

**BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH AT KOLKATA**

**Miscellaneous Application No.45/2024/EZ
In
Original Application No.66/2024/EZ
(Earlier O.A. No.20/2024/PB)**

IN THE MATTER OF:

Pooja Phillo And Others

....Applicant(s)

Versus

Andhra Pradesh Pollution Control Board
through its Member Secretary & Anr

....Respondent(s)

INDEX

Sl.No.	Particulars	Page Nos.
1.	Affidavit of compliance of A.P. Pollution Control Board	1 - 8
2.	Annexure-I APPCB letter dt.27.10.2024 addressed to Principal Secretary to Govt., Mines and Geology Dept., GoAP.	9 - 36
3.	Annexure-II APPCB letter dt.11.12.2024 addressed to the Special Chief Secretary to Govt., EFS&T Dept.	37 - 128
4.	Annexure-III RO Report dt. 19.12.2024	129 - 136
5.	Annexure-IV APPCB letter dt.30.01.2025 addressed to the Special Chief Secretary to Govt., EFS&T Dept.	137 - 141

Dt. 28.02.2025

Place: New Delhi


Advocate for Respondent No. 7

TVS Raghavendra Sreyas &
Siddharth vasudev,
House No. 24, First Floor,
Ashoka Enclave Extension III,
Sector 35, Faridabad-121003
Haryana

**BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH AT KOLKATA**

Miscellaneous Application No.45/2024/EZ

In

**Original Application No.66/2024/EZ
(Earlier O.A. No.20/2024/PB)**

IN THE MATTER OF:

Pooja Phillo And Others

.... Applicant(s)

Versus

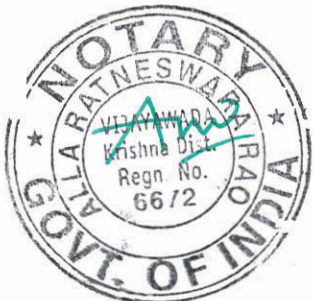
Andhra Pradesh Pollution Control Board
through its Member Secretary & Anr

.... Respondent(s)

AFFIDAVIT OF COMPLIANCE FOR RESPONDENT NO. 7

I, Shanmugam Sri Saravanan, IFS, Son of A. Shanmugam, aged about 51 years, presently working at Paryavaran Bhavan, APIIC Colony Road, Gurunanak Colony, Autonagar, Vijayawada, do hereby solemnly affirm and state as follows:

1. I, am presently working as Member Secretary (FAC), in Andhra Pradesh pollution Control Board and am duly authorized by the Respondent No. 7. I state that I am fully conversant with the facts of the case to the extent of the records maintained by the Respondent and as such competent to depose the correctness or otherwise of the facts stated in the present affidavit.
2. It is stated that the Original Application (O.A.) No. 20 of 2024(PB) has been registered in the Hon'ble National Green Tribunal (NGT), Principal Bench (PB), New Delhi based on the letter petition sent by Ms. Pooja Phillo & ors of Odisha State on construction of Shobhaput bridge and sand mining activity in the river.



**MEMBER SECRETARY
A.P. Pollution Control Board
VIJAYAWADA-520 007.**

3. It is stated that the Hon'ble NGT, in its order dt. 19.02.2024, constituted a Joint Committee with the officials of Central Pollution Control Board (CPCB), Odisha State PCB, Andhra Pradesh State PCB, Collector Koraput, IRO of MoEF&CC Bhubaneswar & Mines and Geology of Andhra Pradesh and directed the committee to undertake visits and look into the grievances of the applicant and to report the factual position and remedies to be taken for redressal of grievance. The CPCB, Kolkata is the Nodal Agency for coordination and compliance. The Hon'ble NGT(PB), New Delhi, transferred the matter to Eastern Zone Bench (EZ), Kolkata and ordered to file report by the Joint Committee before the Eastern Zone Bench, Kolkata. Accordingly, CPCB filed an affidavit before the Hon'ble NGT (EZ), Kolkata along with Joint Committee Report. It is reported by the Joint Committee that the mining activities were observed in the locations falls under Sudu & Pradhaniput areas in the meandering region of River Machhkund towards the Andhra Pradesh side.
4. It is stated that the Hon'ble NGT(EZ), renumbered the matter as O.A. No. 66 of 2024(EZ) and heard the matter on 23.04.2024 and directed the respondents to file their counter-affidavits. The Hon'ble NGT(EZ) heard the matter on 09.08.2024 and disposed the matter with following directions:

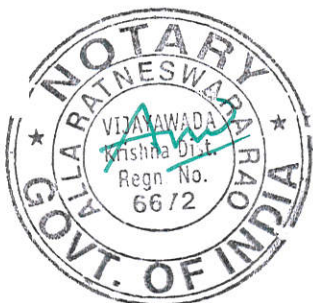
“28. We, therefore, dispose of this Original Application No.66/2024/EZ with a direction to the Chief Secretaries of Andhra Pradesh and Odisha to forthwith take steps for constituting a Committee as provided in the Enforcement and Monitoring Guidelines for Sand Mining 2020 and ensure strict and due compliance of the aforesaid Guidelines to prevent illegal sand mining mechanical or otherwise.



MEMBER SECRETARY
A.P. Pollution Control Board
VIJAYAWADA-520 007.

29. The State Respondents shall also take steps forthwith for taking appropriate legal action against illegal miners as well as for computation of Environmental Compensation. Action in this regard shall be taken within two months and action taken report shall be filed by the Member Secretaries of the State Pollution Control Board, Odisha and Andhra Pradesh respectively by 30.11.2024.”

5. In this regard, it is humbly stated that the Joint Committee has suggested the action plan for remedial measures in respect of sand mining. In this regard it was informed by the RO, Vizianagaram that the District Level committee was constituted under the Chairmanship of the District collector and the Board has not issued CTE/ CTO for the sand mining activities in the said area. Further, it was informed that the Industries, Infrastructure, Investments & Commerce (Mines-II) Dept., Govt. of AP has issued GO.Ms. No.71, dt.04.09.2019 for regulation of the sand mining in the State and as per the regulation the sand extraction from streams of I, II and III order for local needs and shall be transported by bullock carts only through the concerned Tahsildars. It was informed by the Irrigation Dept., the River Machkund falls under 2nd order stream.
6. It is stated that the Govt. of AP withdrawn the existing sand policies i.e., G.O.MS.No.71 dt.04-09-2019 and G.O.MS.No.25 dt.16.04.2021 and issued modified free sand policy through GO. Ms. No: 66 dt.25.10.2024, exempting of statutory duties, Extraction of Sand for local uses in the local body areas adjoining the streams, Extraction of Sand for consumers etc., and constituted Vigilance & Monitoring committees. It was mentioned that Extraction is permitted through manual methods and transportation through bullock carts/ tractors.



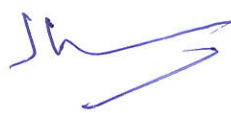
MEMBER SECRETARY
A.P. Pollution Control Board
VIJAYAWADA-520 007.

7. Further, it is stated that the MoEF&CC, GoI issued notification S.O. 1224(E), dt.28.03.2020, exempting certain cases from requirement of prior Environmental Clearance. In Appendix –IX of notification case- 4 read as follows:

“Customary extraction of sand and ordinary earth from sources situated in Gram Panchayat for personal use or community work in village”

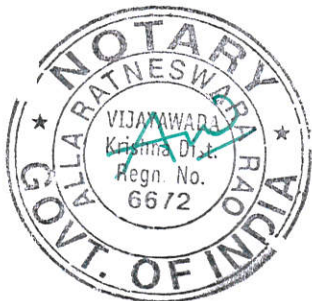
8. It is stated that in compliance with the Hon’ble NGT orders dt 09.08.2024, the Member Secretary of the Andhra Pradesh State Pollution Control Board (APPCB), addressed a letter to the Principal Secretary to Govt., Mines and Geology Dept., GoAP., on .27.10.2024 to take necessary follow-up action in the matter as per the directions of the Hon’ble Tribunal. The copy of the letter dt.27.10.2024 is attached as **Annexure –I.**
9. It is stated that in continuation to the above, the Member Secretary of the APPCB, communicated the orders of the Hon’ble NGT to the Special Chief Secretary to Govt., EFS&T Dept., on 11.12.2024, for taking further necessary action. The copy of the letter dt.11.12.2024 is attached as **Annexure –II.**
10. It is further stated that in obedience to the Hon’ble NGT, EZ orders dt.09.08.2024, the RO, Vizianagaram, again inspected the subject sand mining areas of Sobhaput Bridge, Sudu, Sariapalli, Pradhaniput towards the State of Andhra Pradesh on 12.12.2024 and informed that it has been observed, there was no evidence of sand mining activities and no movement of vehicles, populace and machinery around the areas. Further, informed that the water flow was observed in the River Machhkund over the subjected mining areas. The Copy of the report is attached as

Annexure-III.


MEMBER SECRETARY
A.P. Pollution Control Board
VIJAYAWADA-520 007.



11. It is stated that the Hon'ble NGT, EZ, issued order dt.12.12.2024 with a direction to the Member Secretary of the APPCB to file the affidavit of compliance before the next date of hearing in Miscellaneous Application (MA) No. 45 of 2024(EZ) filed in O.A. No.66 of 2024(EZ) in the Hon'ble NGT, Kolkata.
12. It is further stated that in compliance to the Hon'ble NGT order dt.12.12.2024, the Member Secretary of the APPCB, again addressed a letter on 30.01.2025 to the Special Chief Secretary to Govt., EFS&T Dept., informing the filing of M.A. No.45 of 2024(EZ) in O.A. No.66 of 2024 for taking further necessary action. The copy of the letter dt.30.01.2025 is attached as **Annexure –IV**.
13. It is humbly stated that for Enforcement and Monitoring of the sand mining, the Govt. of AP in its latest regulations issued in G.O. Ms. No: 66 dt. 25.10.2024, duly considering the MoEF&CC notification issued in S.O. 1224(E) dt.28.03.2020 for exempting certain cases from requirement of prior Environmental Clearance. The Standard Practice for assessing illegal mining, suggested by the Joint Committee could not be carried out as the subject mining areas are filled with river water and the gorges & meanderings observed in the mine areas are inundated in the water flow.
14. I stated that this report is submitted to the Hon'ble National Green Tribunal in due compliance of the directions issued by Hon'ble Tribunal. APPCB will abide by all such directions, as the Hon'ble Tribunal may deem fit and appropriate



DEPONENT

MEMBER SECRETARY
A.P. Pollution Control Board
VIJAYAWADA-520 007.

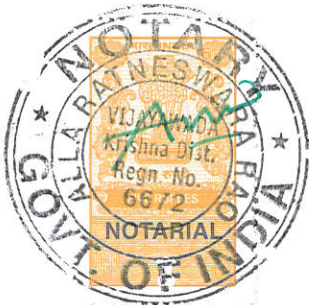
VERIFICATION

I, the above named Deponent, do hereby solemnly affirm and verify that the contents of this affidavit are true to best of my knowledge and belief and nothing material has been concealed there from.

Verified on this the 27th day of February 2025 at Vijayawada.

DEPONENT

MEMBER SECRETARY
A.P. Pollution Control Board
VIJAYAWADA-520 007.



Arw
27/02/2025
Alla Ratneswara Rao
B.Com., LL.B
ADVOCATE - NOTARY
Appointed by Central Govt
VIJAYAWADA. Krishna Dt. A.P.

PHOTOGRAPHS

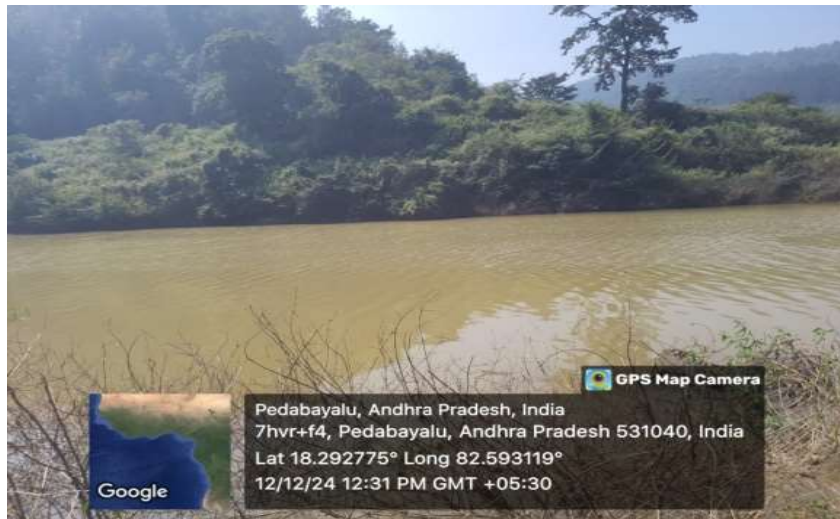
Shobaput Bridge



Sudu



Sariapall



Pradhaniput





o/c

ANNEXURE - I



ANDHRA PRADESH POLLUTION CONTROL BOARD
Dr. YSR Paryavaran Bhavan, APIIC Colony Road,
Gurunanak Colony, Autonagar, Vijayawada- 520007



Lr. No.21/APPCB/Legal/NGT-EZ/OA No.66 of 2024/2024 Dt. 27/10/2024 - 483

To

**The Principal Secretary to Govt.,
Department of Mines and Geology,
A.P. Secretariat, Velagapudi.**

Sir,

Sub: APPCB – Legal – O.A. No. 66 of 2024(EZ) (earlier O.A. No. 20 of 2024_PB, New Delhi), filed by Ms. Pooja Phillo & ors, resident of Nandapur Tahsil, Koraput District, Odisha State- Implementation of Hon'ble NGT, Eastern Zone Bench, Kolkata disposal order dt.09.08.2024 in the matters of construction of Shobhaput bridge and sand mining activity in the river- Follow up action- Requested - Reg.

Ref: The Hon'ble NGT, Eastern Zone Bench, Kolkata Order dt. 09.08.2024 in O.A. No. 66 of 2024(EZ) (Earlier O.A. No. 20 of 2024(PB)).

It is to submit that the Original Application (O.A.) No.20 of 2024(PB) was registered by the Hon'ble National Green Tribunal (NGT), Principal Bench (PB), New Delhi based on the letter petition submitted by the Applicants, Ms. Pooja Phillo and others, resident of Nandapur Tahsil, Koraput District, Odisha State. Thereafter, the case was transferred to the Eastern Bench (EZ) of the Hon'ble NGT at Kolkata and re-numbered as O.A. No.66 of 2024(EZ).

In this regard, it is to submit that the Hon'ble Tribunal, New Delhi in the order dt.19.02.2024 constituted a Joint Committee (the Central Pollution Control Board, Kolkata being the Nodal Agency) and the Committee was directed to inspect the site in question and submit a factual report and also suggest remedial action before the Hon'ble NGT, Kolkata. The Environmental Engineer, Regional Office (RO): Vizianagaram, APPCB was nominated as member of Joint committee. The copy of the Hon'ble Tribunal order dt.19.02.2024 is enclosed.

28.10.2024
DESPATCH
VJ

The Hon'ble NGT, Kolkata reviewed the counter affidavit of CPCB along with the Joint Committee Inspection Report and disposed the matter in the order dt.09.08.2024 with certain directions including the following:

28. *We, therefore, dispose of this Original Application No.66/2024/EZ with a direction to the Chief Secretaries of Andhra Pradesh and Odisha to forthwith take steps for constituting a committee as provided in the Enforcement and Monitoring Guidelines for Sand Mining 2020 and ensure strict and due compliance of the aforesaid Guidelines to prevent illegal sand mining mechanical or otherwise.*

29. *The State Respondents shall also take steps forthwith for taking appropriate legal action against illegal miners as well as for computation of Environmental Compensation. Action in this regard shall be taken within two months and action taken report shall be filed by the Member Secretaries of the State Pollution Control Board, Odisha and Andhra Pradesh respectively by 30.11.2024.*

A copy of the CPCB counter affidavit dt.20.05.2024 (224 Pages) along with Joint Committee Inspection Report is available in Tribunal website (https://greentribunal.gov.in/sites/default/files/news_updates/1716525970.pdf). The copy of the Hon'ble NGT order dt. 09.08.2024 is herewith enclosed for kind perusal.

In view of the above, the Mines and Geology Dept., is requested to take necessary follow-up action in the matter as per the directions of the Hon'ble Tribunal. The action taken report may please be communicated to the Board at the earliest so to take further action and to file action taken report before the Hon'ble Tribunal, as directed by the Hon'ble Tribunal.

Encl: As above.

Yours faithfully,

S Sri Saravanan

MEMBER SECRETARY

Copy to:

1. The JCEE(ECS), APPCB, BO: Vijayawada for information and necessary action with instructions to co-ordinate with EE, RO: Vizianagaram to obtain status report in the matter and to file the



action taken report in the Hon'ble Tribunal.

2. The JCEE, APPCB, ZO: Visakhapatnam for information and necessary action.
3. The EE, APPCB, RO: Vizianagaram for information and necessary action and directed to co-ordinate with District officials and submit status report to the JCEE(ECS), APPCB, BO: Vijayawada for information and necessary action.

Item No.2

(Court No. 2)

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI.**

(Through Physical Hearing with Hybrid V.C. Option)

Original Application No. 20/2024

Pooja Phillo & Ors.

...Applicants

Versus

State of Odisha & Ors.

...Respondents

Date of hearing: 19.02.2024

**CORAM: HON'BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER.
HON'BLE DR. AFROZ AHMAD, EXPERT MEMBER.**

Applicants: None for the Applicants.

Application is registered based on a letter petition received by post.

ORDER

1. Ms. Pooja Phillo and others have sent by post the present letter petition to this Tribunal, which has been treated and registered as O.A. No. 20/2024.
2. The relevant part of the letter petition enumerating grievances of the applicant is reproduced as follows:-

X

X

X

X

"It is to be noted that the Tahsildar of Nandapur Tahsil Office, District-Koraput have been ignoring our demands when we approached for an explanation regarding Sobhaput Bridge construction which is towards Andhra Pradesh upto an extension of 400 meters it's construction have been done by RD Sunabeda, District-Koraput, Odisha.

But the Bridge and road both side are now in the capture of Andhra Pradesh. which is being claimed by the authorities of Andhra Pradesh basing on which Andhra Pradesh is constructing Mobile towers, schools and other institutions.

Instead of identifying the boundaries of the state the revenue officials of Nandapur Tahsil are also face shaving from their duties that the Sobhaput Bridge river is the natural boundary of Odisha border. When several people of Panthlung Grampanchayat informed this matter to the Tahsildar Nandapur he in a horrible way responded to the demands of the Grampanchayat Panthlung.

More importantly the Tahsildar Nandapur without any fail have shaken his hands with the Sand mafias of Andhra Pradesh who have been illegally mining sand from Sudu, Sariapall, Mariput, Ratulput, Pradhaniput, Sobhaput and several other places.

