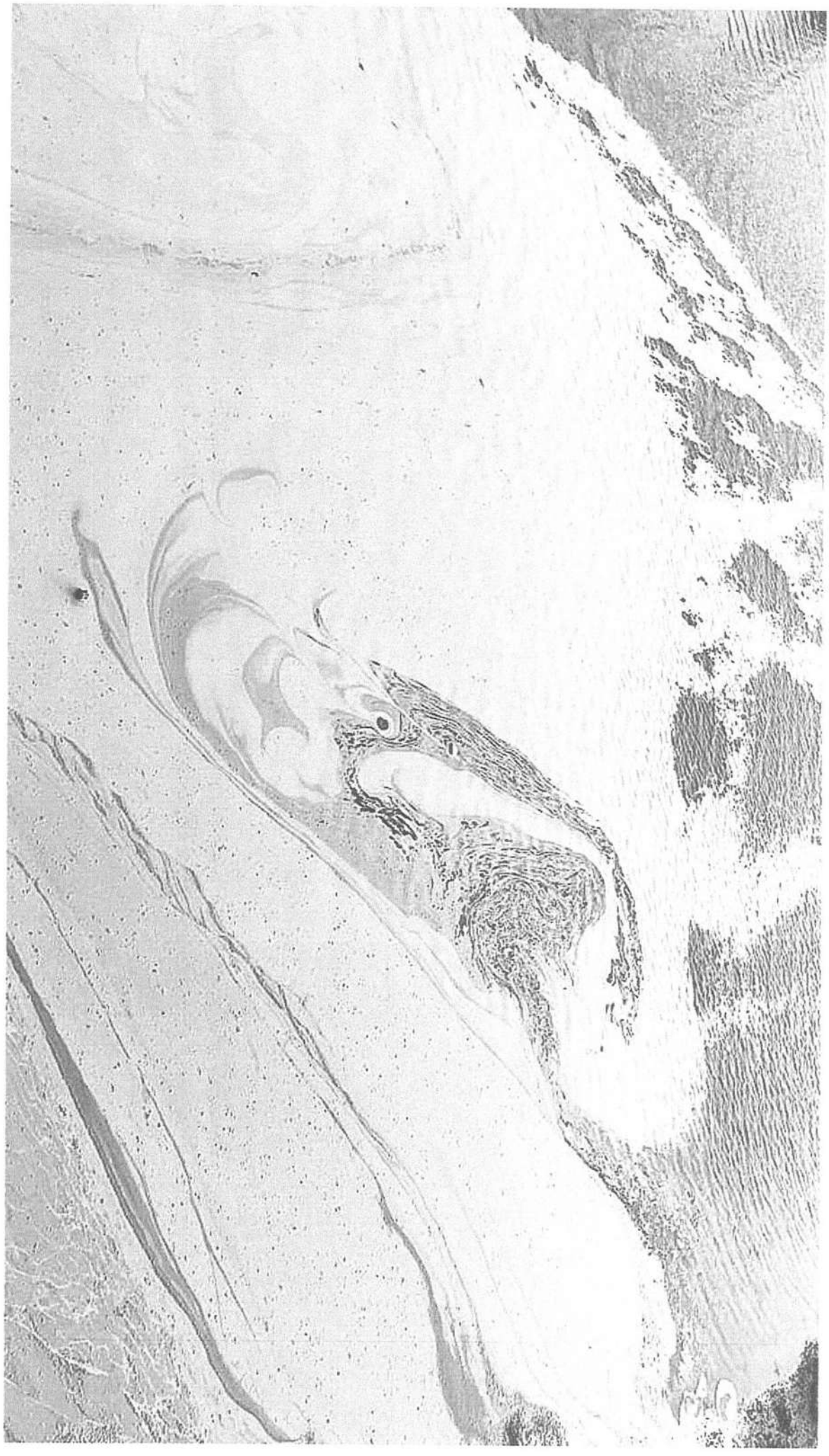
FISH DIED DUE ASH POLLUTION.