A special shed have been constructed near Padwa Badadebta Temple by the Mafias for entertaining the Tahsildar Nandapur with Booze and other favours. More importantly the Tahsildar Nandapur is not issuing "R n Y" form for the legal sand miners of Odisha.

Galganda- Duruba sand sairat, though the lease holder completed his quota of sand lifting the lease has been extended to one year more. Rather the Nandapur Tahsildar is charging the legal sand miners of Odisha with hefty fine of Rs 30000/- per trip to fulfil his own financial needs. Due to illegal sand lifting from the river by using JCP machine day by day the river is going to dipper from the previous, by which the flowing of water going dipper and side by farmers not able to use the river water for their farming.

Thus we request you to kindly take stringent necessary action over this Tahsildar and immediately he should be removed from such important position. He is not treating his position as a Public Servant but a Public Monarch.

X

X

X

X"

3. *Prima facie* the averments made in the application raise substantial questions relating to environment arising out of the implementation of the enactments specified in Schedule-I to the National Green Tribunal Act, 2010.
4. In view of the averments made in the application, we consider it appropriate that a Joint Committee be constituted to verify the factual position and suggest appropriate remedial action. Accordingly, we constitute a Joint Committee comprising of representatives of Central Pollution Control Board, Odisha State Pollution Control Board, Andhra Pradesh Pollution Control Board, Collector, Koraput, Orissa, Integrated Regional Office of MoEF&CC, Bhubaneswar, Odisha, Directorate Geology, Odisha and

O.A. No.20/2024

Pooja Phillo & Ors Vs. State of Odisha & Ors.

-3-

Department of Mines and Geology, Andhra Pradesh and direct the same to undertake visits to the site, look into the grievances of the applicant, associate the applicant and representative of the concerned project proponents, verify the factual position and suggest to the concerned Authorities appropriate remedial action. The Central Pollution Control Board will be the nodal agency for coordination and compliance.

5. Even though in the present case cognizance has been taken by this Bench on the basis of letter petition received by post with approval and assignment under order of Hon'ble Chairperson, but in view of the facts and circumstances of the case including the fact that the place of accrual of cause of action lies within jurisdiction of the Eastern Zone Bench of this Tribunal at Kolkata, we are of the considered view that it will be appropriate if the case is further heard by the Eastern Zone Bench of this Tribunal at Kolkata.

6. Accordingly, the Registry is directed to list the matter before the Eastern Zone Bench of this Tribunal at Kolkata on 23.04.2024 after obtaining orders from Hon'ble the Chairperson for transfer of the case.

7. Factual and Action Taken Report by the Joint Committee and reply/response by the respondents be filed before the Eastern Zone Bench of this Tribunal at Kolkata by email judicial-ngtez@gov.in preferably in the form of searchable PDF/OCR Supported PDF and not in the form of Image PDF.

8. A copy of this order be sent to the Member Secretary, Central Pollution Control Board, Member Secretary Odisha State Pollution Control Board, Member Secretary, Andhra Pradesh Pollution Control Board, Collector, Koraput, Orissa, Regional Officer, Integrated Regional Office of MoEF&CC,

O.A. No.20/2024

Pooja Phillo & Ors Vs. State of Odisha &
Ors.

-4-

Bhubaneswar, Odisha, Secretary, Directorate Geology, Odisha and Secretary,
Department of Mines and Geology, Andhra Pradesh by email for requisite
compliance.

Arun Kumar Tyagi, JM

Dr. Afroz Ahmad, EM

February 19th, 2024
N

Item No.03

Court No.1

**BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, KOLKATA
(THROUGH PHYSICAL HEARING WITH HYBRID MODE)**

Original Application No.66/2024/EZ
(Earlier O.A. No.20/2024/PB)



IN THE MATTER OF

Pooja Phillo & Ors.,
Nandapur Tahsil,
District- Koraput, Odisha.

.....Applicant(s)

Versus

1. **Principal Secretary, Directorate of Geology,**
Government of Odisha,
2. **Collector, Koraput,**
3. **Secretary, Integrated Regional Office of Ministry of**
Environment, Forests and Climate Change,
Bhubaneswar,
4. **Member Secretary, Central Pollution Control Board,**
5. **Member Secretary, Odisha State Pollution Control Board,**
6. **Principal Secretary, Department of Mines and Geology,**
Andhra Pradesh,
7. **Member Secretary, Andhra Pradesh State Pollution Control**
Board,

.....Respondent(s)

Date of hearing: 09.08.2024

**CORAM: HON'BLE MR. JUSTICE B. AMIT STHALEKAR, JUDICIAL MEMBER
HON'BLE DR. ARUN KUMAR VERMA, EXPERT MEMBER**

For Applicant(s) : None

For Respondent(s) : Mr. Anand Prakash Das, ASC for R-1&2 (in Virtual Mode),
Mr. Dipanjan Ghosh Advocate for R-4,
Ms. Papiya Banerjee Bihani, Adv. for R-5 (in Virtual Mode),
Mr. TVS Raghavendra Sreyas, Adv. a/w
Mr. Siddharth Vasudev, Adv. for APPCB (in Virtual Mode)

JCEE-L

8

SRRU

DDG/G
fama
30/8/2024

Instead of identifying the boundaries of the state the revenue officials of Nandapur Tahsil are also face shaving from their duties that the Sobhaput Bridge river is the natural boundary of Odisha border. When several people of Panthlung Grampanchayat informed this matter to the Tahsildar Nandapur he in a horrible way responded to the demands of the Grampanchayat Panthlung.

More importantly the Tahsildar Nandapur without any fail have shaken his hands with the Sand mafias of Andhra Pradesh who have been illegally mining sand from Sudu, Sariapall, Mariput, Ratulput, Pradhaniput, Sobhaput and several other places.

A special shed have been constructed near Padwa Badadebta Temple by the Mafias for entertaining the Tahsildar Nandapur with Booze and other favours. More importantly the Tahsildar Nandapur is not issuing "R n Y" form for the legal sand miners of Odisha.

Galganda- Duruba sand sairat, though the lease holder completed his quota of sand lifting the lease has been extended to one year more. Rather the Nandapur Tahsildar is charging the legal sand miners of Odisha with hefty fine of Rs 30000/- per trip to fulfil his own financial needs. Due to illegal sand lifting from the river by using JCP machine day by day the river is going to dipper from the previous, by which the flowing of water going dipper and side by farmers not able to use the river water for their farming.

Thus we request you to kindly take stringent necessary action over this Tahsildar and immediately he should be removed from such important position. He is not treating his position as a Public Servant but a Public Monarch.

X

X

X

X"

6. Counter-affidavit dated 20.05.2024 has been filed by the Central Pollution Control Board bringing on record the Joint Committee Inspection Report. The Report reads as under:

"Joint Committee report submitted to the Hon'ble NGT (EZ), Kolkata in OA 66 of 2024 (EZ) in the matter Pooja Phillo and Ors Versus State of Odisha & Ors, earlier registered as OA 20 of 2024 at Hon'ble NGT (PB)

1. Background

The Original Application 20 of 2024 was registered at the Hon'ble NGT, Principal Bench, New Delhi based on the letter petition received through post from Smt. Pooja Phillo, resident of Nandapur Tahsil, District- Koraput, Odisha.

In the letter petition, it is enumerated that due to illegal sand lifting from the Machkund river by using JCP machine day by day the river is going to deeper from the previous, by which the flowing of water going deeper and side by farmers are not able to use the river water for their farming.

The Hon'ble NGT, Principal Bench heard the case on 19/02/2024 and directed the following:

"In view of the averments made in the application, we consider it appropriate that a Joint Committee be constituted to verify the factual position and suggest appropriate remedial action. Accordingly, we constitute a Joint Committee comprising of representatives of Central Pollution Control Board, Odisha State Pollution Control Board, Andhra Pradesh Pollution Control Board, Collector, Koraput, Orissa. Integrated Regional Office of MoEF&CC, Bhubaneswar, Odisha, Directorate Geology, Odisha and Department of Mines and Geology, Andhra Pradesh and direct the same to undertake visits to the site, look into the grievances of the applicant, associate the applicant and representative of the concerned project proponents, verify the factual position and suggest to the concerned Authorities appropriate remedial action. The Central Pollution Control Board will be the nodal agency for coordination and compliance."

Further, the matter was transferred to the Hon'ble NGT, Eastern Bench, Kolkata.

The case is numbered as OA No 66 of 2024 and pending before the Hon'ble NGT, Eastern Bench, Kolkata.

2. Formation of the Joint Committee

In compliance to the Hon'ble NGT directions, the Joint Committee was constituted with following members:

Sl	Name	Department	Designation
1.	Sri Q J Khan	Directorate of Mines and Geology, Steel & Mines	Joint Director Geology, Koraput

		<i>Department, Govt. of Odisha</i>	
2	<i>Sri Benudhar Sabar</i>	<i>District Magistrate, Koraput</i>	<i>Sub-Divisional Magistrate and Sub-Collector, Koraput</i>
3	<i>Dr B B Saritha</i>	<i>Andhra Pradesh Pollution Control</i>	<i>Environmental Engineer</i>
4	<i>Sri D E V S S N Raju</i>	<i>Directorate of Mines and Geology, Govt. of Andhra Pradesh</i>	<i>Assistant Director</i>
5	<i>Sri Deepesh Biswal</i>	<i>Odisha State Pollution Control Board, Regional Office, Koraput</i>	<i>Regional Officer</i>
6	<i>Sri Sandeep Nandi</i>	<i>Ministry of Environment, Forest & Climate Change, Integrated Regional Office, Bhubaneswar</i>	<i>Scientist 'B'</i>
7	<i>Smt Sowmya D</i>	<i>Central Pollution Control Board, Regional Directorate, Chennai</i>	<i>Scientist 'E'</i>
8	<i>Sri Sandeep Roy</i>	<i>Central Pollution Control Board, Regional Directorate, Kolkata</i>	<i>Scientist 'D'</i>

3. Joint Committee Meetings and Site Inspection

Central Pollution Control Board, Kolkata being the Nodal Agency in this matter, coordinated with all the concerned departments and the 1st Meeting of the Joint Committee was held on 28th March, 2024 via Video Conferencing for preliminary discussions and other associated activities including schedule for site visit. The Joint Committee decided to schedule the site visit on 04th April, 2024.

After the meeting, as per direction of Hon'ble NGT, an email was also sent to the Applicant intimating about the date and time of inspection so that she may be present during site inspection. The applicant was also informed over telephone and via WhatsApp message service.

The Joint Committee visited the following locations on 04th April, 2024 at Machkund riverbed at Nandapur Tahsil, Koraput, Odisha:

1. Sobhaput Bridge
2. Sand mining locations along the river at Sudu, Sariapall, Mariput, Ratulput, Pradhaniput and Sobhaput.

The applicant Smt. Pooja Phillo, with spouse, was present during the inspection and showed the locations of sand mining mentioned in Application.

4. Site Observations by Joint Committee w.r.t. Averments made by the Applicant

Based on the inspection with reference to the averments outlined in the application, pointwise observation/factual position are provided for each averment as follows:

Observation w.r.t. Averment -1

4. 1 Averment -1:

Sobhaput Bridge construction which is towards Andhra Pradesh upto an extension of 400 metres its construction has been done by RD Sunabeda, District-Koraput, Odisha. But the Bridge and road on both sides are now in the capture of Andhra Pradesh which is being claimed by the authorities of Andhra Pradesh basing on which Andhra Pradesh is constructing Mobile towers, schools, and other institutions.

Instead of identifying the boundaries of the state the revenue officials of Nandapur Tahsil are also face shaving from their duties that the Sobhaput Bridge River is the natural boundary of Odisha border.

Factual Position:

During the Joint Committee inspection, the Applicant was present and informed the committee that State boundaries between Odisha and Andhra Pradesh is not properly demarcated in Nandpur Tahsil, Koraput District i.e. the land adjacent to Shobhaput bridge and upto 400 m distance belongs to Odisha State. People from Andhra Pradesh is carrying out the sand mining activities without necessary permissions from concerned Authorities.

As per the documents furnished by the Department of Land and Revenue, Koraput, the mid line of Machkund river serves as a border boundary between Odisha and Andhra Pradesh. It is informed that the Bridge over River Machkund has been constructed by Road and Development, Sunabeda, Koraput of Odisha and connects Odisha and Andhra Pradesh.

As per Topo Sheet (No. 65 J/11/SW), published in the Year 1985 by Survey of India, the mid-line of River Machkund is demarcated as Border between the Odisha and Andhra Pradesh States.

In the Averment it is mentioned that the Bridge and road on both sides are now in the capture of Andhra Pradesh and authorities of Andhra Pradesh is constructing Mobile towers, schools, and other institutions. During the Joint Committee visit no such activities like construction of Mobile towers, schools and other institutions by the State of Andhra Pradesh in the area near the Shobhaput Bridge that belongs to Orissa was observed. The habitation/establishment area was only present in the Sithaganta Village of Andhra Pradesh which is 2 Km (Road distance approx.) from the bridge.

Observation w.r.t. Averment-2**4.2 Averment-2:**

More importantly the Tahsildar Nandapur without any fail have shaken his hands with the Sand mafias of Andhra Pradesh who have been illegally mining sand from Sudu, Sariapall, Mariput, Ratulput, Pradhaniput, Sobhaput and several other places.

Factual Position:

i. Sand mining Policy in Andhra Pradesh:

In Andhra Pradesh, mining of Minor Mineral is governed by Andhra Pradesh Minor Mining Concession (APMMC) Rules, 1966. As per Government of Andhra Pradesh Industries and Commerce (M-III) Department Memo no. INC04-26024/5/2021/A3-M-III dated 20.07.2021, sand mining is allowed for local consumption in 1st to 3rd order river streams, where sand deposits occur, less than 5000 cubic meters.

ii. Sand mining Policy in Orissa:

Any mining of Minor Mineral in Odisha is governed by OMMC Rules 2016, in which after auction of a sairat source (**Sand Source**- which may be leased out) the bidder or the lessee needs to submit approved Mining Plan as well as other Statutory Clearances like Environment Clearance, Consent to Establish, Consent to Operate from concerned Department.

iii. Factual position as per site visit to sand mining locations:

The Joint Committee visited Sudu, Sariapall, Mariput, Ratulput, Pradhaniput and Sobhaput regions from the Odisha side to verify any sand mining activities are being carried out. The Tahasildar, Nandapur and the concerned revenue inspector (RI) located the spots in the village sheet, all the spots are along the River Machkund. These areas featured in Survey of India Topo Sheet (SITS No-65J/11 (E44K11) wherein the State Boundary of Odisha and Andhra Pradesh follows the mid-line of River Machkund.

In all the locations there were no indications of mechanized mining activities, however, it was observed that local populace from Andhra Pradesh, approached the River from Andhra Pradesh side only and manual mining was being carried out across the width of the river.

The officials of Directorate of Mines and Geology, Steel & Mines Department, Govt. of Odisha and Directorate of Mines and Geology, Govt. of Andhra Pradesh confirmed that the Departments have not identified or notified the aforesaid locations (Sudu, Sariapall, Mariput, Ratulput, Pradhaniput, Sobhaput) for commercial mining in River Machkund.

The observations made at the locations visited are as follow:

Location 1: Sudu

Manual excavation of sand from the river bed below the water level of river is being carried out at the location. About 4 numbers of trucks out of which 2 numbers are Hyva are parked near the river and people were engaged in excavation and loading of sand. The river bank has been broken up by developing approach road to the loading site and a gorge has developed. 10 small dumps of sand were observed. The mining of sand is carried out in unscientific manner. This spot is in the meandering region of River Machhkund towards the Andhra Pradesh side.

Location 2: Sariapal

The location is in the River Machhkund. Mining was not being carried out during the inspection, but it was evident from the physical remnant that sand mining was carried out unscientifically at the location. A dump of sand along the bank towards Odisha side was observed. The river bank was damaged by developing approach road for loading site and a gorge has developed in the Andhra Pradesh side.

Location 3: Pradhaniput

Manual excavation of sand from the river bed below the water level of river was being carried out at the location in Pradhaniput. People were engaged in excavating sand across width of the River and dumping on the bank. The river bank was broken due to development of approach road to the loading site. More than 10 numbers of dumps of sand were observed. The mining of sand is carried out unscientifically as the spot is in the meandering region of River Machhkund towards the Andhra Pradesh side.

Location 4: Rutuluput-Mariput

Any type of mining activity or dumping of sand in these spots were not observed. These spots are in the meandering region River Machhkund. The O/o Tahsildar- Nandapur (Odisha) is carrying out checking activities on regular basis of the area and in case of violation/illegal transportation of the sand, the penalty is being imposed towards Royalty & Ecological Damages purpose. In the

FY 2023-24, an amount of Rs 7,14,450 is recovered as Penalty from the violators.

Observation w.r.t. Averment -3

4.3 Averment 3:

Galganda- Duruba sand sairat, though the lease holder completed his quota of sand lifting the lease has been extended to one year more. Rather the Nandapur Tahsildar is charging the legal sand miners of Odisha with hefty fine of Rs 30000/- per trip to fulfil his own financial needs.

Factual Position:

The Applicant is not aware about this Averment and stated, she did not make this complaint (Averment 3). The committee members visited the Galganda- Duruba sand sairat site and made following observations but Applicant was not interested and did not accompany with the committee.

Galaganda-Duruba-*The Sairat Source for Sand is located at 18°21'37.524"N - 82°44'19.966"E along the Patala River which is a contributory to Jalaput Reservoir in the downstream of Koraput District, Orissa State. Sand has been stored in the river bank at Duruba. Similarly at Galaganda at 18°21'2.962"N - 82°43'2.590"E.*

The Sairat Source for Sand over an area of Ac 28. 65 or Ha 11.59 was auctioned on dt.11.06.2018 as per letter of Competent Authority Tahasildar Nandapur vide Lt.no-1161/18 dt.20.06.2018 for 5 years on long term basis. The first Mining Plan was approved vide Lt. No-996/KZ dt.24.07.2018 with year wise production of 1740 Cum for 2018-19, 1800 Cum for 2019-20, 1860 Cum for 2020-21, 1920 Cum for 2021-21 and 1980 Cum for 2022-23. A total of 9300 Cum for lifting of sand over five years as Minimum Guaranteed Quantity @ Rs.37/- per Cum and other levies. The lease agreement was executed on dt.27.03.2019 vide Lt. No-646/2023 dt.28.03.2023 of Tahasildar Nandapur as per Odisha Minor Minerals Concession Rules (OMMC) Rules 2016 the lease is valid up to 26.03.2024, and hence Modification of Mining Plan up to 26.03.2024 was approved vide Lt. No- 292/KZ dt.19.04.2023.

1. The Galganda- Duruba sand sairat is having lease area of 26.65 Acre under the Plot No. 480, 481 & 321, 322 (Khata No. 65 & 78 respectively). The mining lease was allotted by O/o Tahsildar- Nandpur (vide Letter No. 646/2023 dt. 26/03/23) to Sri Damburudhara Ramsingh w.e.f. 01/04/23 to 26/03/24. At present mining activities have been stopped and further lease validity procedure is not executed due to Code of Conduct in the State.
2. Galganda- Duruba sand sairat has not obtained Environmental Clearance and Odisha State Pollution Control Board does not have any record about this source.
3. No mechanized mining activity using JCB/Hydra or other Machineries is taking place in the area.

Observation w.r.t. Averment -4

4.4 Averment -4:

A special shed have been constructed near Padwa Badadebta Temple by the Mafias for entertaining the Tahsildar Nandapur with Booze and other favours. More importantly the Tahsildar Nandapur is not issuing "R n Y" form for the legal sand miners of Odisha.

Factual Position:

The Applicant was not able to furnish any information about the Averment. The complaint associated with the Averment was stated to not have been made by the Applicant.

5. General Observations:

During discussion with Applicant and Representatives, they were unable to provide the documents which have been submitted before Hon'ble NGT- PB. Further, Applicant was unaware about some content in her Letter Petition as above. However, other people/representatives stated that the major concern in the area is border of the two States i.e. Odisha & Andhra Pradesh near Shobhaput Bridge over River Machkund.

6. Action plan for Remediation:

In view of above observations, following action plan for remedial are proposed by the Joint Committee:

- 1. The Department of Land and Revenue and Department of Irrigation of Andhra Pradesh and Orissa states may examine the boundary issues prevailing in Koraput district.*
- 2. The District Magistrate (of concerned District in Odisha & Andhra Pradesh) may constitute a district-level committee for anti-illegal sand mining measures as per guidelines on “Enforcement & Monitoring Guidelines for Sand mining” (2020) published by MoEF&CC.*
- 3. District Magistrates shall ensure sand mining activities are carried out as per EIA Notification, 2006 and Sustainable Sand Mining Management Guidelines, 2016. Strict regulations may be enforced in governing sand mining activities, including obtaining proper permits and adhering to environmental guidelines.*
- 4. All mining activities in the river should be allowed only on the basis of Environmental Clearance from SEIAA, except for very limited activities which are exempted by MoEF & CC Notification S.O. 1224 (E) Dt 28/03/2020. The Mining Depts in both the States may examine their existing provision for allowing mining in terms of conformity with said Notification and if required, it may modify the existing provisions to align them with the notification.*
- 5. Mining must be done only after obtaining Mining Plan, Environmental Clearance, and Consent to Operate from the State Pollution Control Board. Competent authorities shall lease out the sand sairat sources only after due verification of above statutory clearances.*
- 6. Installation of check gates in areas of sand mining is recommended. This step is key factor for directing legal transportation and ensuring that only approved routes are used for the movement of sand.*
- 7. It is recommended to increase surveillance efforts through the deployment of law enforcement agencies, including police and forest officials, to monitor the area for any illegal sand mining activities. It is suggested to carry regular police patrols in the affected area to check for illegal sand mining and transportation even during odd hours. By maintaining a continuous police presence, authorities could effectively enforce regulations and timely respond to any unlawful operations.*
- 8. It is recommended to Conduct regular remote sensing or drone surveys to check any illegal mining in the area by the Department*

of Mines & Geology / Remote Sensing Agencies. Utilizing modern technologies such as drones, satellite imagery, and GPS tracking will enhance monitoring capabilities and will be helpful to detect illegal activities more effectively.

9. The local communities living in the area may be engaged and awareness may be conducted about the negative impacts of illegal sand mining on the environment, water resources, and livelihoods. Community participation may be encouraged in monitoring efforts and reporting of any suspicious activities to the authorities promptly.”

7. The site observation of the Committee shows that the said boundaries between Odisha and Andhra Pradesh have not been properly demarcated in Nandapur Tahsil, Koraput District i.e. the land adjacent to Shobhaput bridge and upto 400 m distance belongs to Odisha State. It is mentioned that people from Andhra Pradesh are carrying out the sand mining activities without necessary permissions from concerned Authorities.
8. The Report mentions that the mid line of Machkund river serves as a border boundary between Odisha and Andhra Pradesh and the Sobhaput Bridge serves as a connection between Odisha and Andhra Pradesh. It is stated that the Bridge over the River Machkund has been constructed by Road and Development, Sunabeda, Koraput of Odisha, connecting Odisha and Andhra Pradesh.
9. The Report further mentions that during the visit of the Committee no such activities like construction of Mobile towers, schools or other constructions were observed being carried out by the State of Andhra Pradesh in the area near the Shobhaput Bridge that belongs to Odisha. Habitation/establishment area was only present in the Sithaganta Village of Andhra Pradesh which is approximately 2 Km from the bridge.

10. It is also stated that as per the Government of Andhra Pradesh Industries and Commerce (M-III) Department Memo dated 20.07.2021, sand mining is allowed for local consumption in 1st to 3rd order river streams, where sand deposits occur, less than 5000 cubic meters.
11. The Joint Committee also visited Sudu, Sariapall, Mariput, Ratulput, Pradhaniput and Sobhaput regions from the Odisha side to verify any sand mining activities are being carried out. The Tahasildar, Nandapur and the concerned revenue inspector (RI) located the spots in the village sheet, and all the spots were found to be along the River Machkund.
12. It is stated that these areas also featured in the Survey of India Topo Sheet (SITS) No-65J/11 (E44K11) wherein the State Boundary of Odisha and Andhra Pradesh follows the mid-line of River Machkund. In all the locations there were no indications of mechanized mining activities, however, it was observed that local populace was carrying out manual mining of sand from River Machkund.
13. It is stated that the local populace from the side of Andhra Pradesh, approached the River and manual mining was carried out across the width of the river.
14. The Report further mentions that the officials of the Directorate of Mines and Geology, Steel & Mines Department, Govt. of Odisha and Directorate of Mines and Geology, Govt. of Andhra Pradesh confirmed that the Departments have not identified or notified the aforesaid locations (Sudu, Sariapall, Mariput, Ratulput, Pradhaniput, Sobhaput) for commercial mining in River Machkund.

15. At the Sudu locations, the Committee observed that manual excavation of sand from the river bed below the water level of river was being carried out; 4 trucks out of which 2 were Hyva, were parked near the river and people were engaged in excavation and loading of sand; the river bank was broken up by developing approach road to the loading site and a gorge has developed; 10 small dumps of sand were observed; mining of sand was being carried out in an unscientific manner. This spot was found to be out of the region of River Machkund towards Andhra Pradesh side.
16. As regards Sariapal, the Report mentions that there was no mining being carried out during inspection but physical remnants showing sand mining being carried out unscientifically was observed; dump of sand along the river bank towards Odisha side was observed; the river bank was damaged by developing approach road for loading site and a gorge had developed in the Andhra Pradesh side.
17. As regards Pradhaniput, the Committee observed that manual excavation of sand from the river bed below the water level of the river was being carried out; people were engaged in excavation of sand across the width of the River and there was dumping of sand on the river bank; the river bank was broken due to developing of approach road to the loading site; more than 10 dumps of sand were observed; mining of sand was being carried out unscientifically and the area is in the River Machkund towards Andhra Pradesh side.
18. As regards location of Rutuluput-Mariput, the Committee observed that no activity of sand mining or dumping of sand was observed. The area is in the meandering region of River Machkund. The

Tahsildar-Nandapur (Odisha) is carrying out checking activities on a regular basis in the area.

19. It is also stated that in the Financial Year (FY) 2023-24, an amount of Rs. 7,14,450 has been recovered towards Penalty.
20. The Report further mentions that the Committee Members visited the Galganda-Duruba sand sairat site but the Applicant did not accompany the Committee. The Committee observed that the Sairat Source for Sand is located at 18° 21' 370524"N - 82° 44' 19.966" E along the Patala River which is a contributory to Jalaput Reservoir in the downstream of Koraput District, Orissa State. Sand had been stored on the river bank at Duruba and Galaganda. The Sairat Source for Sand over an area of 28.65 acres or 11.59 Ha was auctioned on 11.06.2018 by the Tahasildar Nandapur for five years. Lease agreement was executed on 27.03.2019 and lease is valid upto 26.03.2024. It is stated that the first Mining Plan was approved vide Letter dated 24.07.2018 with year wise production of 1740 Cum for 2018-19, 1800 Cum for 2019-20, 1860 Cum for 2020-21, 1920 Cum for 2021-22 and 1980 Cum for 2022-23, a total 9300 Cum for lifting of sand over five years as Minimum Guaranteed Quantity (MGQ) at Rs. 37/- per Cum and other levies.
21. As regards Galganda-Duruba sand sairat, it is stated that the same has a lease area of Ac 26.65 decimal under Plot No. 480, 481 & 321, 322 (Khata No.65 & 78 respectively). It is stated that the mining lease was allotted by the Tahsildar- Nandapur (vide Letter No.646/2023 dt 26/03/23) to Sri Damburudhara Ramsingh w.e.f. 01/04/23 to 26/03/24 but at present mining activities had been stopped and further lease validity procedure could not executed due to Model Code of Conduct (MCC) in the State.

22. It is stated that Galganda-Duruba sand sairat has not obtained Environmental Clearance and Odisha State Pollution Control Board does not have any record about this source. No mechanized mining activity using JCB/Hyva or other Machineries was found in the area.
23. The Committee has also made certain recommendations in its Report with an Action plan for Remediation (APR) which has been proposed with the Department of Land and Revenue and Department of Irrigation of Andhra Pradesh and Orissa to examine the boundary issues prevailing in Koraput district.
24. It is also recommended inter alia, that the (District Magistrates of the concerned districts in Odisha and Andhra Pradesh) may constitute a district-level committee for prevention and taking measures against illegal sand mining as per "Enforcement & Monitoring Guidelines for Sand mining" (2020) issued by the MoEF&CC.
25. We have considered the Joint Committee Inspection Report and we find that illegal sand mining using Hyva trucks has been found to be carried out in Sudu area at the spot in the meandering region of River Machkund towards Andhra Pradesh.
26. Similarly, illegal mining activities have been observed at the sand site in Pradhaniput on the Andhra Pradesh side in the area meandering region of River Machkund towards Andhra Pradesh. Similarly, illegal sand mining in an unscientific manner was found being carried out at the Sariapal where physical remnants of sand mining was found on the Odisha side and at Rutuluput-Mariput on the Odisha side where mining activities have been carried out in the past and penalties have also been recovered. Illegal sand

mining has also been found to be carried out in Galganda-Duruba where sand has been stored in the river bank at Duruba and Galganda. The committee has also noted that at places the river bank has been broken to make way for the approach road connecting to the loading site. This is a serious matter which shows damage to the river bank which if not corrected and not checked for future will lead to disastrous consequences to the riverine ecology. Preventive measures have been recommended to be taken with regard to both the State of Odisha and Andhra Pradesh.

27. The Enforcement and Monitoring Guidelines for Sand Mining 2020 issued by the Ministry of Environment, Forest and Climate Change, New Delhi mandates **Monitoring of Mining near Inter-district or inter-state boundary** and provides that:-

a) The districts/state sharing the boundary shall constitute the combined task force for monitoring of mined materials, mining activity and also should actively participate in the preparation of DSR by providing appropriate inputs.

b) The task force shall meet every quarter to reconcile the data collected during the period and identify any gap/lapses based on the outcome of such meeting. The respective district shall take action/corrective measures.

c) The Guidelines provide that the task-force shall include essentially the representative of respective districts from the mining department, transport department, regional office of State Pollution Control Board (SPCB) concerned and a reputed citizen nominated by district administration. The Taskforce shall be headed by officer not less than ADM rank and quarterly outcome shall be submitted to District administration.

The Committee provides for standard operating procedure for assessing illegal mining by the committee constituted and it is provided that the Committee shall, but not be limited to, include the steps given in the following table given in the guidelines which reads as under:-

Suggestive standard Practice for assessing illegal mining

<i>Step 1</i>	<i>The assessment team should collect the information and documents prescribed in the Pre-Requisite section.</i>
<i>Step 2</i>	<i>The assessment team should verify the applicability/validity of statutes under EPA-1986, Air and Water Act, MMDR 1957, State Mines and Mineral Rules, etc.</i>
<i>Step 3</i>	<i>Field visit should be conducted for identification of mining lease area (in hectare) and boundary pillar constructed to indicate the same.</i>
<i>Step 4</i>	<i>With the help of GPS instrument, the team should assess the area where any extraction or mining have been carried out on the day of visit and calculate the mined-out area in a hectare.</i>
<i>Step 5</i>	<i>If available, the team may avail the use of latest satellite images for calculating the total mined out area.</i>
<i>Step 6</i>	<i>The team should verify the Ground / Surface Level (in meter above MSL) of at least 04 highest points in or around the area where mining has been done. The Ground / surface level will then be computed based on averaging of 04 highest points verified by the team.</i>
<i>Step 7</i>	<i>With the help of Depth Measurement kit or any depth measuring instruments, the depth should be measured for at least 04 points in the mined-out area.</i> <i>For computing, the depth, averaging of the value obtained at 04 points should be done.</i>

Step 8	Verification of compliance conditions of Environmental Clearance and Consent to operate, mining methodology under Mining Plan.
Step 9	Identification of vulnerable impacts observed on the field and non-compliance of conditions of Environmental Clearance and Consent to Operate.
Step 10	Field Survey for identification, monitoring and verification of ecological species based on the information available and documents mentioned in the Pre-requisite section.
Step 11	Preparation of inventory of machinery used/observed on the field (optional)
Step 12	Preparation of inventory of hydraulic structures observed on the field (optional)
Step 13	Water sampling for assessment of water quality including physical and biological parameters. (optional)
Step 14	Reconciliation collation of data/information and compilation to maintain violation.
Step 15	Identification of restoration plan and computation of cost of the restoration plan.

28. We, therefore, dispose of this Original Application No.66/2024/EZ with a direction to the Chief Secretaries of Andhra Pradesh and Odisha to forthwith take steps for constituting a Committee as provided in the Enforcement and Monitoring Guidelines for Sand Mining 2020 and ensure strict and due compliance of the aforesaid Guidelines to prevent illegal sand mining mechanical or otherwise.
29. The State Respondents shall also take steps forthwith for taking appropriate legal action against illegal miners as well as for computation of Environmental Compensation. Action in this regard shall be taken within two months and action taken report shall be

filed by the Member Secretaries of the State Pollution Control Board, Odisha and Andhra Pradesh respectively by 30.11.2024.

30. I.As., if any, stand disposed of accordingly.
31. There shall be no order as to costs.

.....
B. Amit Sthalekar, JM

.....
Dr. Arun Kumar Verma, EM

August 09, 2024,
 Original Application No.66/2024/EZ
 (Earlier O.A. No.20/2024/PB)
 OM

True Copy



NGT

ANNEXURE - II



ANDHRA PRADESH POLLUTION CONTROL BOARD
Dr. YSR Paryavaran Bhavan, APIIC Colony Road,
Gurunanak Colony, Autonagar, Vijayawada- 520007



Lr. No.21/APPCB/Legal/NGT-EZ/OA No.66 of 2024/2024 **Dt. 11/12/2024**

To
The Special Chief Secretary to Govt.,
Govt of A.P.
A.P. Secretariat, Velagapudi.

Sir,

Sub: APPCB – Legal – O.A. No. 66 of 2024(EZ) (earlier O.A. No. 20 of 2024_PB, New Delhi), filed by Ms. Pooja Phillo & ors, resident of Nandapur Tahsil, Koraput District, Odisha State- Implementation of Hon’ble NGT, Eastern Zone Bench, Kolkata disposal order dt.09.08.2024 in the matters of construction of Shobhaput bridge and sand mining activity in the river - Requested - Reg.

Ref: 1. The Hon’ble NGT, Eastern Zone Bench, Kolkata Order dt. 09.08.2024 in O.A. No. 66 of 2024(EZ) (Earlier O.A. No. 20 of 2024(PB)).
2. APPCB Lr. No. 21/APPCB/Legal/NGT-EZ/OA No.66 of 2024/2024 - 483, dt. 27.10.2024 addressed to the Mines and Geology Dept., GoAP

It is to submit that the Original Application (O.A.) No. 20 of 2024(PB) was registered by the Hon’ble National Green Tribunal (NGT), Principal Bench (PB), New Delhi based on the letter petition submitted by the Applicants, Ms. Pooja Phillo and others, resident of Nandapur Tahsil, Koraput District, Odisha State. Thereafter, the case was transferred to the Eastern Zone (EZ) of the Hon’ble NGT at Kolkata and re-numbered as O.A. No.66 of 2024(EZ).

In this regard, it is to submit that the Hon’ble Tribunal, New Delhi in the order dt.19.02.2024 constituted a Joint Committee (the Central Pollution Control Board, Kolkata being the Nodal Agency) and the Committee was directed to inspect the site in question and submit a factual report and also suggest remedial action before the Hon’ble NGT, Kolkata. The Environmental Engineer, Regional Office (RO): Vizianagaram, APPCB was nominated as member of Joint committee. The copy of the Hon’ble Tribunal order dt.19.02.2024 is enclosed.

The Hon’ble NGT, Kolkata reviewed the counter affidavit of CPCB along with the Joint Committee Inspection Report and disposed the matter in the order dt.09.08.2024 with certain directions including the following:

28. We, therefore, dispose of this Original Application No.66/2024/EZ with a direction to the Chief Secretaries of Andhra Pradesh and Odisha to forthwith take steps for constituting a committee as provided in the Enforcement and Monitoring Guidelines for Sand Mining 2020 and ensure strict and due compliance of the aforesaid Guidelines to prevent illegal sand mining mechanical or otherwise.

29. The State Respondents shall also take steps forthwith for taking appropriate legal action against illegal miners as well as for computation of Environmental Compensation. Action in this regard shall be taken within two months and action taken report shall be filed by the Member Secretaries of the State Pollution Control Board, Odisha and Andhra Pradesh respectively by 30.11.2024.

In compliance with the above, the Mines and Geology Dept., GoAP., was requested in the reference 2nd cited to take necessary follow-up action in the matter as per the directions of the Hon'ble Tribunal and to communicate to the Board at the earliest so as to file action taken report before the Hon'ble Tribunal. Copy of the letter is herewith attached for kind perusal. The action taken report is awaited.

In view of the above, the matter may please be taken up with the Chief Secretary to Government, GoAP as per the directives of the Hon'ble Tribunal. The copy of the Enforcement and Monitoring Guidelines for Sand Mining, 2020 is downloaded from the MoEF & CC website and the same is attached for kind perusal.

This is submitted for kind information and further necessary action.

Encl: As above.