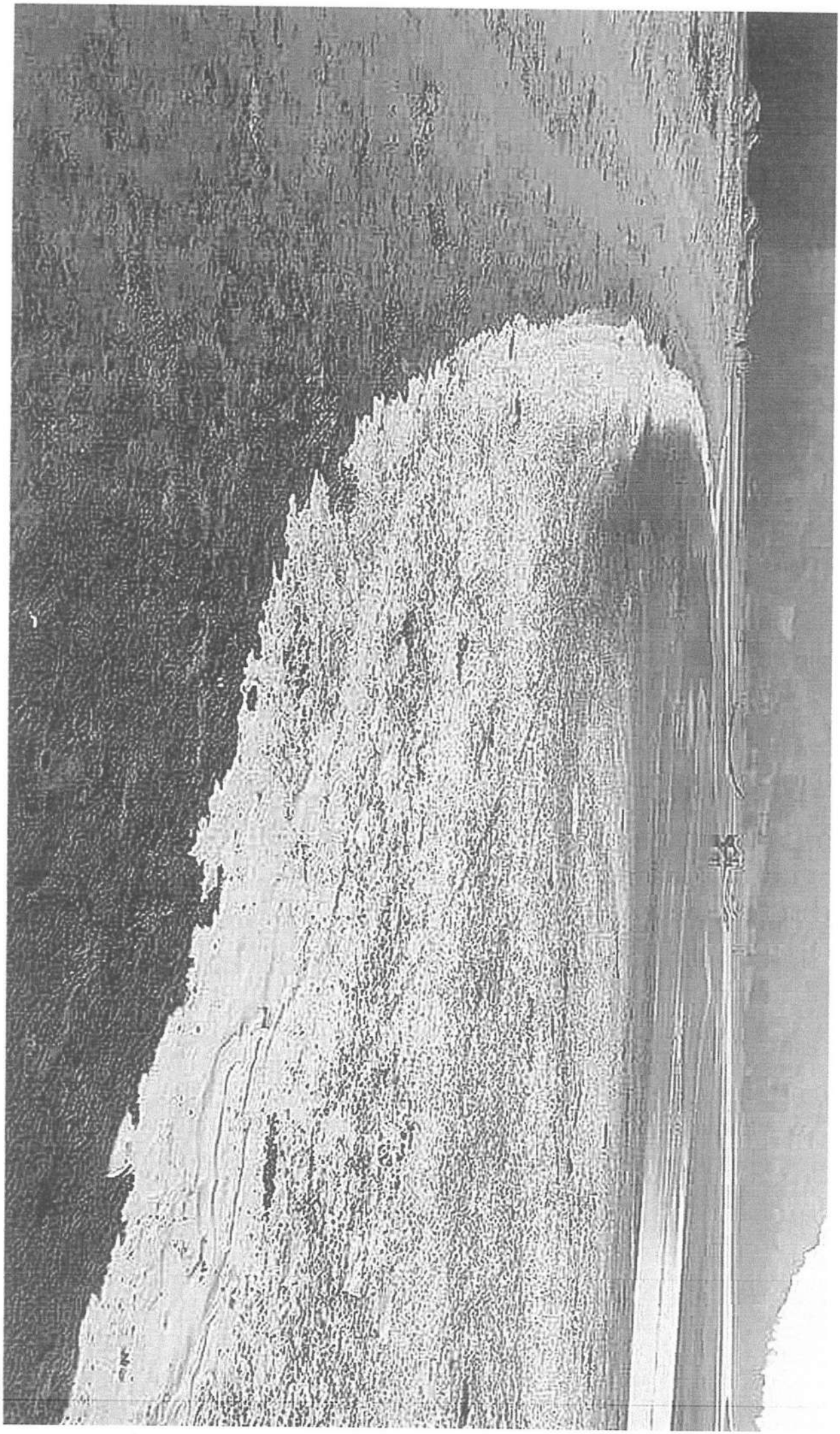


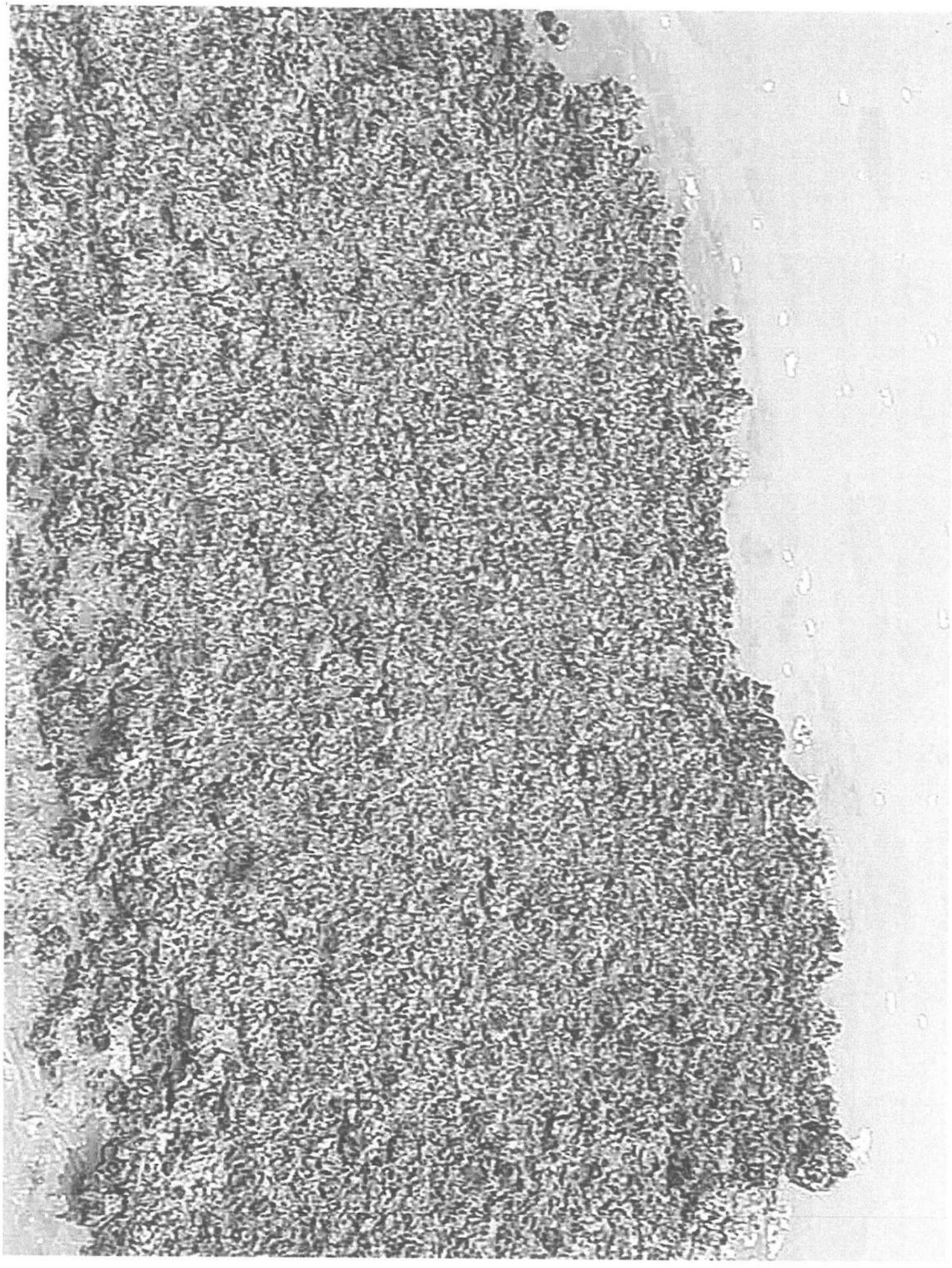






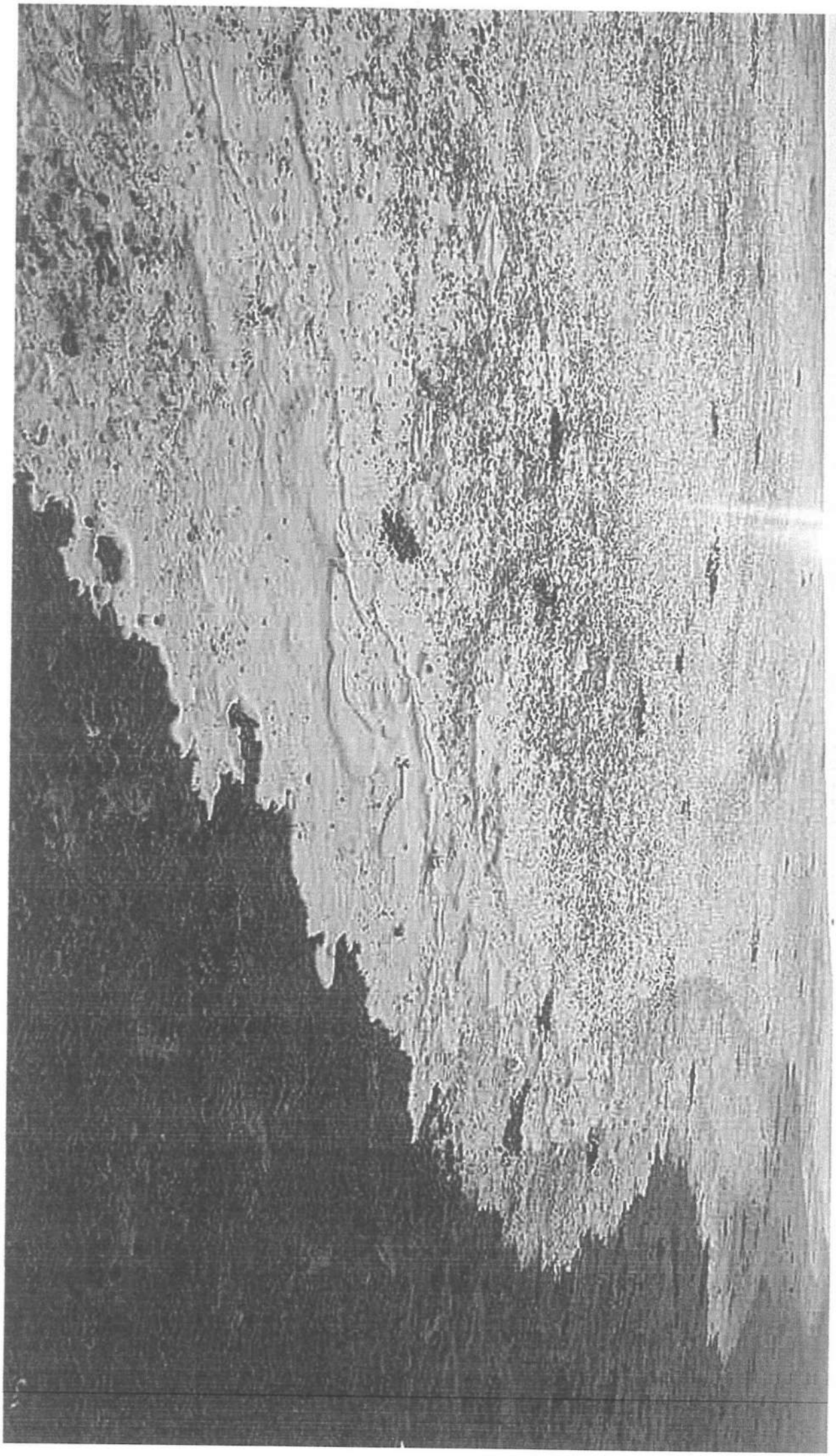






GOPRO
CAMERA

REDMI NOTE 5 PRO
MI DUAL CAMERA



Stage-I (FC)

No.J-13011/19/94-IA.II.

तार :
Telegram : PARYAVARAN,
NEW DELHI
दूरभाष :
Telephone : 4360473
टेलेक्स (द्विभाषीय) :
Telex : (bi-lingual) : W-66185 DOE IN
FAX : 4360678

भारत सरकार
पर्यावरण एवं वन मंत्रालय
GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT & FORESTS
पर्यावरण भवन सी. जी. ओ. कॉम्पलेक्स
PARYAVARAN BHAVAN, C.G.O. COMPLEX
लोदी रोड, नई दिल्ली-110003
LODHI ROAD, NEW DELHI-110003

July 23, 1996.

OFFICE MEMORANDUM

Subject : 2 x 500 MW Simhadri Thermal Power Project by National Thermal Power Corporation, Andhra Pradesh.

Reference is invited to letter No.CE(Gen)/EE/EC/F.14/50/95 dated 4th December, 1995 from Andhra Pradesh State Electrocity Board and letters No.CEV-Simhadri-96 dated 3rd June, 1996 and 17th July, 1996 from National Thermal Power Corporation Ltd. regarding the above mentioned project.

2. The proposal for the setting up of the 1000 MW Coal Based Power Project has been examined and clearance is hereby accorded from environmental angle subject to effective implementation of the following conditions :-

(i) The Consent Order No.20/PCB/C.Estt./RO-VSP/AEE-VIII/95 dated 13th November,1995 of Andhra Pradesh Pollution Control Board for establishment of Simhadri Thermal Power Project should be got transferred in favour of NTPC Limited, the executing agency. All the conditions stipulated by the State Pollution Control Board should be strictly implemented along with the additional ones if stipulated during transfer of Consent Order.

(ii) A Bi-flue of height 275 m with continuous stack monitoring facility should be installed.

(iii) Electro-static-precipitator having efficieny of not less than 99.8% should be installed and it should be ensured that particulate emission would not exceed the prescribed limit of 150 ug/Nm3.

(iv) A closed circuit cooling device should be provided. The water requirement should be limited to 600 CUM/hour from the Yeleru Canal and 9100 CUM/hour from the sea. The proposed pipeline of 6 km for sea water intake should conform to the regulations of the Coastal Zone Notification of February, 1991.

(v) Adequate space should be provided for installation of flue gas desulphurisation plant in future for control of sulphur-di-oxide.

(vi) Acquisition of land should be restricted to 2381.00 acres including the area of 630 acres for ash disposal.

(vii) Only beneficiated coal to the tune of 14,844 tonnes/day should be used. Fly ash generated to the tune of 33.5 million CUM should be collected in dry form in silos and fully utilised in a phased manner. Presently, plan has been drawn for utilisation of 20% ash. A detailed scheme for full utilisation should be submitted to the Ministry by 31 December, 1996. For avoiding contamination of ground water, ash pond should be suitablly lined and dyked.

(viii) Noise level should be limited to 85 dBA and regular maintenance of equipments be undertaken. For people working in the area of generator halls and other high noise areas, ear pluggs should be provided.

(ix) A Rehabilitation Master Plan covering details of the provisions made for rehabilitation of 150 families, compensation package, training facilities etc. should be submitted within four months i.e. by November, 1996. The plan should specifically indicate the schedule and implementation.

(x) For controlling fugitive dust, regular sprinkling of water in coal handling and other vulnerable areas of the plant should be ensured.

(xi) Afforestation should be undertaken covering an area of 292 acres and should be implemented in a phased manner. After care, gap filling and monitoring should also be ensured. A norm of 1500-2000 trees per ha should be followed. The afforestation plan may be submitted by November, 1996 and the schedule given in it is adhered to strictly.

(xii) Continuous monitoring of ground water should be undertaken by establishing good network of observation wells in consultation with the Central Ground Water Board. Results and data collected should be analysed to ascertain the status of water quality and findings should be submitted for evaluation.

(xiii) All effluents generated in various plant activities should be collected in the Central Effluent Treatment Plant and treated to ensure adherence to specified standards of discharge. The concept of zero discharge should be adopted to a maximum possible extend.

(xiv) Keeping in view that 2 x 520 MW Thermal Power Plant by M/s Hinduja National Power Corporation Ltd. (HNPCL) is proposed in the vicinity of Simhadri Project, common facilities for coal transportation, laying of rail line etc. should be worked out in mutual consultation to avoid duplication of the facilities and acquisition of additional area.

(xv) A financial provisionofRs.301.55 crores should be provided for implementation of environmental mitigative measures with adequate scope for its enhancement, if required, in future.

(xvi) Regular monitoring for SPM, SO2 and NOX around the power plant may be carried out and records maintained. The data so collected should be properly analysed and submitted to the Ministry every six months.

(xvii) Full cooperation should be extended to the Scientists/ Officers from the Regional Office of the Ministry at Bangalore who would be monitoring the compliance of environmental status. Complete set of impact assessment report and the Management Plans should be forwarded to the Regional Office for their use during monitoring.

(xviii) Monitoring Committee should be constituted for reviewing the compliance to various safeguard measures by involving recognised local NGOs, Pollution Control Boards, Institutions, Experts etc.

3. The Ministry reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry.

4. In case of any deviation or alteration in the project proposed from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the conditions imposed and to add additional environmental protection measures required, if any.

5. 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 the Public Liability Insurance Act, 1991, the Impact Assessment Notification of January, 1994 and its amendments.

(Nalini Bhat)
Additional Director

Chairman and Managing Director,
National Thermal Power Corporation Ltd.,
NTPC Bhavan, SCOPE Complex,
Lodhi Road,
New Delhi-110003.

Copy for information to:-

1. The Secretary, Ministry of Power, Shram Shakti Bhavan, Rafi Marg, New Delhi.

2. The Chairman, Andhra Pradesh Pollution Control Board, IInd Floor, HUDA Complex, Maitrivanum, Ammerpet, Hyderabad-38.

3. The Chairman, Central Electricity Authority, Sewa Bhavan, R.K. Puram, New Delhi.

4. The Chief Conservator of Forests, Regional Office, Bangalore.

5. The Chairman, Central Pollution Control Board, East Arjun Nagar, Delhi.

6. Guard File.

(Nalini Bhat)
Additional Director

FAX
NO. J-13011/19/94-IA-II (T)

तार
Telegram : PARYAVARAN,
NEW DELHI
दूरभाष :
Telephone :
टेलेक्स (द्विभाषीय) ।
Telex : (bi-lingual) : W-66185 DOE IN
FAX : 4360678

भारत सरकार
पर्यावरण एवं वन मंत्रालय
GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT & FORESTS
पर्यावरण भवन, सी० जी० ओ० कॉम्प्लेक्स
PARYAVARAN BHAWAN, CGO COMPLEX
लोदी रोड, नई दिल्ली-110003
LODHI ROAD, NEW DELHI-110003

Dated : 6.2.1998.

Subject:- 2 x 500 MW Simhadri Thermal Power Project by National Thermal Power Corporation Ltd., Andhra Pradesh.

.....

Reference is invited to communication No. 33/3/9531(F-97)/3/004/D dated the 16th December, 1997 and dated 16th January, 1998 from National Thermal Power Corporation Ltd. regarding the permission to use Raw Coal for Simhadri Super Thermal Power Project, Andhra Pradesh.

2. Keeping in view the provision of Notification No. G.S.R. 560 (E) dated the 19th September, 1997, the Ministry has no objection in using the Raw Coal for the proposed Simhadri Super Thermal Power Project. Accordingly, the condition No. vii stipulated in our clearance letter of even number dated 23rd July, 1996 may be read as under:-

" Use of coal should not exceed 16,800 tonnes per day for 100 % PLF operation. Fly ash should be collected in dry form and should be fully used in a phased manner. Acquisition of land for ash disposal should be restricted to 630 acres. Presently, Plan has been drawn for utilisation of only 20% ash. A detailed Scheme should be drawn for full utilisation and submitted by June, 1998. For avoiding contamination of ground water, ash pond should be suitably lined and dyked".

....2/-

3. All other conditions stipulated in our earlier clearance letter will remain unchanged.

4/3/98

(DR. A.K. TYAGI)
Joint Director

The Chairman and Managing
Director,
National Thermal Power Corpn. Ltd.,
Plot No. A-8A, Sector-24,
P.B. No. 13,
Noida (UP)- 201 301.

Copy to:-

1. The Secretary, Ministry of Power Shram Shakti Bhawan, Rafi Marg, New Delhi.
2. The Chairman, Andhra Pradesh Pollution Control Board, IInd Floor, HUDA Complex, Maitrivanum, Ammerpet, Hyderabad - 38.
3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi.
4. The Chief Conservator of Forests, Regional Office, Bangalore.
5. The Chairman, Central Pollution Control Board, East Arjun Nagar, Delhi - 32.
6. Guard File.

(DR. A.K. TYAGI)
Joint Director

Page-1

No.J.13011/19/94-IA.II(T)
Government of India/Bharat Sarkar
Ministry of Environment and Forests

Paryavaran Bhavan,
C.G.O. Complex, Lodi Road,
New Delhi-110003.

May 20, 2002.

Subject : 2x500 MW Simhadri Thermal Power Station, Andhra Pradesh of M/s National Thermal Power Corporation Limited - Waiver of condition reg.

This has reference to letter No.33/3/9531(F-98)/3/004/D dated 19th September and 20th November, 1998 and No.ESE.3520:2001.GEN.04D dated 27th December, 2001 from National Thermal Power Corporation Limited requesting waiver of stipulation of lining of ash pond area for the above mentioned project.