Yours faithfully,

S Sri Saravanan

MEMBER SECRETARY

Copy to:

1. Submitted to the Principal Secretary to Govt., GoAP, Department of Mines and Geology, A.P. Secretariat, Velagapudi for kind information.
2. The Director, Department of Mines and Geology, GoAP, Sri Anjaneya Towers, D.No.7-104, B- Block, 5th and 6th Floors, Ibrahimpatnam, Vijayawada for favor of information.
3. The JCEE (ECS), APPCB, BO: Vijayawada for information and necessary action with instructions to co-ordinate with EE, RO: Vizianagaram to obtain status report in the matter and to file the action taken report in the Hon'ble Tribunal.
4. The JCEE, APPCB, ZO: Visakhapatnam for information and necessary action.
5. The EE, APPCB, and RO: Vizianagaram for information and necessary action and directed to co-ordinate with District officials and submit status report to the JCEE (ECS), APPCB, and BO: Vijayawada for taking necessary action.

Item No.2

(Court No. 2)

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI.**

(Through Physical Hearing with Hybrid V.C. Option)

Original Application No. 20/2024

Pooja Phillo & Ors.

...Applicants

Versus

State of Odisha & Ors.

...Respondents

Date of hearing: 19.02.2024

**CORAM: HON'BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER.
HON'BLE DR. AFROZ AHMAD, EXPERT MEMBER.**

Applicants: None for the Applicants.

Application is registered based on a letter petition received by post.

ORDER

1. Ms. Pooja Phillo and others have sent by post the present letter petition to this Tribunal, which has been treated and registered as O.A. No. 20/2024.
2. The relevant part of the letter petition enumerating grievances of the applicant is reproduced as follows:-

X

X

X

X

“It is to be noted that the Tahsildar of Nandapur Tahsil Office, District-Koraput have been ignoring our demands when we approached for an explanation regarding Sobhaput Bridge construction which is towards Andhra Pradesh upto an extension of 400 meters it's construction have been done by RD Sunabeda, District-Koraput, Odisha.”

But the Bridge and road both side are now in the capture of Andhra Pradesh. which is being claimed by the authorities of Andhra Pradesh basing on which Andhra Pradesh is constructing Mobile towers, schools and other institutions.

Instead of identifying the boundaries of the state the revenue officials of Nandapur Tahsil are also face shaving from their duties that the Sobhaput Bridge river is the natural boundary of Odisha border. When several people of Panthlung Grampanchayat informed this matter to the Tahsildar Nandapur he in a horrible way responded to the demands of the Grampanchayat Panthlung.

More importantly the Tahsildar Nandapur without any fail have shaken his hands with the Sand mafias of Andhra Pradesh who have been illegally mining sand from Sudu, Sariapall, Mariput, Ratulput, Pradhaniput, Sobhaput and several other places.

A special shed have been constructed near Padwa Badadebta Temple by the Mafias for entertaining the Tahsildar Nandapur with Booze and other favours. More importantly the Tahsildar Nandapur is not issuing "R n Y" form for the legal sand miners of Odisha.

Galganda- Duruba sand sairat, though the lease holder completed his quota of sand lifting the lease has been extended to one year more. Rather the Nandapur Tahsildar is charging the legal sand miners of Odisha with hefty fine of Rs 30000/- per trip to fulfil his own financial needs. Due to illegal sand lifting from the river by using JCP machine day by day the river is going to diper from the previous, by which the flowing of water going diper and side by farmers not able to use the river water for their farming.

Thus we request you to kindly take stringent necessary action over this Tahsildar and immediately he should be removed from such important position. He is not treating his position as a Public Servant but a Public Monarch.

X

X

X

X"

3. *Prima facie* the averments made in the application raise substantial questions relating to environment arising out of the implementation of the enactments specified in Schedule-I to the National Green Tribunal Act, 2010.
4. In view of the averments made in the application, we consider it appropriate that a Joint Committee be constituted to verify the factual position and suggest appropriate remedial action. Accordingly, we constitute a Joint Committee comprising of representatives of Central Pollution Control Board, Odisha State Pollution Control Board, Andhra Pradesh Pollution Control Board, Collector, Koraput, Orissa, Integrated Regional Office of MoEF&CC, Bhubaneswar, Odisha, Directorate Geology, Odisha and

O.A. No.20/2024

Pooja Phillo & Ors Vs. State of Odisha & Ors.

-3-

Department of Mines and Geology, Andhra Pradesh and direct the same to undertake visits to the site, look into the grievances of the applicant, associate the applicant and representative of the concerned project proponents, verify the factual position and suggest to the concerned Authorities appropriate remedial action. The Central Pollution Control Board will be the nodal agency for coordination and compliance.

5. Even though in the present case cognizance has been taken by this Bench on the basis of letter petition received by post with approval and assignment under order of Hon'ble Chairperson, but in view of the facts and circumstances of the case including the fact that the place of accrual of cause of action lies within jurisdiction of the Eastern Zone Bench of this Tribunal at Kolkata, we are of the considered view that it will be appropriate if the case is further heard by the Eastern Zone Bench of this Tribunal at Kolkata.

6. Accordingly, the Registry is directed to list the matter before the Eastern Zone Bench of this Tribunal at Kolkata on 23.04.2024 after obtaining orders from Hon'ble the Chairperson for transfer of the case.

7. Factual and Action Taken Report by the Joint Committee and reply/response by the respondents be filed before the Eastern Zone Bench of this Tribunal at Kolkata by email judicial-ngtez@gov.in preferably in the form of searchable PDF/OCR Supported PDF and not in the form of Image PDF.

8. A copy of this order be sent to the Member Secretary, Central Pollution Control Board, Member Secretary Odisha State Pollution Control Board, Member Secretary, Andhra Pradesh Pollution Control Board, Collector, Koraput, Orissa, Regional Officer, Integrated Regional Office of MoEF&CC,

O.A. No.20/2024

Pooja Phillo & Ors Vs. State of Odisha &
Ors.

-4-

Bhubaneswar, Odisha, Secretary, Directorate Geology, Odisha and Secretary,
Department of Mines and Geology, Andhra Pradesh by email for requisite
compliance.

Arun Kumar Tyagi, JM

Dr. Afroz Ahmad, EM

February 19th, 2024
N

o/c



ANDHRA PRADESH POLLUTION CONTROL BOARD
Dr. YSR Paryavaran Bhavan, APIIC Colony Road,
Gurunanak Colony, Autonagar, Vijayawada- 520007



Lr. No.21/APPCB/Legal/NGT-EZ/OA No.66 of 2024/2024 Dt. 27/10/2024 - 483

To

**The Principal Secretary to Govt.,
Department of Mines and Geology,
A.P. Secretariat, Velagapudi.**

Sir,

Sub: APPCB – Legal – O.A. No. 66 of 2024(EZ) (earlier O.A. No. 20 of 2024_PB, New Delhi), filed by Ms. Pooja Phillo & ors, resident of Nandapur Tahsil, Koraput District, Odisha State- Implementation of Hon'ble NGT, Eastern Zone Bench, Kolkata disposal order dt.09.08.2024 in the matters of construction of Shobhaput bridge and sand mining activity in the river- Follow up action- Requested - Reg.

Ref: The Hon'ble NGT, Eastern Zone Bench, Kolkata Order dt. 09.08.2024 in O.A. No. 66 of 2024(EZ) (Earlier O.A. No. 20 of 2024(PB)).

It is to submit that the Original Application (O.A.) No.20 of 2024(PB) was registered by the Hon'ble National Green Tribunal (NGT), Principal Bench (PB), New Delhi based on the letter petition submitted by the Applicants, Ms. Pooja Phillo and others, resident of Nandapur Tahsil, Koraput District, Odisha State. Thereafter, the case was transferred to the Eastern Bench (EZ) of the Hon'ble NGT at Kolkata and re-numbered as O.A. No.66 of 2024(EZ).

In this regard, it is to submit that the Hon'ble Tribunal, New Delhi in the order dt.19.02.2024 constituted a Joint Committee (the Central Pollution Control Board, Kolkata being the Nodal Agency) and the Committee was directed to inspect the site in question and submit a factual report and also suggest remedial action before the Hon'ble NGT, Kolkata. The Environmental Engineer, Regional Office (RO): Vizianagaram, APPCB was nominated as member of Joint committee. The copy of the Hon'ble Tribunal order dt.19.02.2024 is enclosed.

27.10.2024
DESPATCH
VJ

The Hon'ble NGT, Kolkata reviewed the counter affidavit of CPCB along with the Joint Committee Inspection Report and disposed the matter in the order dt.09.08.2024 with certain directions including the following:

28. *We, therefore, dispose of this Original Application No.66/2024/EZ with a direction to the Chief Secretaries of Andhra Pradesh and Odisha to forthwith take steps for constituting a committee as provided in the Enforcement and Monitoring Guidelines for Sand Mining 2020 and ensure strict and due compliance of the aforesaid Guidelines to prevent illegal sand mining mechanical or otherwise.*

29. *The State Respondents shall also take steps forthwith for taking appropriate legal action against illegal miners as well as for computation of Environmental Compensation. Action in this regard shall be taken within two months and action taken report shall be filed by the Member Secretaries of the State Pollution Control Board, Odisha and Andhra Pradesh respectively by 30.11.2024.*

A copy of the CPCB counter affidavit dt.20.05.2024 (224 Pages) along with Joint Committee Inspection Report is available in Tribunal website (https://greentribunal.gov.in/sites/default/files/news_updates/1716525970.pdf). The copy of the Hon'ble NGT order dt. 09.08.2024 is herewith enclosed for kind perusal.

In view of the above, the Mines and Geology Dept., is requested to take necessary follow-up action in the matter as per the directions of the Hon'ble Tribunal. The action taken report may please be communicated to the Board at the earliest so to take further action and to file action taken report before the Hon'ble Tribunal, as directed by the Hon'ble Tribunal.

Encl: As above.

Yours faithfully,

S Sri Saravanan

MEMBER SECRETARY

Copy to:

1. The JCEE(ECS), APPCB, BO: Vijayawada for information and necessary action with instructions to co-ordinate with EE, RO: Vizianagaram to obtain status report in the matter and to file the

action taken report in the Hon'ble Tribunal.

2. The JCEE, APPCB, ZO: Visakhapatnam for information and necessary action.
3. The EE, APPCB, RO: Vizianagaram for information and necessary action and directed to co-ordinate with District officials and submit status report to the JCEE(ECS), APPCB, BO: Vijayawada for information and necessary action.

Table of Content

Sl. No.	Contents	Page
1	Introduction	02
2	Need for Policy Guidelines	04
3	Objective of Guidelines	09
4	Requirements for Monitoring & Enforcement	10
5	Replenishment Study	27
6	Enforcement Provisions	34
7	Recommendation of High Power Committee	41
8	General Approach for Sustainable Sand Mining	45
9	Monitoring Mechanism	48

Table of Annexure

Annexure		Page
Annexure - I	Details of Sand/M-Sand Sources	64
Annexure - II	List of Potential Mining Leases (Expiring & Proposed)	65
Annexure - III	Cluster & Contiguous Cluster details	66
Annexure - IV	Transportation Routes for individual leases and leases in Cluster	67
Annexure - V	Final List of Potential Mining Leases (Existing & Proposed)	68
Annexure - VI	Final List of Cluster & Contiguous Cluster	69
Annexure - VII	Final Transportation Routes for individual leases and leases in Cluster	70
Annexure - VIII	Salient provision for sand mining in the state of Tamil Nadu	71

1.0 INTRODUCTION

The Ministry of Environment Forest & Climate Change formulated the Sustainable Sand Management Guidelines 2016 which focuses on the Management of Sand Mining in the Country. But in the recent past, it has been observed that apart from management and systematic mining practices there is an urgent need to have a guideline for effective enforcement of regulatory provision and their monitoring.

Section 23 C of MMDR, Act 1957 empowered the State Government to make rules for preventing illegal mining, transportation and storage of minerals. But in the recent past, it has been observed that there was large number of illegal mining cases in the Country and in some cases, many of the officers lost their lives while executing their duties for curbing illegal mining incidence. The illegal and uncontrolled illegal mining leads to loss of revenue to the State and degradation of the environment.

India is developing at a faster pace and much technological advancement has already been taken place in the surveillance and remote monitoring in the field of mining. Thus, it is prudent to utilize the technological advancement for the effective monitoring of the mining activities particularly sand mining in the country.

Use of latest remote surveillance and IT services helps in effective monitoring of the sand mining activity in-country and also assist the government in controlling the illegal mining activity in the country. Thus, there is a need for an effective policy for monitoring of sand mining in the Country which can be enforced on the ground. These guidelines focus on the effective monitoring of the sand mining since from the identification of sand mineral sources to its dispatch and end-use by consumers and the general public. Further, the effective monitoring and enforcement require efforts from not only Government agencies but also by consumers and the general public.

It is the responsibility of every citizen of India to protect the environment and effective monitoring can only be possible when all the stakeholders viz. Central Government, State Government, Leaseholders/Mine Owners, Distributors, Dealers, Transporters and Consumers (bulk & retail) will contribute towards sustainable mining, and comply with all the statutory provisions. It is felt necessary to identify the minimum requirements across all geographical region to have a uniform protocol for monitoring and enforcement of regulatory provision prescribed for sustainable sand and gravel mining.

This document will serve as a guideline for collection of critical information for enforcement of the regulatory provision(s) and also highlights the essential infrastructural requirements necessary for effective monitoring for Sustainable Sand Mining.

The document is prepared in consideration of various orders/directions issued by Hon'ble NGT in matters pertaining to illegal sand mining and also based on the reports submitted by expert committees and investigation teams.

Further, this document is supplemental to the existing "Sustainable Sand Mining Management Guideline-2016" (SSMG-2016), and these two guidelines viz. "Enforcement & Monitoring Guidelines for Sand Mining" (EMGSM-2020) and SSMG-2016 shall be read and implemented in sync with each other. In case, any ambiguity or variation between the provision of both these document arises, the provision made in "Enforcement & Monitoring Guidelines for Sand Mining-2020 "shall prevail.

2.0 NEED FOR POLICY GUIDELINES

The Ministry of Environment, Forest & Climate Change (MoEF&CC) published Environmental Impact Assessment Notification 1994 which is only applicable for the Major Minerals more than 5 ha. In order to cover the minor minerals also into the preview of EIA, the MoEF&CC issued EIA Notification 2006 for Major & Minor Mineral more than 5 Ha. The Hon'ble Supreme Court in its Judgment dated the 27th February 2012 in I.A. No.12- 13 of 2011 in Special Leave Petition (C) No.19628-19629 of 2009, in the matter of Deepak Kumar etc. Vs. State of Haryana and Others etc. made prior environment clearance mandatory for mining of minor minerals irrespective of the area of mining lease. In order to comply with the judgment of Hon'ble Supreme Court, the Ministry issued S.O.141 (E) dated 15.01.2016. Further, MoEF&CC published Sustainable Sand Mining Management Guidelines 2016 for scientific and sustainable sand mining in the Country. The recommendations for the management of sustainable sand extraction are the key objective of the Guidelines. Special emphasis is given on monitoring of the mined out material, which is key to the success of the environmental management plan. Use of IT and IT-enabled services for effective monitoring of the quantity of mined out material and transportation along with process re-engineering has been made a part of the Guidelines. Guidelines support the fundamental concept, promote environmental protection, limit negative physiological, hydrogeological and social impacts underpinning sustainable economic growth.

The Hon'ble NGT in its order dated 04.09.2018 in O.A. 173/2018 in the matter of Sudarsan Das vs. State of West Bengal & Ors. Inter-alia observed that ***"There can be no two views that an effective institutional monitoring mechanism is required not only at the stage when Environmental Clearance is granted but also at subsequent stages". "The guidelines focus on the preparation of District Survey Report and the Management Plan" ... We are of the view that all the safeguards which are suggested***

in sustainable sand mining guidelines as well as notification dated 15.01.2016 ought to be scrupulously followed.” ...It is a known fact that in spite of the above-suggested guidelines being in existence, on the ground level, illegal mining is still going on. The existing mechanism has not been successful and effective in remedying the situation.” ...” Since there is an utter failure in the current monitoring mechanism followed by the State Boards, SEIAAs and DEIAAs, it is required to be revised for effective monitoring of sand and gravel mining and a dedicated monitoring mechanism be set up.”

The Hon’ble NGT in its order dated 04.09.2018 in O.A. 173/2018 in the matter of Sudarsan Das vs. State of West Bengal & Ors. directed that ***MoEF&CC has issued directions from time to time under Section 3 and 5 of the Environment (Protection) Act, 1986. The MoEF&CC needs to revise its directions keeping in mind the following:***

- *Mining Surveillance System discussed in para 23 above be finalized in consultation with ISRO Hyderabad.*
- *Safeguards suggested in Sustainable Sand Mining Guidelines published by the MoEF&CC in the year 2016.*
- *Suggestions in the High Power Committee Report.*
- *The requirement of demarcation of boundaries being published in respect of different leases in the public domain.*
- *Need to issue SOP laying down mechanism to evaluate loss to the ecology and to recover the cost of restoration of such damage from the legal or illegal miners. Such evaluation must include the cost of mining material as well as the cost of ecological restoration and the net present value of future ecosystem services forgone.*
- *Need to set up a dedicated institutional mechanism for effective monitoring of sand and gravel mining which may also take care of mining done without any Environmental Clearance as well as mining done in violation of Environmental Clearance conditions.*

- *The Mining Department may make a provision for keeping apart at least 25% of the value of mined material for the restoration of the area affected by the mining and also for compensating the inhabitants affected by the mining.*
- *One of the conditions of every lease of mine or minerals would be that there will be independent environmental audit at least once in a year by reputed third party entity and report of such audit be placed in the public domain.*
- *In the course of such an environmental audit, a three-member committee of the local inhabitants will also be associated. Composition of three members committee may preferably include ex-servicemen, a former teacher and former civil servant. The Committee will be nominated by the District Magistrate.*

The Hon'ble NGT in its order dated 05.09.2018 in O.A. 44/2016 in the matter of Mushtakeem Vs. MoEF & CC & Ors. Inter-alia observed the following:

"Para 20. In Original Application No. 481/2016, the allegation is that there is the connivance of the District Administration with the miners and mining is going in violation of conditions of Environmental Clearance. According to the applicant, an effective mechanism is required to be evolved so that illegal mining does not place."

*"Para 22. We proceed to consider the main question proposed for the consideration stated earlier hereinabove as to **how to ensure the protection of the environment by checking illegal mining.**"*

"Para 23. We have dealt with the identical issue relating to the illegal sand mining in the border districts in the State of West Bengal and Odisha in the order dated 04th September 2018 in Sudarsan Das Vs. State of West Bengal & Ors., Original Application No. 173 of 2018. We have directed the MoEF&CC to revise the guidelines on the subject for an effective mechanism for sand mining, relevant portions of which are reproduced below: -..."

The Hon'ble NGT in its order dated 10.09.2018 in O.A. 304/2015 in the matter of Jai Singh & Anr.Vs. Union of India Ors. inter-alia observed the following:

*"Para 6. After disposal of the above matters, a disturbing event widely reported in media which took place on 07th September 2018 has been brought to our notice. **A Deputy Ranger who tried to stop illegal mining was killed by mining mafia at Morena in the State of M.P.***

"Para 7. The above disturbing event may also be kept in mind by the MoEF, while considering the issuance of revised guidelines in light of the judgment dated 05th September 2018 (Supra)."

The Hon'ble NGT in its order dated 05.04.2019 in O.A. 360/2015 in the matter of National Green Tribunal Bar Association & Anr.Vs. Union of India & Ors. inter-alia observed the following:

"The 2016 Guidelines need revision in the light of the report of High Powered Committee in September 2016, failure of Monitoring mechanism followed by State Boards, SEIAs, DEIAs and MSS system developed by Ministry of Mines & IBM with the assistance of BISAG and MAITY and other observations quoted in paras 12 to 15 above.

50. As noted earlier in paras 17, 23, 27, 31 and 35, States of West Bengal, Odisha, Gujarat, Karnataka, Maharashtra, Punjab, Haryana and Uttar

Pradesh are required to follow SSMG, 2016 as may be revised by MoEF&CC and even other States where illegal sand mining is taking place.

The States may review the monitoring mechanism in terms of several directions of the Tribunal and guidelines of MoEF&CC.

The international conservation concern regarding natural wealth is a universal demand. Article 51(a) subsection (G) of the constitution requires every citizen of India to protect and improve the natural environment including forest, lakes, rivers, wildlife and to have compassion for the living creature.

The Hon'ble Supreme Court in the case of M.C. Mehta Vs. Kamal Nath (1997) 1 SCC 388 held that under Article of Indian Constitution incorporates the "Public Trust Doctrine" and as such extents to the protection of all-natural resources which includes the protection of flora and fauna.

The Hon'ble Supreme Court in the case of Vellore Citizens Welfare Forum Vs. Union of India & Ors (1996) held that the precautionary principle is part of the Environmental Law in India. It further stated that onus of proof is on the actor of the developer/industrialize to show that its actions are environmentally benign."

3.0 OBJECTIVE OF GUIDLINES

- Identification and Quantification of Mineral Resource and its optimal utilization.
- To regulate the Sand & Gravel Mining in the Country since its identification to its final end-use by the consumers and the general public.
- Use of IT-enabled services & latest technologies for surveillance of the sand mining at each step.
- Reduction in demand & supply gaps.
- Setting up the procedure for replenishment study of Sand.
- Post Environmental Clearance Monitoring.
- Procedure for Environmental Audit.
- To control the instance of illegal mining.

4.0 REQUIREMENTS FOR MONITORING & ENFORCEMENT

Sustainable Sand Mining Management Guidelines (SSMMG) 2016 and past experience suggest that the source of sand in India are through

- a) River (riverbed and flood plain),
- b) Lakes and reservoirs,
- c) Agricultural fields,
- d) Coastal / marine sand,
- e) Palaeo-channels and
- f) Manufactured Sand (M-Sand).

The SSMMG-2016 highlights the identification of the sand mining sources, replenishment of the River Bed Material (Sand, Boulder, Gravel, Cobble etc.), preparation of Districts Survey Report, and Standard Environmental Conditions suitable for sand mining projects.

The necessary requirements to comply with the direction of Hon'ble NGT and to facilitate effective monitoring and enforcement of regulatory provision for sand mining in the country are as follows:

- i) Identification of sand mining sources, its quantification and feasibility for mining considering various environmental (proximity of protected area, wetlands, creeks, forest etc.) and other factors such as important structures, places of archaeological importance, habitation, prohibited area etc.
- ii) The mining lease auctioned by State government as per their Minor Mineral Concession Rules are granted of Letter of Intent (LoI), but it has been observed that many of the sites are not suitable w.r.t environmental aspects. In most of the cases, the unplanned grant of mining lease leads to formation of cluster and/or contiguous cluster

of small mining leases which sometimes is difficult to regulate and monitor. In order to address such issues, more emphasis is required on the preparation of District Survey Report and its format for reporting,

- iii) Mining Plan is an important document to assist the mine owner to operate the mine in a scientific manner. States have their own format for preparation of mining plan and it is observed that recording of the initial level of mining lease at shorter interval say 25m X 25 m grid interval is not present.
- iv) There is no practice for regular replenishment study to ascertain the rate of depositing, plan and section needs to be prepared based on the restrictions provided in letter of intent and provisions of Sustainable Sand Mining Management Guidelines 2016.
- v) Environmental Clearance is a process wherein the regulatory authorities after considering the potential environment impact of mining clearance is granted with a set of specific & standard conditions to carry out mining operations, but often it is observed that letter of intent is granted for a location which has less potential for mining and not feasible for environment-friendly mining. This leads to an unnecessary financial burden on the mine owners and litigations. Thus, LoI should be preferably granted for those locations which have the least possibility of an impact on the environment and nearby habitation.
- vi) It is the responsibility of the mine owner to obtain all the statutory clearance and comply with the conditions stipulated in the clearance letter. Mining should be carried out within the mining lease area as per

approved mining plan or mining plan concurred by other regulatory authorities.

- vii) Mining operation also involves transportation of mineral from the mining area to end-user and its necessary that movement of the mineral needs to be monitored.

The State Government already have power under section 23c of MMDR, Act 1957 to make rules for preventing illegal mining, transportation and storage of minerals. However, there are instances of illegal mining which shows that there is a need for strengthening the system of mineral dispatch and its monitoring. This document provides good practices already under implementation by various states for regulating the mineral sale, dispatch, storage, transportation and use.

- viii) The river reaches with sand provide the resource and thus it is necessary to ascertain the rate of replenishment of the mineral. Regular replenishment study needs to be carried out to keep a balance between deposition and extraction. This document provides the procedure to be followed for conducting replenishment study.
- ix) Even after all the regulatory procedure and policy being in place, there are instances where illegal mining is taking place. There is a need for regular surveillance of the sand mining reaches. The monitoring agencies can monitor the sites remotely by using Unmanned Artificial Vehicles (UAVs)/Drone which is now a viable option. The drone can also be used for reserves estimation, quantity estimation, land use monitoring. This document highlights possible use of IT/Satellite/Drone technology for effective monitoring of sand mining.

4.1 Identification of possible sand mining sources and preparation of District Survey Report (DSR)

4.1.1 Preparation of District Survey Report.

“Sustainable Sand Mining Guidelines, 2016” issued by MoEF&CC requires preparation of District Survey Report (DSR), which is an important initial step before grant of mining lease/Lol. The guidelines emphasize detailed procedure to be followed for the purpose of identification of areas of aggradation/ deposition where mining can be allowed and identification of areas of erosion and proximity to infrastructural structures and installation where mining should be prohibited. Calculation of annual rate of replenishment, allowing time for replenishment after mining, identification of ways of scientific and systematic mining; identifying measures for protection of environment and ecology and determining measures for protection of bank erosion, benchmark (BM) with respect to mean Sea Level (MSL) should be made essential in mining channel reaches (MCR) below which no mining shall be allowed.

The Hon’ble NGT in its Judgment dated 08.12.2017 in the matter of Anjani Kumar vs State of Uttar Pradesh & Ors. inter-alia mentioned the following regarding sand mining in the Uttar Pradesh.

“It states that the main object of preparation of District Survey Report is to ensure identification of areas of aggradation/deposition where mining can be allowed and identification of areas of erosion and proximity to infrastructural structures and installation where mining should be prohibited and calculation of annual rate of replenishment and allowing time for replenishment after mining area. Thus, the environmental protection requires a strictly regulated mining in terms of area, quantity as well as most importantly replenishment thereof.”

"The data collection and declared for preparation of DSR shall take precedence over other data and would form the foundation for providing mining lease in terms of Appendix- x to the Notification dated 15th January 2016 must be prepared by the statutory authority stated therein i.e. DEIAA prior to awarding of permits for carrying on mining activity in any part of the State of UP."

The Hon'ble High Court of Jharkhand at Ranchi in its orders dated the 11th April 2018 and 19th June 2018 in W.P. (PIL) No. 1806 of 2015, in the matter of Court on its Own Motion Versus the State of Jharkhand & Others with W.P. (PIL) No. 290 of 2013, in the matter of Hemant Kumar Shilkarwar Versus the State of Jharkhand & Others, has inter-alia directed the preparation of District Survey Report for minor minerals other than Sand and Bajri or delegation of the powers for preparation of format of District Survey Report of minor minerals other than sand and Bajri to the State Government and/or District Environment Impact Assessment Authority and District Expert Appraisal Committee. To comply with the direction of Hon'ble High Court the Ministry has issued S.O. 3611(E) dated 25.07.2018, wherein, the procedure of preparation of DSR is mentioned. But it is felt that still there is other information that needs to be reported in DSR to make it a comprehensive DSR.

Therefore, preparation of District Survey Report is a very important step and sustainable sand mining in any part of the country will depends on the quality of District Survey Report.

Considering the importance of district survey report, the Ministry of Environment Forest and climate change, after consultation with experts dealing with mining-related matters, formulated the following guidelines for the preparation of comprehensive District Survey Report for sand mining.

- a) District Survey Report for sand mining shall be prepared before the auction/e-auction/grant of the mining lease/Letter of Intent (LoI) by Mining department or department dealing the mining activity in respective states.
- b) The first step is to develop the inventory of the River Bed Material and Other sand sources in the District. In order to make the inventory of River Bed Material, a detailed survey of the district needs to be carried out, to identify the source of River Bed Material and alternative source of sand (M-Sand). The source will include rivers, de-siltation of reservoir/dams, Patta lands/Khatedari Land, M-sand etc.

The revenue department of Kerala already conducted river mapping and sand auditing of around 20 rivers of Kerala which is a good example wherein the profile of rivers was created at regular intervals and aggradation/deposition was identified along with water level. In the same study, benchmarks were also created at a prominent location at regular interval for future surveying. Such study helps the mining departments to identify the source of sand.

Thus, it is proposed that for preparation of district survey report, the auditing of rivers needs to be carried out. There is already a provision under MMDR Act 2015 for National Mineral Exploration Trust (MET) wherein a 2% of royalty amount to be deposited in the trust. This fund is used for mineral exploration in the country. The Sand Auditing is also a sort of identification of mineral and State Government may request Central Govt. for proving funds for river auditing. The Central Govt. (Ministry of Mines) may also explore the possibilities for providing the funds for river auditing. The other option is that State Govt. may conduct such studies by its own fund and the same may be recovered from the leaseholders to whom the mining lease will be allocated.

- c) District Survey Report is to be prepared in such a way that it not only identifies the mineral-bearing area but also define the mining and no mining zones considering various environmental and social factors.
- d) Identification of the source of Sand & M-Sand. The sources may be from Rivers, Lakes, Ponds, Dams, De-silting locations, Patta land/Khtedari lands. The details in case of Rivers such as [name, length of river, type (Perennial or Non-Perennial), Villages, Tehsil, District], in case of Lakes, Ponds, Dams, De-silting locations [Name, owned/maintained by (State Govt./PSU), area, Villages, Tehsil, District] in case of Patta land/Khtedari lands [Owner Name, Sy No, Area, Agricultural/Non-Agricultural, Villages, Tehsil, District], in case of M-Sand Plant [Owner Name, Sy No, Area, Quantity/Annum, Villages, Tehsil, District], needs to be recorded as per format given in **Annexure-I**.
- e) Defining the sources of Sand/M-Sand in the district is the next step for identification of the potential area of deposition/aggradation wherein mining lease could be granted. Detailed survey needs to be carried out for quantification of minerals. The purpose of mining in the river bed is for channelization of rivers so as to avoid the possibility of flooding and to maintain the flow of the rivers. For this, the entire river stretch needs to be surveyed and original ground level (OGL) to be recorded and area of aggradation/deposition needs to be ascertained by comparing the level difference between the outside riverbed OGL and water level. Once the area of aggradation/deposition are identified, then the quantity of River Bed Material available needs to be calculated. The next step is channelization of the river bed and for this central $\frac{3}{4}$ th part of the river, width needs to be identified on a map. Out of the $\frac{3}{4}$ th part area, where there is a deposition/aggradation of the material needs to be identified. The remaining $\frac{1}{4}$ th area needs to be kept as no mining zone for the

protection of banks. The specific gravity of the material also needs to be ascertained by analyzing the sample from a NABL accredited lab. Thus, the quantity of material available in metric ton needs to be calculated for mining and no mining zone.

Note: As physical survey with conventional method is time-consuming, use of unmanned aerial vehicle (UAV) may be explored to carry out the survey and finalizing the original ground level and for developing a 3D model of the area.

- f) The permanent boundary pillars need to be erected after identification of an area of aggradation and deposition outside the bank of the river at a safe location for future surveying. The distance between boundary pillars on each side of the bank shall not be more than 100 meters.
- g) Identifying the mining and no mining zone shall follow with defining the area of sensitivity by ascertaining the distance of the mining area from the protected area, forest, bridges, important structures, habitation etc. and based on the sensitivity the area needs to be defined in sensitive and non-sensitive area.
- h) Demand and supply of the Riverbed Material through market survey needs to be carried out. In addition to this future demand for the next 5 years also needs to be considered.
- i) It is suggested that as far as possible the sensitive areas should be avoided for mining, unless local safety condition arises. Such deviation shall be temporary & shall not be a permanent feature.
- j) The final area selected for the mining should be then divided into mining lease as per the requirement of State Government. It is suggested the mining lease area should be so selected as to cover the entire deposition area. Dividing a large area of deposition/aggradation into smaller

mining leases should be avoided as it leads to loss of mineral and indirectly promote illegal mining.

- k) Cluster situation shall be examined. A cluster is formed when one mining lease of homogenous mineral is within 500 meters of the other mining lease. In order to reduce the cluster formation mining lease size should be defined in such a way that distance between any two clusters preferably should not be less than 2.5 Km. Mining lease should be defined in such a way that the total area of the mining leases in a cluster should not be more than 10 Ha.
- l) The number of a contiguous cluster needs to be ascertained. Contiguous cluster is formed when one cluster is at a distance of 2.5 Km from the other cluster.
- m) The mining outside the riverbed on Patta land/Khatedari land be granted when there is possibility of replenishment of material. In case, there is no replenishment then mining lease shall only be granted when there is no riverbed mining possibility within 5 KM of the Patta land/Khatedari land. For government projects, mining could be allowed on Patta land/Khatedari land but the mining should only be done by the Government agency and material should not be used for sale in the open market. Cluster situation as mentioned in para k above is also applicable for the mining in Patta land/Khatedari land.
- n) The State Government should define the transportation route from the mining lease considering the maximum production from the mines as at this stage the size of mining leases, their location, the quantity of mineral that can be mined safely etc. is available with the State Government. It is suggested that the transportation route should be selected in such a way that the movement of trucks/tippers/tractors from the villages having habitation should be avoided. The transportation route so

selected should be verified by the State Government for its carrying capacity.

- o) Potential site for mining having its impact on the forest, protected area, habitation, bridges etc, shall be avoided. For this, a sub-divisional committee may be formed which after the site visit shall decide its suitability for mining. The list of mining lease after the recommendation of the Committee needs to be defined in the following format given in as **Annexure-II**. The Sub-Divisional Committee after the site visit shall make a recommendation on the site for its suitability of mining and also records the reason for selecting the mining lease in the Patta land. The details regarding cluster and contiguous cluster needs to be provided as in **Annexure-III**. The details of the transportation need to be provided as in **Annexure IV**.

- p) **Public consultation**-The Comments of the various stakeholders may be sought on the list of mining lease to be auctioned. The State Government shall give an advertisement in the local and national newspaper for seeking comments of the general public on the list of mining lease included in the DSR. The DSR should be placed in the public domain for at least one month from the date of publication of the advertisement for obtaining comments of the general public. The comments so received shall be placed before the sub-divisional committee for active consideration. The final list of sand mining areas [leases to be granted on riverbed & Patta land/Khatedari land, de-siltation location (ponds/lakes/dams), M-Sand Plants (alternate source of sand)] after the public hearing needs to be defined in the final DSR in the format as per **Annexure-V**. The details regarding cluster and contiguous cluster needs to be provided in **Annexure-VI**. The details of the transportation need to be provided in **Annexure-VII**.

4.2 Grant of Letter of Intent to those mining leases which are falling in potential mining zone

The State Government shall issue letter of intent as per procedure laid down in their Minor Mineral Concession Rules with due consideration of final district survey report. The State Government shall ensure that all the letter of intent shall have complete details of the mining lease including geo-coordinate of the corner points, the involvement of forest land, distance from the forest land, distance from the protected area, distance from other sites of archaeological importance, details of the cluster situation etc. The demarcation of the boundaries of Lol/Lease area shall be placed in public domain along with Lol/lease deed details.

The LOI should not be granted for mining area falling on both riverbed and outside riverbed. Therefore, in the same lease, both types of area should not be included.

The authority responsible for grant of lease for sand mining shall ensure that annual audit of the sand mining process, production and compliance of the imposed conditions by regulatory authority (Environmental clearance or mine plan) shall be one of the essential condition of the lease agreement. The annual audit report shall be submitted to the district administration, which shall be put in public domain through the district website. Any deviation observed shall be appropriately and in accordance with applicable law shall be dealt by the concerned authority and corrective measures shall also be taken to restoration of ecological/environmental damage, if observed.

4.3 Mining Plan

The preparation of Mining Plan is also very important. The mining plan should include the original ground level recorded at an interval not more than 10M x 10M along & across the length of the river. In addition to this-levels, outside the mining lease and bank of the river up to meters needs to be recorded. In the mining plan, there should be 3 plates for each year production & development planning (pre-monsoon, monsoon and post-monsoon). The time period of monsoon should be defined in the DSR. At the time of review of the mining plan, the details of the replenishment study conducted for all the years needs to be included in the mining plan. The Mining Plan should include the certificate from PCCF on forest land, distance from the protected area, past production details for mining leases seeking expansion.

Following considerations shall be kept in mind for sand/gravel mining while approving mining plan

- a) Parts of the river reach that experience deposition or aggradation shall be identified. The Leaseholder/ Environmental Clearance holder may be allowed to extract the sand and gravel deposit in these locations to manage aggradation problem.
- b) The distance between sites for sand and gravel mining shall depend on the replenishment rate of the river. Sediment rating curve for the potential sites shall be developed and checked against the extracted volumes of sand and gravel.
- c) Sand and gravel may be extracted across the entire active channel during the dry season.