2. The project report of December, 2001 on "Hydro-Geological Investigations for Lining of Ash Pond at Simhadri Thermal Power Plant, Andhra Pradesh" by National Institute of Hydrology, Roorkee, has been examined in the Ministry for reviewing the request regarding waiver for lining of ash pond area of Simhadri Thermal Power Project. The following findings of the report have been noted.

- The hydraulic conductivity of the soils is quite low and will not allow appreciable seepage of contaminated water.
- Even if the contaminated water seeps, it will flow towards Bay of Bengal due to natural gradient where enormous diluting capacity is available.
- The quality of ground water in the area is saline and not good for domestic use.
- Most of the villages are on the other side of the isolated hills and will not be affected due to ash disposal area.
- Even if some clay material from the ash disposal area has been used for construction of starter dyke, the investigators have expressed that there is still adequate layer of loam/silty loam in the ash disposal area to serve as impermeable layer.

3. Keeping in view the findings of the study report and geo-hydrological conditions in the region, Ministry partially modifies condition No.2(viii) of the environmental clearance issued for the project vide its letter of even number dated 23rd July, 1996 regarding lining of ash pond. The ash disposal area identified for the project need not be lined. However, following mitigation measures should be ensured during operation of the plant.

- No earth/clay matter should be removed from the ash dyke henceforth for any activity related to the project.

Proposed.

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- Leachate collections should be undertaken through Lysimeter at 6-10 locations around the ash dyke and monitoring report should be regularly submitted along with its analysis for ascertaining its change in water quality. For facilitating comparison, continuous monitoring of ground water quality should be immediately initiated to serve as baseline data.

- In the initial period, only flay ash should be discharged in ash dyke due to its grain size being similar to soil profile.

- Green belt should be created around the ash dyke for controlling fugitive dust. A detailed proposal indicating area coverage and phased action plan should be submitted within three months.

4. NTPC should ensure strict implementation of all other environmental conditions stipulated in the clearance letter and its subsequent amendments.

(Nalini Bhat)
Director

Shri M.L. Rao,
DGM (Environmental Engineering),
National Thermal Power Corporation Ltd.,
Plot No. A-8A, Sector-24, P.B.No.13,
NOIDA U.P.)-201 301.

Copy for information to :

1. Chief Conservator of Forests Chief Conservator of Forests, Regional Office, Southern Region, Ministry of Environment and Forests, Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, IInd Block, Koramangala, Bangalore-560034.

2. Chairman, Andhra Pradesh Pollution Control Board, IInd Floor, Huda Complex, Maitrivanum, Ammerpet, Hyderabad 38.

(Nalini Bhat)
Director

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1 For kind info pl.
GN (Simhadri) 02/08/07

BY SPEED POST

Regional ED (South) - May like to see

No. J- 13011/11/2007-IA-II (T)
Government of India
Ministry of Environment & Forests

Paryavaran Bhawan
CGO Complex, Lodi Road
New Delhi-110003

Dated: 1st August, 2007

Copy: 1. Dr MP (EMD/AM)
2. AK Jain (TS)
3. Jaroop (PRS)
4. JS-Coal Power

To

M/s National Thermal Power Corporation Ltd.
Plot No. A-8A, Sector 24,
Post Box No.13
Noida-201301,
Uttar Pradesh.

Sub: Simhadri Super Thermal Power Project, Stage-II (2x500 MW) at Vizag, District Visakhapatnam, Andhra Pradesh by M/s NTPC Ltd – Environmental Clearance - Regarding. (EC)

Sir,

The undersigned is directed to refer to your communication no. CC:ESE: 3530:2006:07/GEN dated 23. 02.2007 on the above mentioned subject. Subsequent information furnished vide letter dated 9th May, 2007 has also been considered.

2. It is noted that the proposal is for grant of environmental clearance under the provisions of EIA Notification, 1994 for setting up of a 2x500 MW power plant as stage-II expansion at Simhadri, Visakhapatnam District, Andhra Pradesh. The plant will be located within the premises of the existing stage-I power plant. No additional land will be acquired for the main plant, however, 400 acres of barren land for the ash pond and 75 acres of land for afforestation outside the plant premises will be acquired. The water requirement is estimated as 6740 m3/hr of sea water and 550 m3/hr of sweet water. The sweet water requirement will be met from Visakhapatnam Industrial Water Supply Project. The coal requirement is estimated as 18,000 TPD at 100% PLF. No National Park / Sanctuary are reported within 10 km of the project site. Public hearing was held on 9.01.2007. Total cost of the project will be Rs 4844.42 crores which includes Rs 270.42 crores for environmental protection measures.

3. The proposal has been considered by the Expert Appraisal Committee in accordance with para 12 of the EIA Notification dated 14th September, 2006 read with

Ref 78 Dt 2/8/07

2/6

para 2.2.1 (i) (a) of the Circular No. J-11013/41/2006-IA.II(I) dated 13.10.2006. Based on the recommendations of the Expert Appraisal Committee for Thermal Power and Coal Mine Projects, the Ministry of Environment & Forests hereby accords environmental clearance to the said project under the provisions of EIA Notification 2006, subject to implementation of the following terms and conditions:-

(i) No activities in CRZ area shall be taken up without obtaining requisite prior clearance under the provisions of the CRZ Notification, 1991.

(ii) Ash and sulphure content in coal to be used as fuel shall not exceed 45% and 0.6% respectively.

(iii) Space provision shall be made for installation of FGD of requisite efficiency of removal of SO_2, if required at a later stage.

(iv) A bi-flue stack of 275 m height with exit velocity of at least 22.2 m/s shall be provided with continuous online monitoring system.

(v) High efficiency Electrostatic Precipitator (ESPs) having efficiency of 99.9% shall be installed so as to ensure that particulate emissions do not exceed 100 mg/Nm^3.

(vi) Closed Cycle Cooling system with natural draft cooling towers shall be provided.

(vii) Treated effluents conforming to the prescribed standards shall be re-circulated and reused with in the plant. The discharge, if any, into the sea shall be at ambient temperature from the cold water side.

(viii) Rain water harvesting should be adopted. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rain water harvesting technology within a period of three months from the date of clearance.

(ix) Fly ash shall be collected in dry form and its 100% utilization shall be achieved within 9 years in accordance with the notification on fly ash utilization SO 763 (E) dated 14th September, 1999 and the amendments made therein from time to time.

(x) Regular monitoring of ground water quality including heavy metals shall be undertaken around ash dyke and the project area to ascertain the change, if any, in the water quality due to leaching of contaminants from ash disposal area.

(xi) Noise levels shall be limited to 75 dBA. For people working in the high noise area, protective devices such as earplugs etc. shall be provided.

(xii) In lieu of the 25 acres of greenbelt area to be utilized for the project, greenbelt shall be developed in an area of 10 acres between coal handling plant and cooling tower of stage-II. Additionally, afforestation shall be carried out in an area of 75 acres outside the plant premises in consultation with the State Forest Department.

(xiii) Regular monitoring of the air quality shall be carried out in and around the power plant and records shall be maintained. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with State Pollution Control Board. Six monthly reports shall be submitted to this Ministry.

(xiv) For controlling fugitive dust, regular sprinkling of water in vulnerable areas of the plant shall be ensured.

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

(xvi) A separate environment monitoring cell with suitable qualified staff should be set up for implementation of the stipulated environmental safeguards.

(xvii) Half yearly report on the status of implementation of the conditions and environmental safeguards should be submitted stipulated to this Ministry, the Regional Office, CPCB and SPCB.

(xviii) Regional Office of the Ministry of Environment & Forests located at Bangalore will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report, Environment Management Plan and the additional information/clarifications submitted subsequently to this ministry should be forwarded to the Regional Office for their use during monitoring.

(xix) Separate funds should be allocated for implementation of environmental protection measures along with item-wise break-up. These cost should be included as part of the project cost. The funds earmarked for the

environment protection measures should not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.

(xx) Full cooperation should be extended to the Scientists/Officers from the Ministry and its Regional Office at Bangalore/the CPCB/the SPCB during monitoring of the project.

4. The Ministry reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry.

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

6. In case of any deviation or alteration in the project proposed 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.

7. 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.

Yours faithfully,

(Dr. S.K. Aggarwal)
Director

Copy to:-

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi-110001.

2. The Secretary, Environment & Forests Department, Govt. of Andhra Pradesh, Secretariat, Hyderabad-500 022.

3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.