- d) Abandoned stream channels on the terrace and inactive floodplains be preferred rather than active channels and their deltas and flood plains. The stream should not be diverted to form the inactive channel.
- e) Layers of sand and gravel which could be removed from the river bed shall depend on the width of the river and replenishment rate of the river.
- f) Sand and gravel shall not be allowed to be extracted where erosion may occur, such as at the concave bank.
- g) Segments of the braided river system should be used preferably falling within the lateral migration area of the river regime that enhances the feasibility of sediment replenishment.
- h) Sand and gravel shall not be extracted up to a distance of 1 kilometre (1 km) from major bridges and highways on both sides, or five times (5x) of the span (x) of a bridge/public civil structure (including water intake points) on up-stream side and ten times (10x) the span of such bridge on down-stream side, subjected to a minimum of 250 meters on the upstream side and 500 meters on the downstream side.
- i) The sediment sampling should include the bed material and bed material load before, during and after the extraction period. Develop a sediment rating curve at the upstream end of the potential reach using the surveyed cross-section. Using the historical or gauged flow rating curve, determine the suitable period of high flow that can replenish the extracted volume. Calculate the extraction volume based on the sediment rating curve and high flow period after determining the allowable mining depth.

- j) Sand and gravel could be extracted from the downstream of the sand bar at river bends. Retaining the upstream one to two-thirds of the bar and riparian vegetation is accepted as a method to promote channel stability.
- k) The flood discharge capacity of the river could be maintained in areas where there is a significant flood hazard to existing structures or infrastructure. Sand and gravel mining may be allowed to maintain the natural flow capacity based on surveyed cross-section history. Alternatively, off-channel or floodplain extraction is recommended to allow rivers to replenish the quantity taken out during mining.
- l) The Piedmont Zone (Bhabhar area) particularly in the Himalayan foothills, where riverbed material is mined, this sandy-gravelly track constitutes excellent conduits and holds the greater potential for groundwater recharge. Mining in such areas should be preferred in locations selected away from the channel bank stretches.
- m) Mining depth should be restricted to 3 meters and distance from the bank should be $\frac{1}{4}$ th or river width and should not be less than 7.5 meters.
- n) The borrow area should preferably be located on the riverside of the proposed embankment because they get silted in the course of time. For low embankment, less than 6 m in height, borrow area should not be selected within 25 m from the toe/heel of the embankment. In the case of the higher embankment, the distance should not be less than 50 m. In order to obviate the development of flow parallels to the embankment, crossbars of width eight times the depth of borrow pits spaced 50 to 60 meter center-to-center should be left in the borrow pits.

- o) Demarcation of mining area with pillars and geo-referencing should be done prior to the start of mining.
- p) A buffer distance /un-mined block of 50 meters after every block of 1000 meters over which mining is undertaken or at such distance as may be the directed/prescribed by the regulatory authority shall be maintained.
- q) A buffer distance /unmined block of 50 meters after every block of 1000 meters over which mining is undertaken or at such distance as may be the directed/prescribed by the regulatory authority shall be maintained.
- r) River bed sand mining shall be restricted within the central 3/4th width of the river/rivulet or 7.5 meters (inward) from river banks but up to 10% of the width of the river, as the case may be and decided by regulatory authority while granting environmental clearance in consultation with irrigation department. Regulating authority while regulating the zone of river bed mining shall ensure that the objective to minimize the effects of riverbank erosion and consequential channel migration are achieved to the extent possible. In general, the area for removal of minerals shall not exceed 60% of the mine lease area, and any deviation or relaxation in this regard shall be adequately supported by the scientific report.
- s) Mining Plan for the mining leases(non-government) on agricultural fields/Patta land shall only be approved if there is a possibility of replenishment of the mineral or when there is no riverbed mining possibility within 5 KM of the Patta land/Khatedari land. For government projects mining could be allowed on Patta land/Khatedari land but the mining should only be done by the Government agency and material should not be used for sale in the open market.

The minerals reserve for river bed area is calculated on the basis of maximum depth of 3 meters and margins, width and other dimensions as mentioned in para (s) above. The area multiplied by depth gives the volume and volume multiplied with bulk density gives the quantity in Metric Ton. In case of river bed, mineable material per hectare area available for actual mining shall not exceed the maximum quantity of 60,000 MT per annum.

4.4 Obtaining Environmental & Other Statutory Clearance

The LOI Holder/Lease Holder to obtain Environmental and Other Statutory Clearances from the concerned authorities as per provision of applicable laws.

4.5 Baseline date before Commencement of Mining Operations

Baseline data in respect of the initial level of mining lease in the interval not more than 25 X 25 meters shall be collected for record by leaseholder. The level of river bed upstream and downstream up to 100 meters also needs to be recorded. The area outside the mining lease/river bank (if lease boundary coincides with mining lease) up to 100 meters from both the banks/mining lease needs to surveyed for initial level.

4.6 Additional measures where project proponent is selected by a bidding

In those states where sand plots are auctioned to the highest bidder, the following is suggested:

It has been observed that bidders try to form a cartel and bids are received for certain plots where legal mining is done, and bids for certain other plots don't elicit any response. Sand from these un-

auctioned plots is then excavated using the same machinery deployed for the excavation of adjacent plot which might have been auctioned off. It is not easily possible for the field machinery to prevent such illegal activities. This may be prevented by having plot of larger size. plots are large in size as possible are identified for auction. Care may be taken to ensure that no continuous stretch of plot in the river bed is divided for auction. A continuous stretch of plot shall be preferred for auction, and the attempt may not be made to auction it off in pieces.

5.0 REPLENISHMENT STUDY

The need for replenishment study for river bed sand is required in order to nullify the adverse impacts arising due to excessing sand extraction. Mining within or near riverbed has a direct impact on the stream's physical characteristics, such as channel geometry, bed elevation, substratum composition and stability, in-stream roughness of the bed, flow velocity, discharge capacity, sediment transport capacity, turbidity, temperature etc. Alteration or modification of the above attributes may cause an impact on the ecological equilibrium of the riverine regime, disturbance in channel configuration and flow-paths. This may also cause an adverse impact on in-stream biota and riparian habitats. It is assumed that the riparian habitat disturbance is minimum if the replenishment is equal to excavation for a given stretch. Therefore, to minimize the adverse impact arising out of sand mining in a given river stretch, it is imperative to have a study of replenishment of material during the defined period.

5.1 Generic Structure of Replenishment Study

Initially replenishment study requires four surveys. The first survey needs to be carried out in the month of April for recording the level of mining lease before the monsoon. The second survey is at the time of closing of mines for monsoon season. This survey will provide the quantity of the material excavated before the offset of monsoon. The third survey needs to be carried out after the monsoon to know the quantum of material deposited/replenished in the mining lease. The fourth survey at the end of March to know the quantity of material excavated during the financial year. For the subsequent years, there will be a requirement of only three surveys. The results of year-wise surveys help the state government to establish the replenishment rate of the river. Based on the replenishment rate future auction may be planned.

The replenishment period may vary on nature of the channel and season of deposition arising due to variation in the flow. Such period and season may vary on the geographical and precipitation characteristic of the region and requires to be defined by the local agencies preferable with the help of the Central Water Commission and Indian Meteorological Department. The excavation will, therefore, be limited to estimated replenishment estimated with consideration of other regulatory provisions.

5.2 Methodology for Replenishment Study

The replenishment estimation is based on a theoretical empirical formula with the estimation of bedload transport comprising of analytical models to calculate the replenishment estimation. The iso-pluvial maps of IMD can be used for estimation of rainfall. Catchment yield is computed using different standard empirical formulas relevant to the geographical and channel attributes. eg. Strange's Monsoon runoff curves for runoff coefficient). Peak flood discharge for the study area can be calculated by using Dickens, Jarvis and Rational formula at 25, 50 and 100 years return period. The estimation of bed load transport using Ackers and White Equation or similar can be made. A simulation model is used with basic data generated from the field in the pre-study and post-study period (preferably pre-monsoon and post-monsoon) to estimate the volume of replenished material. The particle size distribution and bulk density of the deposited material are required to be assessed from a NABL recognized laboratory. Considering the bulk density and the volume, the estimation of replenishment in weight will be calculated after considering safeguards and stability of the slopes and riverine regime. Some of the common methods used for field data acquisition for replenishment study

5.2.1. Physical survey of the field by the conventional method

- i. The conventional survey technical using DGPS and other survey tools are used to define the topography, contours and offsets of the lease area. The survey should clearly depict the important attributes of the stretch of the river and its nearby important civil and other feature of importance. Such information will provide the eligible spatial area for mining. The contour and the elevation benchmarks will provide the baseline data for assessing the pre and post-study period scenario.
- ii. Physical benchmarks are to be fixed at appropriate intervals (preferable 1 in 30 m) and the Reduced Level (RL) shall be validated from a nearby standard RL. These RL should be engraved on a steel plate (Bench Plate) and shall be fixed and placed at locations which are free from any damages and are available in pre and post-study period. The bench plates shall be available for use during the mining period as reference for all mining activity. Reference pillar may also be used in place of Bench Plates with visible and readable demarcation on the ground as common reference points to control the topographic survey and mining activity.
- iii. Baseline data on elevation status for a grid of 10 m x 10 m is preferred to have accuracy in the assessment. It is expected that two consecutive cross-sections in longitudinal and lateral direction should not be more than 10-meter distance apart, however, the regulatory authority may fix these intervals depending on the geographical and site-specific conditions, only and after providing the scientific reason for such deviation.
- iv. The changes observed in the elevation in pre and post scenario at each node should be depicted in graphical forms with an appropriate scale to estimate the area of deposition and erosion. These graphical

presentations should depict the active channel regime and the flow bed elevation with other important features required to be considered for estimation of the mining area. The area of deposition and erosion shall be calculated for each cross-section after giving due regard to the stability and safety of active channel banks, and other features of importance. The elevation level shall be in reference to the nearest bench-plates established for the purpose.

- v The levels (MSL & RL) of the corner point of each grid should be identifiable and safety barriers (Non-Mining) demarcated as restricted in consensus with Mineral Concession Rules of respective State, and the provision mentioned in this Sustainable Sand Mining Management Guidelines.
- vi A clear identification is required to be highlighted between grids under mineable and grids under the non-mineable area. These baseline data (pre and post) be subjected to stimulation with the help of data mine software to derive at the replenishment area and corresponding volume and estimated weight.
- vii The database should be structured in a tabulated form clearly depicting the nomenclature of the section lines, latitude and longitude of the starting point, chain-age and respective levels of all the points taken on that section line.
- viii Net area shall be derived after the summation of the area of deposition minus area of erosion for each cross-section. The volume will be estimated by multiplying the distance between two cross-sections with the average of net area of these two consecutive cross-sections.
- ix One sample per 900 square meters (30 m x 30 m) shall be preferred sample density for assessment of bulk density for estimation of deposition rate. Care should be taken that the sample for assessment

of bulk density is taken from the deposition zone and not from erosion. However, depending on the site condition, river morphology and geographical condition, sample density may be adjusted. Reason for such deviation shall be appropriately highlighted in the report with supporting scientific data.

5.2.2. Use of UAV/Drone and other image data processing techniques

With the development in image data processing tools and its accuracy acceptability, Drone/UAV fitted with the advance camera are used for survey purposes. Such technology has promising potential in the survey of sand mining zones due to its fast and reliable output deliveries. The survey is conducted using a set of instruments and compatible software to utilized the properly referenced data for depicting the topography of the study area. Instrument calibration and software compatibility and its validation with the ground data are an essential requirement for using this technique.

The details of the instruments their limitation and software used shall be demonstrated in the form of the accuracy assessment report, through a chapter in the replenishment study report. Other details to be incorporated in the report with regard to the study using such imaginary techniques shall highlight the followings:

- a) **Flight Planning:** - The lease co-ordinates and the flight plan devised to capture the front and side overlap percentages for in each flight in reference to global coordinates (Kml or SHP file) system. The software used for the purpose and its details along with limitations with basic analytical assumptions.
- b) **Block file generation:** - This operation concerns the selection of the sensor model and the definition of block properties, the addition of

imagery to the block file, marking of GCPs, generation of tie points and refining of the model.

- c) **Interior orientation:** - The interior orientation of the stereo pair rational polynomial coefficients (RPC) used, which should be bundled with the scenes. RPCs are coefficient, which is used by photogrammetric software to represent the ground to-image viewing geometry.
- d) **Exterior orientation:** For exterior orientation, ground control points shall be used, which are collected from the DGPS survey.
- e) **Aero Triangulation:** - A critical phase in photogrammetric mapping is to rectify the satellite imagery at an appropriate tract on the surface of the earth. This is accomplished by collecting horizontal and vertical data [GCP's] to ascertain the spatial location of a number of features that are visible and measurable on the aerial images – this process is often called control bridging, which refers to passing horizontal and vertical information from one aerial image to the next.
- f) **Ortho Generation:** - After running the above steps; the software shall automatically generate orthorectified imagery.
- g) **DTM extraction:** For extraction of DTM, Generated point cloud data classified manually to extract bare earth.

5.2.3 Accuracy Assessment of Aerial Data:

To check the accuracy of DTM generated by Aerial data, few points are selected and compared with on-site by using DGPS instrument for the ground-truthing purpose. It is preferred to do ground-truthing at minimum 5 locations spread evenly across the lease area. The readings from the DGPS instrument are then compared with the Drone data for accuracy assessment

purpose. A comparative chart will be prepared in comparison of Data related to ground-truthing (by DGPS) and from Drone. Such accuracy assessment report shall a chapter of the replenishment study.

5.2.4 Replenishment study shall have the details of

- List of instruments
- List of software
- Establishment of Benchmark by putting No. of pillar points and various Ground Control Points (GCP) at the site.
- Ground Control Points (GCP) Collection: - Various GCPs were observed by using DGPS for Permanent Benchmarks and for control points.
- The summary of the elevation data from each section's profile based on the post-monsoon the survey should have mentioned in the table form.
- The detail of post-monsoon survey data in the tabular form shall be
- The detailed comparison of both pre-monsoon and post-monsoon elevation data shall be attached
- Cross-sectional depiction of deposition and erosion for each section in pre and post-deposition season shall be given supported by relevant field study data and plan.

6.0 ENFORCEMENT

6.1 Mining Operation:

The mining operations should be strictly carried out in accordance with the approved mining plan and after complying with all the conditions stipulated in Environmental & Other Statutory Clearance. Mine owner shall follow the operational procedure (for sale, dispatch, storage, reserve reconciliation and transportation) as may be defined by the concerned state government in its monitoring guidelines. Mine owner should comply with the recommendation and suggestion made by the High Power Committee as applicable.

6.2 Post Environment Cleanace Monitoring:

It's the responsibility of the EC Holder to comply with the Environmental Clearance conditions and upload the six-monthly EC compliance report on the website of the Ministry. For the category, 'A' mines (>100 Ha individual & cluster) Regional Office of the MoEF&CC are entrusted to carry out EC Monitoring and for the Category 'B' Mines by SEIAA. The monitoring shall be carried out as per the procedure/schedule suggested by MoEF&CC from time to time. MOEF&CC vide its notification S.O. 637(E) dated 28.02.2014 has delegated the power to State/Union Territory Environmental Impact Assessment Authority to issue show cause notice to project proponent in case of violation of Conditions of Environmental Clearance issued by the said authority and to issue direction for keeping the said EC in abeyance or withdrawing it. Thus, for category 'B' (0 to 100 Ha) projects SEIAAs are responsible for EC monitoring.

6.3 Environment Audit:

The Hon'ble NGT in its order dated 04.09.2018 in O.A. 173/2018 in the matter of Sudarsan Das vs. State of West Bengal & Ors. Inter-alia directed

that "One of the conditions of every lease of mine or minerals would be that there will be independent environmental audit at least once in a year by reputed third party entity and report of such audit be placed in the public domain. In the course of such an environmental audit, a three-member committee of the local inhabitants will also be associated. Composition of three member's committee may preferably include ex-servicemen, a former teacher and former civil servant. The Committee will be nominated by the District Magistrate.

The gazette notification on environmental audit has been issued by the Ministry of Environment and Forests on March 13, 1992 (amended vide notification GSR 386 (E) dated April 22, 1993). This notification applies to every person carrying on an industry, operation or process requiring consent to operate under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) or under section 21 of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981), or both, or authorization under the Hazardous Waste (Management and Handling) Rules, 1989, issued under the Environment (Protection) Act, 1986 (29 of 1986). The notification requires that an Environmental Statement for the financial year ending the 31st March be submitted to the concerned State Pollution Control Board, on or before the 30th September of the same year.

It is suggested that NABET Accredited consultant may be engaged for Environment Audit and during the course of the audit, a three-member committee nominated by District Magistrate shall be associated.

6.4 Monitoring of Sale & Purchase of Sand:

6.4.1 In order to curb illegal mining it is very necessary that the general public is aware of the legal source of sand and RBM suppliers. The Ministry of Mines issued **Sand Mining Framework 2018** wherein it has proposed two mechanisms for the online sale of sand depending on whether there is a free market for sand in the State or the prices are regulated by the Government.

Para 1.2.12.2 Under the market model

In the case of the market model, all the lessees/ certified dealers in the State should register themselves on the online portal/ mobile app. For registering, the lessee/ certified dealer will have to enter the details of its concession/ stockyard, location, the quantity of sand expected on a weekly basis, as per the approved mining plan. Once registered, the online portal/ app will display the name of the reach/ stockyard and sand could be booked by the consumer from those leases/ stockyards and prices up to the delivery level. Further, the lessee/ certified dealer needs to regularly update the sand available in the reach/ stockyard, and they can decide the price at which they want to sell their sand. Anyone who wishes to purchase sand in the State will have the following options for buying:

- 1. Mobile app*
- 2. Online portal*
- 3. Customer care/ telephone call*
- 4. Licensed traders*

The consumer needs to register on the portal and log in using his/her credentials (Aadhar card based only). After logging in, the portal will display the entire list of reaches/ stockyards along with the quantity of sand available in those reaches/ stockyards and the quality and price of

sand. The consumer can filter/ sort the reaches/ stockyards based on such parameters as location, quality and price, and book from the lease/ stockyard he/she wishes to. The consumer should also have the option to purchase the sand by ordering at customer care. Also, stockyards should be made around all the major consumption hubs in the State based on their estimated demand.

Para 1.2.12.3 Controlled market prices

In case the prices are regulated by the State Government, the only difference from the previous model is that the price of sand at the river reach/ stockyard shall be uniform across the State/ district based on the quality and transportation lead. A consumer after logging in may choose the reach/ stockyard from which he/she wishes to purchase the sand. The payment for booking the sand in both the cases should be made on the portal/ app so that proper accounting of the sale of sand can be maintained by the Government. Also, stockyards should be made around all the major consumption hubs in the State based on their estimated demand.

It is suggested that the State Government should develop an online portal for sale and purchase of Sand & RBM. In addition to this State Government shall decide on the model viz. *Under market model or Controlled market prices or both* to be adopted for their respective States. The State Government shall accordingly modify their Minor Mineral Concession Rules within 6 months of publication of these guidelines. It is suggested that the controlled price model is more effective in controlling illegal sand mining. Because if the State Government is the only agency to provide the sand in the State, then price and supply of sand can be controlled more effectively. There will be no confusion in the consumers about legality of the purchase as the only source of sand provider is the State Government through its network of registered stockiest, retailers and transporters. The consumers

can fill the online request, pay the amount, select the transporter and give its feedback after the receipt of the sand. The transportation can also be controlled as the tippers used for transportation is registered tippers with GPS facility, the transportation route is well defined for easy monitoring, control over overloading of tippers, control over spillage of mineral etc. The State Govt. shall also make provision for penalizing the persons/agency buying the sand and RBM from the illegal sources.

6.4.2 The Ministry of Mines in its Sand Mining Framework also mentioned the following different level of monitoring:

Para 1.2.13.1 Level 1- Reach/ Stockyard level monitoring

For monitoring of the active reaches:

- a. *Quantity of sand to be extracted from the reach should be based on the quantity of sand assessed in the reach by the Joint Inspection Team.*
- b. *The lease boundary should be demarcated with geo-coordinates or geo-fenced to ensure that sand extraction is going on only within the permitted area.*
- c. *De-casting from river beds should be monitored on a regular basis to keep a track of excavated quantity.*
- d. *After every two years, a mandatory audit of the quantity extracted and quantity permitted along with the replenishment rate.*
- e. *Mandatory e-pass/ e-permit should be made available at reach level for transportation of any sand by any GPS enabled vehicle with the provision of entering the vehicle number of the sand carrying vehicle and expected delivery address and customer name/ mobile number. Also, provision should be made available for stockyards/ stockiest of sand. In the case of*

nomination based (controlled pricing) business model, the margin of private stockist should be capped over a fixed percentage of notified prices.

- f. At the stockyard, the stock supervisor should verify the authenticity of online payment receipt before issuing the transit pass. The loading of sand should be monitored electronically and all transporting vehicles should pass through an electronically monitored weighbridge. g. Real-time data capture for transportation*

Para 1.2.13.2 Level 2 - Transportation monitoring

To make transportation monitoring effective and useful, all the sand carrying vehicles (tractors/ trucks) should be registered with the department and GPS equipment should be installed in all the sand carrying vehicles. Weighbridges with CCTV should be installed at all the stockyards, active reaches to ascertain the exact quantity of sand being transported in the vehicle. Check posts with CCTV cameras should be established near all major consumption centres to check if all the transporting vehicles are carrying a valid transport permit. The transport permit generated should contain the security features mentioned under section 5.11 so that one permit cannot be re-used by generating photocopies of the permit.

Para 1.2.13.3 Level 3 - End consumer monitoring/ bulk consumer

For end consumer monitoring, a customer grievance redressal center should be established to enquire about the grievances faced by the sand consumers. The telephone number of the call center should be advertised so that it reaches the general public through which anyone in the State can register his/her complain related to the sand, be it in terms of price or any other grievance. Additionally, profiles of customers should be analyzed such as the delivery of sand at the same address, usage pattern and its comparison with the estimated usage, as mentioned in purpose, etc. Further, surprise checking

should be conducted by the district level committee staff as per instructions of the monitoring agency.

Para 1.2.13.4 Level 4 - Indirect monitoring

Indirect monitoring can be done by determining sand consumption through the quantum of cement sales in the State, as the sale of cement is quite organized and data is easily available at the State level and district levels for the same. From district-wise cement consumption, the further trend of sand consumption can be derived. Any anomalies in the sand consumption/demand can be analyzed further.

Note: *The above monitoring mechanism is just a suggestion and the States may visit Andhra Pradesh and Telangana to study the monitoring mechanism in greater detail.*

It is suggested that State Government may consult with concern department of State of Telangana and Tamil Nadu to have better understanding on their experience and knowledge in adopting best sand mining enforcement provisions and monitoring practices and frame their own regulatory regime and monitoring framework. The framework of monitoring should essential include online sale & purchase of River Bed Material/ Auction of leases, Sand from rivers and other sources, online monitoring of excavation, storage and transportation of mineral for control of illegal mining.

The respective State Governments shall develop the online Sale & Purchase System after defining the model viz. Under market model or Controlled market prices model. The level of monitoring needs to be defined and guidelines need to be finalized by the respective State Governments as per their requirement with due consideration of suggestive guideline in this document. These all measure will help in curbing illegal mining.

7.0 Recommendations of High Power Committee:

A high power committee (HPC) was constituted by Hon'ble National Green Tribunal to assess the status of illegal mining the stretch of River Yamuna, under the chairmanship of Secretary, Ministry of Environment Forest & Climate Change. The committee after exhaustive field survey and interaction with stakeholders and having surprise visits submitted a comprehensive report on river sand mining along with certain recommendations on enforcement requirements and monitoring essentials. The same is provided in the following section for consideration of monitoring / regulatory authority to adopt applicable provisions in their monitoring framework and also to ensure that the infrastructural requirements recommended by the HPC are put in use at all locations including the lease area.

7.1 Recommendations of High Power Committee (HPC)

The following recommendation of the High Power Committee shall be considered while framing the monitoring mechanism by the State Government.

- i. Project Proponent must ensure that following security features are included in the Transport Permission/Permits (TP) so that duplicate/fraudulent/forged TPs for transport, not accounted for in the IT-based system, is not possible.:
 - (a) Printed on Indian Bank Association (IBA) approved
 - (b) Magnetic Ink Character Recognition Code (MICR) paper;
 - (c) Unique Barcode;
 - (d) Unique Quick Response Code (QR);
 - (e) Fugitive Ink Background;
 - (f) Invisible Ink Mark;
 - (g) Void Pantograph;
 - (h) Watermark.

- ii. Project Proponent must ensure that CCTV camera, Personal Computer (PC) or laptop, Internet Connection, Power Back up, access control of mine lease site; and arrangement for weight or approximation of weight of mined out mineral on basis of volume of the trailer of vehicle used at mine lease site are available.
- iii. The PP has to enter the destination, distance between plot and destination, vehicle number etc in the system. After scanning, unique bar code number, invoice date time and validity date-time are generated by the software which gets printed individually on each TP. Validity of TP is calculated based on the distance between plot and destination. After validity time is over the TP stands invalid.
- iv. The officers involved in monitoring should be provided with mobile application and/or bar code scanners using which the TP can be checked anywhere on road. As soon as the bar or QR code on TP gets scanned through using the mobile application and/or scanner or vehicle number is entered into the application or sent by SMS to a predefined number, all details of TP such as plot details, vehicle details, validity time, etc. should be fetched from the server. This means if anything is re-written on TP and attempt is made to reuse the same, it can be traced immediately. Various reports can be generated using the system showing daily lifting reports and user performance report. This way the vehicles carrying sand can be tracked from source to destination.
- v. The facility to fetch details using mobile app, website and SMS may be made available to the general public as well. However, they shall not be allowed to stop the vehicles to check the transportation. The only option that they should have is to check vehicle numbers of the passing vehicle in the mobile app or SMS for the validity of the pass. The only result that should be available to them should be if the vehicle carrying sand has a

valid permit at the relevant point of time or not. If the citizen finds that the vehicle doesn't have such a permit, as ascertained from mobile app or website or SMS, he should alert local authorities, who shall then take further action as per the law.

- vi. In case, the vehicle break-down, the validity of Transport Permit or Receipt shall be extended by sending SMS by the driver in specific format to report the breakdown of the vehicle. The server will register this information and register the breakdown. The State can also establish a call center, which can register breakdowns of such vehicles and extend the validity period. The subsequent restart of the vehicle also should be similarly reported to the server/call center.
- vii. The route of the vehicle from source to destination shall be tracked through the system using checkpoints, Radio-frequency identification (RFID) tags, and Global Positioning System (GPS) tracking.
- viii. The system shall enable the Authorities to develop a periodic report on different parameters like daily lifting report, vehicle log/ history, lifting against allocation, and total lifting. The system can be used to generate auto mails/SMS. This will enable the District Collector / Magistrate and other authorities to get all the relevant details and will enable the authority to block the scanning facility of any site found to be indulged in irregularity. Whenever any authority intercepts any vehicle transporting illegal sand, it shall get registered on the server and shall be mandatory for the officer to fill in the report on action taken. Every intercepted vehicle should be tracked.
- ix. It is necessary to prevent any truck/vehicle from transporting sand out of the identified plot bypassing the strong IT enabled system. Therefore, at each of the sand plot, the following additional measures should be taken.

- (a) There shall be one entry and exit point provided for trucks/vehicles. The said entry point should have facilities as mentioned above. In case, it is necessary to have more than one entry/exit points, all such points shall have checkpoints with facilities as mentioned above. All other possible ways of entry/exit should be closed using barriers like compound, trench, etc. All provisions shall be made to not make it possible for any vehicle to enter or exit without entry into the computerized system.
- (b) All such points should have 24X7 CCTV coverage, the footage of which should be made available online to the district administration. In cases, where sufficient internet bandwidth is not available, it may be deposited with the district administration on a weekly basis. If possible, the entry/exit points should have boom barriers which will record the vehicles entering and exiting the plot.

8.0 GENERAL APPROACH TO SUSTAINABLE SAND MINING

8.1 Pre-requisite for starting sand mining operation

- i)** All district to prepare a comprehensive mining plan for the district as per the provision of District Survey Report. These reports shall be put on the website of District Administration. No mining shall be allowed in the area which has not been identified in the comprehensive mining plan of the District.
- ii)** Replenishment study should be conducted on regular basis.
- iii)** All potential rivers mining zone/area shall be identified and put for auction with proper geo-tagged details by the auctioning authority concerned.
- iv)** The latitude and longitude of each mining lease shall be clearly mentioned in Letter of Intent issued to the potential mine lease. Such information shall be provided on the website of the district administration.
- v)** The provision of these guidelines shall be considered while identifying the potential stretches /locations and boundaries of the leases for the minable area.
- vi)** The Lol holder shall seek Environmental Clearance as per the provision of EIA Notification, and the regulatory authority shall ensure that the provision suggested in "Sustainable Sand Mining & Management 2016" and in this documents, as applicable are part of the clearance conditions.
- vii)** There shall be no river bed mining operation allowed in monsoon

period. The period as defined by IMD Nagpur for each state shall be adhered with.

- viii) The monitoring infrastructures including weighbridge and adequate fencing of the lease area, CCTV, Transport permits, etc, as suggested in this document shall be ensured in order to reduce unrecorded dispatch.
- ix) Regular monitoring of mined minerals and its transportation and storage shall be ensured and all information shall be captured at centralized database so that easy tracking of illegal material can be done.
- x) Annual audit of each mining lease shall be carried out wherein three independent member of repute, nominated by District administration shall also participate.

8.2 Mining of Sand from Agricultural Fields

This practice is prevalent in Haryana; to ensure that mining from outside doesn't affect rivers, no mining is permitted in an area up to a width of 100 meters from the active edge of embankments or distance prescribed by Irrigation department whichever is critical. The top layer of soil varying between 1 and 2 meters is removed and stacked separately and thereafter the sand deposit which maybe 10-15 meter deep is mined. After removing the sand layer up to a maximum depth of 09 meters or the maximum mineable minerals, as permitted by competent authority. The topsoil stacked is spread out on the field and the same is brought under the cultivation. Though the level of this land (mined out area) is lowered to the depth of the excavation and in initial years of cultivation the productivity is low, but the productivity of the fields improves with continued cultivation and addition of organic manure in the field. In Haryana, some leases are of large area

(ranging from 1000 hectare to 2000 hectare) and agricultural fields and river bed both are included in the same lease for mining.

The following recommendations should be kept in mind for mining in such leases:

1. Mining of sand in such mine leases will require environment clearance.
2. The lease should be of sand mining either from the agricultural field or river. In the same lease, both types of area should not be included.
3. The sand mining from the agricultural field is being done in Haryana for a long time and it can be done in a more sustainable manner without adverse impact on agricultural productivity if proper environmental safeguards are taken.
4. The slope of mining area adjacent to agricultural fields should be proper (preferably 45 degree) and adequate gap (minimum 10 feet) be left from adjacent agricultural field to avoid erosion and scouring.

The provision for sand mining in agricultural field may be permitted, whenever replenishment of sand occurs due to natural phenomena.

Permission may also be granted by competent authority (District administration) for excavation of sand/Soil from agricultural fields, after due diligence of this prevailing condition in order to avoid any unacceptable impact on the environment and nearby livelihood from agriculture provided such objective of such excavation mining of Soil/Sand in limited increase the productivity of sand agricultural field.

9.0 MONITORING MECHANISM

9.1 Illegal Mining

The Hon'ble Supreme Court in its Judgment dated 2.08.2017 in W.P 114 of 2014 in the matter of Common Cause Vs Union of India & Ors, inter-alia passed the following:

Para 128. *The simple reason for not accepting this interpretation is that Rule 2(ii-a) of the MCR was inserted by a notification dated 26th July 2012 while we are concerned with an earlier period. That apart, as mentioned above, the holder of a mining lease is required to adhere to the terms of the mining scheme, the mining plan and the mining lease as well as the statutes such as the EPA, the FCA, the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981. If any mining operation is conducted in violation of any of these requirements, then that mining operation is illegal or unlawful. Any extraction of a mineral through an illegal or unlawful mining operation would become illegally or unlawfully extracted mineral."*

In view of above Judgement, any mining activities which are not governed under the provision of Environment (Protection) Act, 1985, The Water (Prevention & Control of Pollution Act, 1974, The Air (Prevention & Control of Pollution) Act, 1981, Forest Conservation Act-1980, Wildlife Protection Act - 1972, shall be considered as illegal mining within the provision of section 21(5) of Mines and Minerals (Development & Regulation) Act, 1957 (MMDR Act) and the concerned authority shall take necessary action within the provision of MMDR Act.

As per the provision of 23(C) of MMDR Act, the State Government is empowered to make rules for preventing illegal mining, and transportation

& storage of Illegal minerals. All such mining which qualifies under illegal, shall be dealt with in the provision of MMDR Act by the concern authorities.

State Pollution Control Board (SPCB) is the nodal authority in the State for dealing with cases related to pollution or environment management coming under the purview of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981 and the Environment Protection Act 1986. SPCB shall initiate appropriate action under the provision of these acts for non-compliance or violation of the provisions.

9.2 Environmental Damage due to illegal mining

The environmental damages incurred or resulting due to illegal mining shall be assessed by a committee constituted by District Administration having expertise from relevant fields, and also having independent representation of locals and State Pollution Control Board. Guidelines for assessment of ecological damages prescribed by the State Government or Concerned Pollution Control Boards or any other authority shall be applicable and compensation as fixed shall be paid by the project proponent, in light of Hon'ble National Green Tribunal orders.

9.3 Monitoring of Mining near Inter-district or inter-state boundary

There are situations where bifurcated river becomes district boundaries or state boundaries in such situation it is difficult to assess the mining potential, or to have close monitoring and enforcement of the regulatory provision. Such challenges have been identified and dealt with in SSMG-2016. However, in the absence of any standardized procedure, the monitoring has not been effectively practiced. This has been highlighted by the High Power Committee constituted by NGT in the matter pertaining to illegal mining.

The districts/state sharing the boundary shall constitute the combined task force for monitoring of mined materials, mining activity and also should actively participate in the preparation of DSR by providing appropriate inputs. In such cases, the draft DSR so prepared shall be put up for public consultation in both the districts through respective district administration website.

The task force shall meet every quarter to reconcile the data collected during the period and identify any gap/ lapses based on the outcome of such meeting. The respective district shall take action/ corrective measures. Effort shall be made for real-time data sharing between both the district.

The task –force shall include essentially the representative of respective districts from the mining department, transport department, regional office of SPCB concerned and a reputed citizen nominated by district administration. The Taskforce shall be headed by officer not less than ADM rank and quarterly outcome shall be submitted to District administration.

In addition to the above, there is a need for strict surveillance, particularly at night. The State of Gujarat has already initiated a program called '*Trinetra*' for night surveillance by using night-vision drones to control illegal mining incidents. This program is giving satisfactory results. Such type of system may also be developed by each State within a reasonable time.

A typical standard operating procedure for assessing illegal mining by the committee constituted shall, but not limited to, include the steps given in the following table. However, the process of assessing can be modified based on site-specific conditions and any deviation shall be recorded in the report with proper justification.

Suggestive standard Practice for assessing illegal mining

Step 1	The assessment team should collect the information and documents prescribed in the Pre-Requisite section.
Step 2	The assessment team should verify the applicability/validity of statutes under EPA-1986, Air and Water Act, MMDR 1957, State Mines and Mineral Rules, etc.
Step 3	Field visit should be conducted for identification of mining lease area (in hectare) and boundary pillar constructed to indicate the same.
Step 4	With the help of GPS instrument, the team should assess the area where any extraction or mining have been carried out on the day of visit and calculate the mined-out area in a hectare.
Step 5	If available, the team may avail the use of latest satellite images for calculating the total mined out area.
Step 6	The team should verify the Ground / Surface Level (in meter above MSL) of at least 04 highest points in or around the area where mining has been done. The Ground/surface level will then be computed based on averaging of 04 highest points verified by the team.
Step 7	With the help of Depth Measurement kit or any depth measuring instruments, the depth should be measured for at least 04 points in the mined-out area. For computing, the depth, averaging of the value obtained at 04 points should be done.
Step 8	Verification of compliance conditions of Environmental Clearance and Consent to operate, mining methodology under Mining Plan
Step 9	Identification of vulnerable impacts observed on the field and non-compliance of conditions of Environmental Clearance and Consent to Operate.

Step 10	Field Survey for identification, monitoring and verification of ecological species based on the information available and documents mentioned in the Pre-requisite section.
Step 11	Preparation of inventory of machinery used/observed on the field (optional)
Step 12	Preparation of inventory of hydraulic structures observed on the field (optional)
Step 13	Water sampling for assessment of water quality including physical and biological parameters. (optional)
Step 14	Reconciliation collation of data/information and compilation to maintain violation.
Step 15	Identification of restoration plan and computation of cost of the restoration plan.

9.4 Monitoring Mechanism

A uniform monitoring mechanism is required to assess the regulatory provision in quantitative terms, with robust institutional and legal framework. Based on past experience and suggestions available, the following requirements are suggested for defining a mechanism for monitoring of mining activities which will help in identification of mining which is operating either illegally or are violating the regulatory provisions. Some suggestion will facilitate direct or indirect information to help in such an assessment.

1. All precaution shall be taken to ensure that the water stream flows unhindered and process of Natural river meandering doesn't get affected due to mining activity.
2. River mining from outside shall not affect rivers, no mining shall be permitted in an area up to a width of 100 meters from the active edge of embankments or distance prescribed by the Irrigation department.