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4. The Chairman, Andhra Pradesh State Pollution Control Board, 2nd Floor, HUDA Complex, Maitrivaram, S. R. Nagar, Amarpet, Opp. Sarathi Studio, Hyderabad – 500038 - **with a request to display a copy of the clearance letter at the Regional Office, District Industries Centre and Collector's office for 30 days.**

5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.

6. The Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office(SZ), Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, II-Block, Koramangla, Bangalore-560034.

7. The Director (EI), MOEF.

8. Guard file.

9. Monitoring file.

(Dr. S.K. Aggarwal)
Director

ANDHRA PRADESH POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN, A-3, INDUSTRIAL ESTATE,
SANATHNAGAR, HYDERABAD - 500 018

Phone: 040-23887500
Fax: 040- 23815631
Grams : Kalusya Nivarana
Website :appcb.ap.nic.in

RED CATEGORY
RENEWAL OF CONSENT & AUTHORISATION ORDER
BY REGISTERED POST WITH ACKNOWLEDGEMENT DUE

Consent Order No : APPCB/VSP/VSP/12334/HO/CFO/2017- **Date: 31.07.2017**

CONSENT is hereby granted for Operation under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof and Authorisation under Rule 6 of the Hazardous & Other Wastes (Management and Transboundary, Movement) Rules, 2016 and the rules and orders made there under (hereinafter referred to as 'the Acts', `the Rules') to:

M/s. Simhadri Super Thermal Power Project (Stage-I&II),
NTPC Limited, Parawada,
Visakhapatnam District - 531 020
E-mail: ssrao01@ntpc.co.in / jithinabraham@ntpc.co.in

(Hereinafter referred to as 'the Applicant') authorizing to operate the industrial plant to discharge the effluents from the outlets and the quantity of emissions per hour from the chimneys as detailed below:

i) Out lets for discharge of effluents:
Stage - I (Unit -1&2)- 1000 MW.

Outlet No.	Outlet Description	Max Daily Discharge (KLD)	Point of disposal
1.	D.M. Plant Regeneration effluent	3400	Reused for Ash Slurry preparation
2.	Boiler Blow Down and once through Cooling Water after treatment	1,03,900	Into Sea
3.	Ash Pond Effluent	9600	Reused for Ash Pumping
4.	Domestic	1790	After treatment in STP, onland for Plantation / Gardening.
	Total	1,18,690	

Stage - II (Unit -3&4)- 1000 MW

Existing Outlet No.	Outlet Description	Max Daily Discharge (KLD)	Point of disposal
1.	Filter Back wash	240	Recycled to clarifier inlet
	CHP effluent	4800	Sedimentation, Treatment & Recycle
2.	DM Plant Regeneration Waste	240	Neutralization and disposal through Central Monitoring Basin (CMB) and excess treated effluents to Sea.
	Cooling Tower blow down	106320	Partial use and disposal through CMB and excess treated effluents to Sea.
	Boiler Blow down	1080	Disposal through CMB and excess treated effluents to Sea.
	Ash water Blow down	34320	Disposal through CMB and excess treated effluents to Sea.
3.	Clarifier Sludge	720	Disposed in ash pond
4.	Domestic	2400	Biological treatment & Onland for Plantation / Gardening
	Total	1,50,120 (6255 m^3/hr)	

ii) Emissions from chimneys:

Chimney No.	Description of Chimney	Quantity of Emissions in m3/hr. at peak flow
1.	Attached to 2 x1,675 TPH Coal Fired Boilers (Stage-I: 1000 MW)	28,51,560
2.	Attached to 2 x1,675 TPH Coal Fired Boilers	28,99,800

	(Stage-II: 1000 MW)	
3.	Attached to 6 x 1500 KVA D.G Sets	--

iii) **HAZARDOUS WASTE AUTHORISATION (FORM - II) [See Rule 6 (2)]:**

M/s. Simhadri Super Thermal Power Project, NTPC Limited, Stage-I&II, Parawada, Visakhapatnam District., is hereby granted an authorization to operate a facility for collection, reception, storage, treatment, transport and disposal of Hazardous Wastes namely:

- **HAZARDOUS WASTES WITH RECYCLING OPTION:**

S.No	Name of the Hazardous waste	Stream	Quantity of Hazardous waste	Disposal Option
1.	Used / Waste Lubricating oil	5.1 of Schedule - I	90 KL/Annum	Authorized Re-processors / Re-cyclers.

This consent order is valid for power generation with quantities indicated below:

S.No.	Product	Quantity
1	**Electricity (Coal with maximum sulphur content of 0.6% and ash content of 45%)**	**2000 MW (Existing: Stage - I(Unit-1&2) - 1000 MW, Existing: Stage - II(Unit-3&4) - 1000 MW)**

This order is subject to the provisions of `the Acts' and the Rules' and orders made thereunder and further subject to the terms and conditions incorporated in the schedule A, B & C enclosed to this order.

This combined order of consent & Hazardous Waste Authorization shall be valid for a period ending with the **31st day of August, 2022.**

Sd/-
MEMBER SECRETARY

To
M/s. Simhadri Super Thermal Power Project (Stage-I & II),
NTPC Limited, Parawada,
Visakhapatnam District - 531 020

// T.C.F.B.O. //

1/8/17

Joint Chief Environmental Engineer
Unit Head-IV

SCHEDULE-A

1. Any up-set condition in any industrial plant / activity of the industry, which result in, increased effluent / emission discharge and/ or violation of standards stipulated in this order shall be informed to this Board, under intimation to the Collector and District Magistrate and take immediate action to bring down the discharge / emission below the limits.
2. The industry should carryout analysis of waste water discharges or emissions through chimneys for the parameters mentioned in this order on quarterly basis and submit to the Board.
3. All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991 should be followed as applicable.
4. The industry should put up two sign boards (6x4 ft. each) at publicly visible places at the main gate indicating the products, effluent discharge standards, air emission standards, hazardous waste quantities and validity of CFO and exhibit the CFO order at a prominent place in the factory premises.
5. Not withstanding anything contained in this consent order, the Board hereby reserves the right and powers to review / revoke any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.
6. The industry shall file the water cess returns in Form-I as required under section (5) of Water (Prevention and Control of Pollution) Cess Act, 1977 on or before the 5th of every calendar month, showing the quantity of water consumed in the previous month along

with water meter readings. The industry shall remit water cess as per the assessment orders as and when issued by Board.

7. The applicant shall submit Environment statement in Form V before 30th September every year as per Rule No.14 of E(P) Rules, 1986 & amendments thereof.
8. The applicant should make applications through Online for renewal of Consent (under Water and Air Acts) and Authorization under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts and detailed compliance of CFO conditions for obtaining Consent & HW Authorization of the Board. The industry should immediately submit the revised application for consent to this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions. Any change in the management shall be informed to the Board. The person authorized should not let out the premises / lend / sell / transfer their industrial premises without obtaining prior permission of the State Pollution Control Board.
9. Any person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules 1982, to Appellate authority constituted under Section 28 of the Water(Prevention and Control of Pollution) Act, 1974 and Section 31 of the Air(Prevention and Control of Pollution) Act, 1981.

SCHEDULE - B

WATER POLLUTION:

1. The effluent discharged shall not contain constituents in excess of the tolerance limits mentioned below.

Outlet	Parameter	Limiting Standards
2.	pH	6.50 - 8.50
	Temperature not more than 5°C higher than intake water.	
	Total Suspended Solids (at 103 - 105^0 C)	100 mg/l
	Oil and Grease	20 mg/l
	Free chlorine	0.5 mg/l
	Phosphate as PO4	20 mg/l
	Chromium (Total)	0.2 mg/l
	Copper (Total)	1mg/l
	Iron	1 mg/l
	Zinc	1 mg/l
4.	pH	5.5 - 9.0
	Total Suspended Solids (at 103 - 105^0 C)	200 mg/l
	Bio Chemical Oxygen Demand (BOD 3 at 27 ^{0}C)	100 mg/l
	Total Dissolved Solids	2100 mg/l

2. The industry shall take steps to reduce water consumption to the extent possible and consumption shall NOT exceed the quantities mentioned below:

Stage - I (Unit -1&2)- 1000 MW

S. No.	Purpose	Quantity in KLD
1.	Industrial Cooling (Makeup) - Sea water	2,16,000 KLD
2.	DM Plant	4,320 KLD
3.	Domestic (including Gardening / Irrigation)	4,080 KLD
	Total	**2,24,400 KLD**

Stage - II (Unit -3&4)- 1000 MW

S. No.	Purpose	Quantity in KLD
1.	Industrial Cooling (Makeup) - Sea water	2,13,240 KLD
2.	DM Plant	13,200 KLD
3.	Domestic (including Gardening / Irrigation)	
	Total	**2,26,440 KLD**

The industry shall maintain separate water meters for the above areas and maintain records. The source of water is Sea water (8885 cum/hr) from Bay of Bengal and 550 cum/hr from Yeleru left bank canal.

AIR POLLUTION:

3. The emissions shall not contain constituents in excess of the prescribed limits mentioned below.

Chimney No.	Parameter	Emission Standards
1	Particulate matter	115 mg/Nm^3
2	Particulate matter	100 mg/Nm^3

4. The industry shall comply with emission limits for DG sets of capacity upto 800 KW as per the Notification G.S.R.520 (E), dated 01.07.2003 under the Environment (Protection) Amendment Rules, 2003 and G.S.R.448(E), dated 12.07.2004 under the Environment (Protection) Second Amendment Rules, 2004. In case of DG sets of capacity more than 800 KW shall comply with emission limits as per the Notification G.S.R.489 (E), dated 09.07.2002 at serial No.96, under the Environment (Protection) Act, 1986.
5. The industry shall comply with ambient air quality standards of PM_{10} (Particulate Matter size less than 10μm) - 100 μg/ m^3; $PM_{2.5}$ (Particulate Matter size less than 2.5 μm) - 60 μg/ m^3; SO_2 - 80 μg/ m^3; NO_x - 80 μg/m^3 outside the factory premises at the periphery of the industry.
   Standards for other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No.B-29016/20/90/PCI-I, dated 18.11.2009
   Noise Levels: Day time (6 AM to 10 PM) - 75 dB (A)
   Night time (10 PM to 6 AM) - 70 dB (A).

GENERAL:

6. The industry shall not increase the capacity beyond the permitted capacity mentioned in this order without obtaining CFE & CFO of the Board.
7. **The industry shall submit detailed action plan within one month for fly ash utilization as per the Fly Ash Notification on MoEF to the Board to achieve 100% utilisation of fly ash.**
8. The industry shall explore possibilities for disposal of 100 % fly ash generated to outside parties instead of dyke wall rising.
9. The industry shall maintain proper water curtains in the Ash ponds to avoid dust nuisance to the nearby villagers.
10. The industry shall maintain permanent mechanical sprinklers for suppression of dust on the haul roads in between the villages and report the compliance to RO-Visakhapatnam.
11. Refurbished Environment Management Team with dedicated man power shall be maintained for continuous monitoring of Plant environment to ensure compliance of CFO conditions.
12. The industry shall maintain 3 CAAQM stations connected to APPCB website and report the compliance to RO-Visakhapatnam.
13. The industry shall maintain online Stack and ambient monitoring systems with connection to the Board's website.
14. The industry shall maintain duly compacted soil cover of requisite thickness as per norms for the ash ponds to avoid dust pollution and report the compliance to RO-Visakhapatnam.
15. The industry shall submit Isotopic study final report of M/s. NEERI on impacts on ground water due to ash ponds and report the compliance to RO-Visakhapatnam. Continuous monitoring of the ground water quality in all sides of the plant shall be carried out.
16. The industry shall take necessary measures like Ammonia dosing to maintain ESPs attached to the Boilers so as to meet SPM standards all the time.
17. The industry maintain the data logging facility provided for storing online stack emission data properly, for retrieval as and when necessary. Industry shall submit monthly report to the RO Visakhapatnam.
18. The industry shall maintain water meters for recording consumption of Sea water / water from Yeleru canal and maintain proper records for daily water consumption and shall submit monthly reports to the RO, Visakhapatnam.
19. The industry shall maintain proper arrangements for collection of seepage from ash pond and pumped back into the ash water system, so as to avoid ground water pollution in the surrounding area.
20. The industry shall maintain water cover in the ash pond area to prevent fly ash from getting air borne and air pollution in the surrounding area especially to the residents of Pittavanipalem.
21. Efforts shall be taken to dispose all fly ash in dry form as much as possible instead of diverting it to wet ash pond due to paucity of land available and due to lack of secured landfill arrangement in the ash pond. Dry ash collection systems of Stage-I & Stage - II shall be maintained properly.
22. The industry shall monitor all ground water peizo wells and submit report to RO-Visakhapatnam every three months indicating trends.

23. Garland canal shall be maintained around the fly ash pond to collect water that is expected to leach out and monitoring of such leachates shall be carried out.

24. After increase in the bund level and increase in the storage capacities due to the lateral pressures, the aquifer may be influenced due to the leachates. The industry shall maintain sufficient fresh water in the borrow pits to counter the lateral pressures and contain the leachates if any percolate into strata.

25. The industry shall act on pollution problems that arise out of the ash pond and shall take measures to contain by taking time to time action to dispel apprehensions by the residents of the villagers. If it is required, the industry shall take up the corrective measures like introducing geo-textiles vertically in the sub-surface levels in the detected areas of leaching.

26. The industry shall not use any fuels other than those permitted in this order without prior consent from the Board. They shall maintain log registers on type of fuels & daily consumption, ash content, sulphur content etc., and shall furnish consolidated records to R.O., Visakhapatnam for every three months.

27. The industry shall maintain interlocking facility between APC equipment (ESP) and fuel feeding system for all the units, so that the feeding of the fuel will be stopped automatically, in case, the ESP fails/ tripping's are occurred.

28. The industry shall maintain separate water meters to assess the quantity of water consumed at various sections. The industry shall provide separate water meters with necessary pipeline for assessing the quantity of water used for each of the purposes mentioned below:

    a. Industrial cooling, boiler feed.
    b. Domestic purposes.
    c. Processing, whereby water gets polluted and pollutants are easily biodegradable.
    d. Processing, whereby water gets polluted and pollutants are not easily biodegradable.

29. The industry shall maintain the following records and the same shall be made available to the Board Officials during the inspection.

    a. Daily power generation details.
    b. Quantity of Effluents generated and disposed.
    c. Log Books for pollution control systems.
    d. Daily Fly ash generated and disposed.

30. Green belt of adequate width and density shall be maintained along the boundary of the industry and around ash ponds with minimum area of 33% of total area and to protect surrounding Villages from fugitive dust.

31. The industry shall comply with directions issued by Board from time to time.

32. The industry shall comply with the MoEF,GoI notification dt.14.09.1999 and other directions issued time to time with regard to utilization of ash.

33. The industry shall take measures around the ash pond area to avoid entry of animals in order to prevent accidents, breakage of emergency ponds and protection of greenbelt.

SCHEDULE-C

[see rule 6(2)]

[CONDITIONS OF AUTHORISATION FOR OCCUPIER OR OPERATOR HANDLING HAZARDOUS WASTES]

1. All the rules and regulations notified by Ministry of Environment and Forests, Government of India under the E(P) Act, 1986 in respect of management, handling, transportation and storage of the Hazardous wastes should be followed.

2. The industry shall not store hazardous waste for more than 90 days as per the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016.

3. The industry shall store Used / Waste Oil and Used Lead Acid Batteries in a secured way in their premises till its disposal to the manufacturers / dealers on buyback basis.

4. The industry shall maintain 6 copy manifest system for transportation of waste generated and a copy shall be submitted to concerned Regional Office of APPCB. The driver who transports Hazardous Waste should be well acquainted about the procedure to be followed in case of an emergency during transit. The transporter should carry a Transport Emergency (TREM) Card.

5. The industry shall maintain proper records for Hazardous & other wastes stated in Authorization in FORM-3 i.e., quantity of Incinerable waste, land disposal waste, recyclable waste etc., and file annual returns in Form- 4 as per Rule 6 (5) of the

Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016 and amendments thereof.

6. The industry shall submit the condition wise compliance report of the conditions stipulated in Schedule A, B & C of this Order on half yearly basis to Board Office, Hyderabad and concerned Regional Office.

Sd/-
MEMBER SECRETARY

To
M/s. Simhadri Super Thermal Power Project,
NTPC Limited, Parawada,
Visakhapatnam District - 531 020

// T.C.F.B.O. //

9/8/17

Joint Chief Environmental Engineer
Unit Head-IV

No.J.13011/19/94-IA.II(T)
Government of India/Bharat Sarkar
Ministry of Environment and Forests

Paryavaran Bhavan,
C.G.O. Complex, Lodi Road,
New Delhi-110003.

May 20, 2002.

Subject : **2x500 MW Simhadri Thermal Power Station, Andhra Pradesh of M/s National Thermal Power Corporation Limited - Waiver of condition reg.**

This has reference to letter No.33/3/9531(F-98)/3/004/D dated 19th September and 20th November, 1998 and No.ESE.3520:2001.GEN.04D dated 27th December, 2001 from National Thermal Power Corporation Limited requesting waiver of stipulation of lining of ash pond area for the above mentioned project.

2. The project report of December, 2001 on "Hydro-Geological Investigations for Lining of Ash Pond at Simhadri Thermal Power Plant, Andhra Pradesh" by National Institute of Hydrology, Roorkee, has been examined in the Ministry for reviewing the request regarding waiver for lining of ash pond area of Simhadri Thermal Power Project. The following findings of the report have been noted.

- The hydraulic conductivity of the soils is quite low and will not allow appreciable seepage of contaminated water.
- Even if the contaminated water seeps, it will flow towards Bay of Bengal due to natural gradient where enormous diluting capacity is available.
- The quality of ground water in the area is saline and not good for domestic use.
- Most of the villages are on the other side of the isolated hills and will not be affected due to ash disposal area.
- Even if some clay material from the ash disposal area has been used for construction of starter dyke, the investigators have expressed that there is still adequate layer of loam/silty loam in the ash disposal area to serve as impermeable layer.

3. Keeping in view the findings of the study report and geo-hydrological conditions in the region, Ministry partially modifies condition No.2(viii) of the environmental clearance issued for the project vide its letter of even number dated 23rd July, 1996 regarding lining of ash pond. The ash disposal area identified for the project need not be lined. However, following mitigation measures should be ensured during operation of the plant.

- No earth/clay matter should be removed from the ash dyke henceforth for any activity related to the project.

- Leachate collections should be undertaken through Lysimeter at 6-10 locations around the ash dyke and monitoring report should be regularly submitted along with its analysis for ascertaining its change in water quality. For facilitating comparison, continuous monitoring of ground water quality should be immediately initiated to serve as baseline data.

- In the initial period, only flay ash should be discharged in ash dyke due to its grain size being similar to soil profile.

- Green belt should be created around the ash dyke for controlling fugitive dust. A detailed proposal indicating area coverage and phased action plan should be submitted within three months.

4. NTPC should ensure strict implementation of all other environmental conditions stipulated in the clearance letter and its subsequent amendments.

(Nalini Bhat)
Director

Shri M.H. Rao,
DGM (Environmental Engineering),
National Thermal Power Corporation Ltd.,
Plot No.A-8A, Sector-24, P.B.No.13,
NOIDA (U.P.)-201 301.

Copy for information to :

1. Chief Conservator of Forests Chief Conservator of Forests, Regional Office, Southern Region, Ministry of Environment and Forests, Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, IInd Block, Koramangala, Bangalore-560034.

2. Chairman, Andhra Pradesh Pollution Control Board, IInd Floor, Huda Complex, Maitrivanum, Ammerpet, Hyderabad-38.

(Nalini Bhat)
Director

No. 9/7/2011-S.Th.(Vol. IV)
Government of India
Ministry of Power

'F' Wing, Nirman Bhawan,
New Delhi, 22nd September, 2021

To,

1. CMDs/ MDs of coal / lignite based thermal power plants (Central/ State/ Private)
2. Principal Secretary (Power/ Energy) of All States/ UTs
3. Chairperson, Central Electricity Authority

Subject: Supply of Fly ash to the end users by the power plants to increase fly ash utilization

It is observed that the demand of Fly Ash has been increasing year on year basis contributing to increase in the Fly Ash utilization. Fly Ash is emerging as a valuable commodity. As the end users of Fly Ash like cement plants, brick kilns, road and construction agencies etc. are commercial ventures and all their input costs are accounted for, Fly Ash should invariably be auctioned through a transparent bidding process.

2. All Coal/lignite based power plants are hereby advised to provide fly ash to the end users for all new commitments for supply of fly ash based on the following guidelines:

2.1 The power plants shall provide the Fly Ash to end users through a transparent bidding process only.

2.2 If after bidding/ auction some quantity of Fly Ash still remains un-utilized, then only, as one of the options, it could be considered to be given free of cost on first come first served basis if the user agency is willing to bear transportation cost.

2.3 If ash remains unutilised even after the steps taken in Paras 2.1 and 2.2 above, TPP shall bear the cost of transportation of Fly Ash to be provided free to eligible projects.

2.4 The end users shall be obligated to source the fly ash from the nearest TPPs to reduce the cost of fly ash transportation. If the nearest TPP refuses to do so, the end user project shall approach Ministry of Power for appropriate directions.

2.5 The transportation cost wherever required to be borne as per provisions of MOEF&CC notification by the power plants, shall be discovered on competitive bidding basis only. Thermal Power Plants shall prepare a panel of transportation agencies every

year based on competitive bidding for transportation in slabs of 50km which may be used for the period. The TPPs shall call for bids well in advance so, that a transportation panel is in place as soon as the previous panel expires. There should not be gap between the expiry of one panel and the finalization of the fresh panel.

2.6 The fly ash will be offered to the end users on the competing demand basis, i.e the end users who offer the highest price for fly ash and seek minimum support for transportation cost will be offered the same fly ash on priority. This will reduce the tariff of electricity and burden on the consumers.

2.7 The power plants may offer fly ash subject to their technical restrictions such as all precautions required for Dyke Stability and Safety etc. The power plants having lower ash utilizations shall make all out efforts to increase the fly ash utilization.

3. All concerned are requested to take necessary action in this regard.

4. This issues with the approval of the Hon'ble Minister of Power and NRE.

(Anand Upadhyay)
Deputy Secretary to the Govt. of India
Tel: 23062439

Copy to:

i. Secretary (MOEF&CC), Government of India
ii. Secretary (MoRTH), Government of India
iii. Secretary (MoHUA), Government of India
iv. Secretary, CERC
v. Secretaries of all SERCs/ JERCs

Copy for kind information to:

PS to MOP, PS to MOSP, Sr. PPS to Secretary (Power), All Joint Secretaries/ EA/ CE (Thermal), Directors/DS, MOP

ANDHRA PRADESH POLLUTION CONTROL BOARD
ZONAL LABORATORY, VISAKHAPATNAM
D.No.39-33-20/4, Behind RTA Office, Madhavadhara VUDA Colony,
Visakhapatnam – 530 018.

M. RAVI, M.Sc
SENIOR ENVIRONMENTAL SCIENTIST

Ph : 0891-2719380/ 481
e-mail:zovsplab-ses2@appcb.gov.in

FORM – IV
REPORT BY THE STATE BOARD ANALYST

[See Rule-14]

Report No. 2021 – 12 – ST – 001 to 004 **Date:20.12.2021**

I hereby certify that I M. Ravi (I) State Board Analyst duly appointed under sub-section (3) of Section 26 of the Air (Prevention and Control of Pollution) Act, 1981, received a stack emission samples of **M/s Simhadri Super Thermal Power Project (Stage-I & II), NTPC Ltd., Parawada (M), Visakhapatnam District** collected from the **Stack attached to 1 X 1675 TPH Coal Fired Boiler (Unit-I) (ST-001), Stack attached to 1 X 1675 TPH Coal Fired Boiler (Unit-II) (ST-002), Stack attached to 1 X 1675 TPH Coal Fired Boiler (Unit-III) (ST-003) & Stack attached to 1 X 1675 TPH Coal Fired Boiler (Unit-IV) (ST-004)** collected on **15.12.2021** and received on the day of **16.12.2021** from Junior Scientific Officer, Zonal Laboratory, Visakhapatnam for analysis.

The sample was in a condition fit for analysis as reported below:

I further certify that I have analyzed the above mentioned sample from **16.12.2021 to 20.12.2021** and declare the result of the analysis to be as follows: -

S.No.	Sample No.	Values	Standard (mg/Nm^3)
		Particulate Matter (PM)	
1	Stack attached to 1 X 1675 TPH Coal Fired Boiler (Unit-I)	75.4	**115.0**
2	Stack attached to 1 X 1675 TPH Coal Fired Boiler (Unit-II)	86.1	**115.0**
3	Stack attached to 1 X 1675 TPH Coal Fired Boiler (Unit-III)	54.6	**100.0**
4	Stack attached to 1 X 1675 TPH Coal Fired Boiler (Unit-IV)	58.7	**100.0**

The condition of the seals, fastening and container on receipt was intact.

Signed this: 20.12.2021

Address:
M. Ravi,
Senior Environmental Scientist,
Zonal Laboratory,
APPCB, Visakhapatnam

M.Ravi

SIGNATURE OF THE STATE BOARD ANALYST

A.P. POLLUTION CONTROL BOARD, ZONAL LABORATORY, VISAKHAPATNAM
MOBILE CONTINUOUS AMBIENT AIR QUALITY MONITORING STATION
24 Hrs. AVERAGE VALUES
M/s. NTPC -SIMHADRI, PARAWADA, VISAKHAPATNAM

Location-1: PUMP STATION

Date	Time	CO mg/m³	O3 µg/m³	NO µg/m³	NO2 µg/m³	NOx µg/m³	NH3 µg/m³	SO2 µg/m³	PM 2.5 µg/m³	PM 10 µg/m³	AT °C	RH %	WS m/s	WD deg	BP mmHg
16.12.2021 to 17.12.2021	12:00 to 11:00	0.8	78.3	11.5	23.4	34.9	45	25.7	72	131	23.7	71.2	1.6	209	771

Location-2: ADMINISTRATION BUILDING

Date	Time	CO mg/m³	O3 µg/m³	NO µg/m³	NO2 µg/m³	NOx µg/m³	NH3 µg/m³	SO2 µg/m³	PM 2.5 µg/m³	PM 10 µg/m³	AT °C	RH %	WS m/s	WD deg	BP mmHg
17.12.2021 to 18.12.2021	15:00 to 14:00	0.8	87.4	16.7	19.8	36.5	53	33.7	63	126	22.5	69.0	1.4	200	770

Location-3: SARADA GUEST HOUSE ,TOWNSHIP

Date	Time	CO mg/m³	O3 µg/m³	NO µg/m³	NO2 µg/m³	NOx µg/m³	NH3 µg/m³	SO2 µg/m³	PM 2.5 µg/m³	PM 10 µg/m³	AT °C	RH %	WS m/s	WD deg	BP mmHg
18.12.2021 to 19.12.2021	16:00 to 15:00	0.7	72.6	11.4	22.6	34.0	44	26.3	70	118	23.3	69.6	0.7	137	769
NAAQ Standards 24 Hrs.	-	*2	*100	_	80	_	400	80	60	100	_	_	_	_	_

Note: * O3 & CO standards is for 8 hours

SENIOR ENVIRONMENTAL SCIENTIST

ANDHRA PRADESH POLLUTION CONTROL BOARD
ZONAL LABORATORY, VISAKHAPATNAM
Behind RTA Office, Madhavadhara VUDA Colony
Visakhapatnam – 530 018.
M. RAVI, M.Sc
SENIOR ENVIRONMENTAL SCIENTIST
Ph: 0891-2719480/380/481
e-mail:zovsplab-ses2@appcb.gov.in

AMBIENT AIR QUALITY MONITORING REPORT

Analysis Report No. : **2021 – 12 – A – 003 & 004**

Monitoring Location : On the terrace of complainant's house, D.No. 6-10, Back side of the Ramalayam Temple, Pittavanipalem (V), Parawada (M), Visakhapatnam District.

Monitoring conducted by : Analyst (OS), Regional Office, Visakhapatnam

Results:-

S.No.	Date of monitoring	Parameters (24 Hrs Avg.)			
		PM_{10} ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NO_2 ($\mu g/m^3$)	NH_3 ($\mu g/m^3$)
1.	15.12.2021 to 16.12.2021	120.0	15.0	19.0	28.0
2.	16.12.2021 to 17.12.2021	127.0	13.0	21.0	32.0
Standards(24 hrs average)		**100.0**	**80.0**	**80.0**	**400.0**

SENIOR ENVIRONMENTAL SCIENTIST

ANDHRA PRADESH POLLUTION CONTROL BOARD
ZONAL LABORATORY:: VISAKHAPATNAM
D.No.39-33-20/1/4,Madhavadhara VUDA Colony, Visakhapatnam - 530018.

M.RAVI, M.Sc.,
SENIOR ENVIRONMENTAL SCIENTIST

Ph : 0891-2719380/481
e-mail:zovsplab-ses2@ appcb.gov.in

ANALYSIS REPORT

Sample No. : **2021 – 12 – W – 199 to 205**

Sample location/Address : Surrounding villages of M/s NTPC, Parawada Mandal ,Visakhapatnam.

Sample Source :
W – 199: Sample of water from the hand pump-1 at besides kalpaka road, Pittavanipalem village
W – 200: Sample of water from the hand pump-2 at besides kalpaka road,Pittavanipalem village
W – 201: Sample of water from the hand pump-3 at Beri Ayyanna house Pittavanipalem village
W – 202: Sample of water from the hand pump-1 at Grameena Health care, Devada village
W – 203: Sample of water from the hand pump-2 at Post office Devada village
W – 204: Sample of water from the hand pump-1 at Village approach road, Dasaraipeta village
W – 205: Sample of water from the hand pump-2 at MPUP school,Dasaraipeta village

Sample collected on : 15.12.2021

Sample submitted on : 16.12.2021

Sample collected by : Analyst (OS), Regional Office, Visakhapatnam

S. No.	Parameter	W-199	W-200	W-201	W-202	W-203	W-204	W-205	Drinking water specification IS10500:2012	
									Requirement (Acceptable Limit)	Permissible Limit in the absence of alternate source
1.	pH	6.51	6.57	6.70	7.12	6.75	6.81	6.87	6.5-8.5	NR
2.	Electrical Conductivity (as µS/cm)	1565	2156	3230	2007	1815	1930	1263	--	--
3.	Chloride (as Cl)	185.8	342.4	320.0	293.5	215.2	249.4	88.0	250 mg/L	1000 mg/L
4.	Total Dissolved Solids	1012	1380	2110	1296	1182	1250	816	500 mg/L	2000 mg/L
5.	Total Alkalinity (as $CaCO_3$)	408	512	368	480	448	560	472	200 mg/L	600 mg/L
6.	Total Hardness (as $CaCO_3$)	400	500	808	420	680	544	436	200 mg/L	600 mg/L
7.	Calcium (as Ca)	107.2	108.8	182.4	49.6	174.4	81.6	67.2	75 mg/L	200 mg/L
8.	Magnesium (as Mg)	32.07	55.40	50.0	71.92	59.29	82.62	65.12	30 mg/L	100 mg/L
9.	Nitrate (as NO_3)	40.7	31.8	90.0	38.3	66.4	34.8	39.6	45 mg/L	NR
10.	Nitrite Nitrogen (as NO_2-N)	0.02	0.03	0.84	1.46	0.06	0.10	0.04	--	--
11.	Ammonical Nitrogen (as NH_3-N)	0.04	0.02	0.02	0.08	0.05	0.02	0.03	0.5 mg/L	NR
12.	Phosphate (as P)	0.02	0.01	BDL	0.01	BDL	0.01	BDL	--	--
13.	Sulphate (as SO_4)	95.15	98.64	110.0	96.05	95.88	68.64	31.64	200 mg/L	400 mg/L
14.	Fluoride (as F)	0.16	0.59	0.11	0.87	0.48	0.72	0.74	1.0 mg/L	1.5 mg/L
15.	Sodium (as Na)	168	257	164	296	114	204	110	--	--
16.	Potassium (as K)	19	5	10	3	12	8	5	--	--
17.	Chromium (as Cr)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.05 mg/L	NR
18.	Manganese (as Mn)	0.002	0.004	0.037	0.027	0.025	0.028	0.005	0.1 mg/L	0.3 mg/L
19.	Iron (as Fe)	0.049	0.042	0.063	0.022	0.100	0.034	0.031	0.3 mg/L	NR
20.	Nickel (as Ni)	<0.001	0.001	<0.001	<0.001	0.005	<0.001	<0.001	0.02 mg/L	NR
21.	Copper (as Cu)	0.001	0.003	0.005	0.003	0.011	0.001	0.006	0.05 mg/L	1.5 mg/L
22.	Zinc (as Zn)	0.180	0.059	0.047	0.078	0.207	0.136	0.029	5.0 mg/L	15 mg/L
24.	Arsenic (as As)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.01 mg/L	0.05 mg/L
25.	Cadmium (as Cd)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003 mg/L	NR
26.	Mercury (as Hg)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001 mg/L	NR
27.	Lead (as Pb)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.01 mg/L	NR

Note: - All values are expressed in mg/l except pH and EC
NR: No Relaxation

SENIOR ENVIRONMENTAL SCIENTIST