3. The mining from the area outside river bed shall be permitted subject to the condition that a safety margin of two meters (2 m) shall be maintained above the groundwater table while undertaking mining and no mining operation shall be permissible below this level unless specific permission is obtained from the Competent Authority. Further, the mining should not exceed nine-meter (9 m) at any point in time.
4. Survey shall be carried out for identifying the stretches having habitation of freshwater turtles or turtle nesting zones. Similarly, stretches shall be identified for other species of significant importance to the river ecosystem. Such stretch with adequate buffer distance shall be declared as no-mining zone and no mining shall be permitted. The regulatory authority as defined for granting Environmental Clearance, while considering the application of issuance of ToR and/or EC for the adjacent block (to non-mining zone) of mining shall take due precaution and impose requisite conditions to safeguard the interest of such species of importance.
5. District administration shall provide detailed information on its website about the sand mines in its district for public information, with an objective to extend all information in public domain so that the citizens are aware of the mining activities and can also report to the district administration on any deviation observed. Appropriate feedback and its redressal mechanism shall also be made operational. The details shall include, but not limited to, lease area, geo-coordinates of lease area and mineable area, transport routes, permitted capacity, regulatory conditions for operation including mining, environmental and social commitments etc.

6. A website needs to be maintain to track the movement of centralised sand mining and a Centralised server system should be made to manage the data related to sand mining across India.
7. The mineral concession holders shall maintain electronic weighbridges at the appropriate location identified by the district mining officer, in order to ensure that all mined minerals from that particular mine are accounted for before the material is dispatched from the mine. The weighing bridge shall have the provision of CCTV camera and all dispatch from the mine shall be accounted for.
8. The mineral movement shall be monitored and controlled through the use of transit permit with security features like printing on IBA approved MICR papers, Unique bar/QR, fugitive ink background, invisible ink mark, void pantographs and watermarks papers or through use of RFID tagged transit permits and IT /IT-enabled services. Such monitoring system shall be created and made operationalised by State Mining department and district level mining officer shall be responsible for ensuring that all legal and operational mines are connected and providing the requisite information on the system. Regular check and associated report shall be submitted to DLTF and uploaded on the website.
9. State Government shall constitute a District Level Task Force (DLTF) under the Chairmanship of Deputy Commissioner/District Magistrate/Collector with Superintendents of Police and other related senior functionaries (District Forest Officer, District transport officer, Regional officer- SPCBs, Senior Officer of Irrigation Department, District Mining Officer) with one/two independent member nominated by the Commissioner concerned. The independent member shall be retired government officials/teacher or ex-serviceman or ex-judiciary member.

The DLTF shall keep regular watch over the mining activities and movement of minerals in the district. The DLTF shall have its regular meeting, preferably every month to reconcile the information from the mining activity, and other observations made during the month and take appropriate corrective and remedial action, which may include a recommendation for revoking mining lease or environmental clearance. The DLTF may constitute an independent committee of the expert to assess the environmental or ecological damage caused due to illegal mining and recommend recovery of environmental compensation from the miner's concern. The recommendation may also include action under the provision of E(P) Act, 1986.

10. The area not identified for mining due to restriction or otherwise are also to be monitored on a regular basis by the DLTF. Any observations of mining activity from the restricted area shall be reported and corrective measures shall be initiated on an urgent basis by the DLTF.
11. The dispatch routes shall be defined in the Environmental Clearance and shall be avoided through densely habituated area and the increase in the number of vehicle movement on the road shall be in agreement with the IRC guidelines / carrying capacity of the road. The alternate and dedicated route shall be explored and preferred for movement of mining to avoid inconvenience to the local habitat. The mining production capacity, by volume/weight, shall be governed by total permissible dispatch calculated based on the carrying capacity of dispatch link roads and accordingly, the production should be regulated.
12. The movement of minerals shall be reconciled with the data collected from the mines and various Naka/check posts. Other measures may also include a general survey of the potential mineable area in the district

which has not been leased/auctioned or permitted for mining due to regulatory or other reasons.

13. The location and number of check post requirement shall be reviewed by DLTF on a regular basis so that appropriate changes in location/number could be made as per the requirement. Such review shall be carried out on a regular basis for the district on inter-state boundary or district providing multiple passages between two districts of different states.
14. The district administration shall compile the information from their district of the permitted and legal mined out minerals and other details and share such information and intelligence with the officials of the adjoining district (Inter or/and Intra State) for reconciliation. The information shall include the area of operation, permissible quantity, mined out minerals (production) the permitted route etc., and other observations, especially where the mine lease boundary is congruent with the district boundary. Such coordination meeting shall be held on a quarterly basis, alternatively in two district headquarters or any other site in two districts decided mutually by the District Magistrate.
15. The mining department shall include submission of an annual environmental audit report as one of the conditions in the mining lease agreement. The annual audit for each river bed mining lease shall be carried out and the audit report shall be uploaded on the website of district administration. The audit shall be carried out by an independent team of 3 members nominated by District Collector/Magistrate/Commissioner comprising of Ex-Serviceman, Ex-Government officials of repute, Professor or Person having experience of mining/environment. The guidelines and method of the audit shall reflect adequately the monitor-able parameters and output and reflect

the compliance status with respect to the conditions imposed by the regulatory authorities including conditions of Environmental clearance.

16. The in-situ and ex-situ environmental mitigative measures stipulated as EMP, CER, CSR and other environmental and safety conditions in mines including the welfare of labours shall properly reflect in the audit report.

9.5 Suggestive additional requirements are

i. The requirement at the Mine Lease Site:

- a. Small Size Plot (Up to 5 hectares): Android Based Smart Phone.
- b. Large Size Plots (More than 5 hectares): CCTV camera, Personal Computer (PC), Internet Connection, Power Back up.
- c. Access control of mine lease site.
- d. Arrangement for weight or approximation of the weight of mined out mineral on the basis of the volume of the trailer of vehicle used.

ii. Scanning of Transport Permit or Receipt and Uploading on Server:

- a. Website: Scanning of receipt on mining site can be done through barcode scanner and computer using the software;
- b. Android Application: Scanning on mining site can be done using Android Application using a smartphone. It will require internet availability on SIM card;
- c. SMS: Transport Permit or Receipt shall be uploaded on the server even by sending SMS through mobile. Once Transport Permit or Receipt get uploaded, a unique invoice code gets generated with its validity period.

iii. Proposed working of the system:

The State Mining Department should print the Transport Permit or Receipt with security features and issue them to the mining leaseholder through the District Collector. Once these Transport Permits or Receipts are issued, they would be uploaded on the server against that mine lease area. Each receipt should be preferable with pre-fixed quantity, so the total quantity gets determined for the receipts issued. When the

Transport Permit or Receipt barcode gets scanned and invoice is generated, that particular barcode gets used and its validity time is recorded on the server. So all the details of transporting of mined out material can be captured on the server and the Transport Permit or Receipt cannot be reused.

iv. Checking On Route:

The staff deployed for the purpose of checking of vehicles carrying mined mineral should be in a position to check the validity of Transport Permit or Receipt by scanning them using the website, Android Application and SMS.

v. Breakdown of Vehicle:

In case the vehicle break-down, the validity of Transport Permit or Receipt shall be extended by sending SMS by the driver in specific format to report the breakdown of the vehicle. The server will register this information and register the breakdown. The State can also establish a call center, which can register breakdowns of such vehicles and extend the validity period. The subsequent restart of the vehicle also should be similarly reported to the server or call center.

vi. Tracking of Vehicles:

The route of the vehicle from source to destination can be tracked through the system using checkpoints, RFID Tags, and GPS tracking.

vii. Alerts or Report Generation and Action Review:

The system will enable the authorities to develop a periodic report on different parameters like daily lifting report, vehicle log or history, lifting against allocation, and total lifting. The system can be used to generate auto mails or SMS. This will enable the District Collector or District Magistrate to get all the relevant details and shall enable the authority to block the scanning facility of any site found to be indulged in irregularity. Whenever any authority intercepts any vehicle transporting illegal sand, it shall get registered on the server and shall be mandatory for the officer to fill in the report on action taken. Every intercepted vehicle shall be tracked.

The monitoring of mined out mineral, environmental clearance conditions and enforcement of Environment Management Plan will be ensured by the regulatory authority and the State Pollution Control Board or Committee. The monitoring arrangements envisaged above shall be put in place. The monitoring of enforcement of environmental clearance conditions shall be done by the Central Pollution Control Board, Ministry of Environment, Forest and Climate Change and the agency nominated by the Ministry for the purpose.

Some of the State has followed the SSMMG-2016 and has also improvised or customized on the provisions given therein, and are successfully in operation. Salient provision adopted at different stages of sand mining in the state of Tamil Nadu is given as **Annexure VIII**.

9.6 Actions against illegal excavation and transport

Solapur district administration in Maharashtra had adopted a multi-pronged strategy to penalize the persons involved in illegal excavation and transport which resulted in a significant increase in revenue earned by the state. Following rules and procedures as mentioned in these guidelines will add to the costs of PP. Those involved in illegal activities are not required to bear these costs and this will make their supply in the market cheaper (though illegal). This will put the players running their business by following rules and procedures laid down by the government to disadvantage as far as the selling price is considered. Therefore, it is necessary to come down heavily on those involved in illegal excavation/transport, so that there is no incentive for players to abide by the rules.

The following action may be taken to achieve this deterrence against illegal business:

1. The action should be taken under all legal options available simultaneously. Thus, after identifying the case of illegal excavation, storage and/or transport of minor minerals (including sand), fine should be levied as per the land revenue laws/code(s) of the state. In addition, FIR should be lodged in the police station under relevant sections of law including sec 379 IPC. In addition, action under the Motor Vehicle Act, 1989 and relevant rules should initiate to cancel/suspend the driving license of the driver and permit of the vehicle. Further, action should be initiated under provisions in the Income Tax Act, 1961 for unaccounted income and under the Central Goods and Services Act, 2017 for non-payment of GST. (Earlier this was done under the state act pertaining to Value Added Tax/Sales Tax). Habitual offenders should also be taken up under local state laws for externment and/or preventive action. It is clarified that as per law, it is possible to take all actions under various laws

simultaneously for one offence. What is prohibited in law is an action under the same law for the same act more than once.

2. The action should be taken against all persons responsible. Often, there is a tendency to penalize only the drivers of the vehicles. The mafia of illegal mining and transport is much bigger and drivers are only one part of the system. It is necessary to identify all those involved in the offence. It is usually not possible to reach the place of excavation without creating a motorable pathway up to the same through land which may be private land. Such role of such landowners needs to be looked into for each offence and proceeded against simultaneously. Further, the role of vehicle owners needs to be probed. Role of the person who allowed his land to be used for illegal excavation and storage should also be examined. Lastly, the person who purchases such sand should also be probed. The legal proceedings stated above needs to be initiated against all of these together. An attempt should be made to fix the financial responsibility in joint and several ways so that recovery is easier.
3. There may be discretion available in law about the extent of the penalty to be levied. If such discretion is very wide, then it is advisable that guidelines may be laid down to reduce such discretion in law for levying penalties. For example, in Maharashtra, Land Revenue Code, fine of any amount of penalty up to thrice the value of the sand can be levied. Solapur district administration had instructed Tahsildars and SDMs not to use discretion and levy the fine of three times the value. Availability of discretion makes junior level functionaries susceptible to pressures and it may also lead to corrupt practices.
4. It is emphasized that actions, as stated above, are most important to ensure that the IT-based system works. If these exemplary actions are not taken against everyone, it shall create a strong disincentive to those

involved in legal excavation and transportation. For IT-based (or any other) legal system to work, it is necessary to ensure that illegal system stops working altogether.

Annexure-I**Details of Sand/M-Sand Sources****a) Rivers:**

River Name/M-Sand Plant	Total Stretch of River (in KM)	Type of River (Perennial or Non-Perennial)

b) De-Siltation Location: (Lakes/Ponds/Dams etc.)

Name of Reservoir/Dams	Maintain/Controlled by State Govt./PSU etc.	Location	District	Tehsil	Village	Size(Ha)

c) Patta Lands/Khatedari Land:

Owner	Sy. No	Area (Ha)	District	Tehsil	Village	Agricultural Land (Yes/No)

d) M-Sand Plants:

Plant Name	Owner	District	Tehsil	Village	Geo-location	Quantity Tonnes/Annum

Note: For inclusion of M-Sand Plant/Patta Land in DSR the plant/landowners need to submit the request to the Mining Department with complete details. Inclusion in DSR does not give them the right to operate the M-Sand Plant/Sand Mining lease.

Annexure-II**List of Potential Mining Leases (existing & proposed)****Rivers**

River Details	Lease Details	Area (in Ha)	Distance (in KM) from PA/BR/WC/	Distance from Forest Area (in KM)	Mining leases within 500 meters (if yes cluster area)	Total excavation in Tonnes /Annum considering digging depth max as 3 meters	Mineral to be mined (Sand/ Bajri/ RBM etc.)	Existing / Proposed

Patta Lands/Khatedari Land: (existing & proposed)

Owner	Sy. No	Area	District	Tehsil	Village	Total Reserve (MT)	Total Mineral to be mined (MT)	Existing /Proposed

De-Siltation Location: (Lakes/Ponds/Dams etc.) (Existing & proposed)

Name of Reservoir /Dams	Maintain /Controlled by State Govt./PSU etc.	Location	District	Tehsil	Village	Size (Ha)	Quantity MT / Year	Existing /Proposed

M-Sand Plants :(existing & proposed)

Plant Name	Owner	District	Tehsil	Village	Geo-location	Quantity Tonnes/Annum	Existing/Proposed

Annexure-III**Cluster & Contiguous Cluster details****Clusters:**

River Name	Cluster No.	Lease No	Location (Riverbed / Patta Land)	Village	Area (in Ha)	Total Excavation (Ton)	Total Mineral Excavation (Ton)

Contiguous Clusters:

River Name	Contiguous Cluster No.	Cluster No	Number of leases in the cluster	Location (Riverbed / Patta Land)	Distance between clusters	Village	Area of Cluster (Ha)	Total Mineral Excavation (Ton)

Annexure-IV**Transportation Routes for individual leases and leases in Cluster**

Lease No	Transportation Route No	Number of tipper s /day of lease	Number of tipper s /day of all the lease on route	Length of Route in KM	Type of Road (Black Topped/ unpaved)	Recommendation for road (Black Topped/ unpaved)	The road will be Constructed by Govt/ Lease Owner	Route Map & Location

Cluster No	Transportation Route No	Number of tipper s /day of cluster	Number of tipper s /day of all the clusters on route	Length of Route in KM	Type of Road (Black Topped/ unpaved)	Recommendation for road (Black Topped/ unpaved)	The road will be Constructed by Govt/ Lease Owner	Route Map & Location

Annexure-V**Final List of Potential Mining Leases (existing & proposed)****Rivers**

River Details	Lease Details	Area (in Ha)	Distance (in KM) from PA/BR/WC/	Distance from Forest Area (in KM)	Mining leases within 500 meters (if yes cluster area)	Total excavation in (MT/Yr) (Mine depth max as 3 m)	Mineral to be mined (Sand/Bajri/RBM etc.)	Existing /Proposed

Patta Lands/Khatedari Land: (existing & proposed)

Owner	Sy. No	Area	District	Tehsil	Village	Total Reserve (MT)	Total Mineral to be mined (MT)	Existing /Proposed

De-Siltation Location: (Lakes/Ponds/Dams etc.) (Existing & proposed)

Name of Reservoir/ Dams	Maintain/ Controlled by State Govt./PSU etc.	Location	Distt.	Tehsil	Village	Size(Ha)	Quantity MT/Year	Existing/ Proposed

M-Sand Plants :(existing & proposed)

Plant Name	Owner	District	Tehsil	Village	Geo-location	Quantity MT/Annum	Existing/Proposed

Annexure-VI**Final List of Cluster & Contiguous Cluster****Clusters:**

River Name	Cluster No.	Lease No	Location (Riverbed / Patta Land)	Village	Area (in Ha)	Total Excavation (Ton)	Total Mineral Excavation (Ton)

Contiguous Clusters:

River Name	Contiguous Cluster No.	Cluster No	Number of leases in the cluster	Location (Riverbed /Patta Land)	Distance between clusters	Village	Area of Cluster (in Ha)	Total Mineral Excavation (Ton)

Annexure-VII**Final Transportation Routes for individual leases and leases in Cluster**

Lease No	Transportation Route No	Number of tippers /day of lease	Number of tippers /day of all the lease on route	Length of Route in KM	Type of Road (Black Topped/unpaved)	Recommendation for road(Black Topped/unpaved)	The road will be Constructed by Govt/Lease Owner	Route Map & Location

Cluster No	Transportation Route No	Number of tippers /day of cluster	Number of tippers /day of all the clusters on route	Length of Route in KM	Type of Road (Black Topped/unpaved)	Recommendation for road(Black Topped/unpaved)	The road will be Constructed by Govt/Lease Owner	Route Map & Location

Annexure VIII**Salient provision for sand mining in the state of Tamil Nadu****STEPS TO BE FOLLOWED BEFORE EXECUTION:**

- The state as a policy should endeavor to have single authority/agency responsible for all river sand mining in the state with an objective to ease the gap in demand and supply and accordingly, take necessary measures including planning, monitoring of mined material and its transport, and to curb illegal mining and sale of materials.
- The prospective site for sand quarry may be identified based on the availability of adequate sand deposits along the river beds, which hinders the free flow of water and results in flooding during monsoon seasons. Emphasis may be given to such quarry sites which is more viable for replenishment.
- A detailed study may be conducted by engaging expert from reputed Institutions to identify prospective sand reaches, assessment of the impact of sand quarrying on the Ground Water Table and water availability, conduct bore log details and study the social and environmental aspects. The generic requirement for replenishment study is to be followed.
- Once the site is identified for prospective sand quarry site based on the detailed replenishment study, the concerned department shall submit the proposal with the geo-tagged boundary of the proposed mining Precise Area Proposal to the District Collector for approval.
- A joint inspection may be carried out by the RDO/Sub-Collector, Assistant/Deputy Director,

- Executive Engineer, TWAD Board and the PWD officials to consider the various factors before giving consent to the proposal.
- The RDO concerned along with Revenue officials may verify the revenue records of the proposed sand quarrying area and give the NOC.
- The AD/DD Mines may verify the presence of permanent structures such as tower line, bridge, monuments if any, in the vicinity of the proposed mining site as per Tamil Nadu Minor Mineral Concession Rules, 1959 (As per Rule 36 " there shall be no quarrying of sand in any river bed or adjoining area or any other area which is located within 500 meter radial distance from the location of any bridge, water supply system, infiltration well or pumping installation of any of the local bodies or Central or State Government Department or the Tamil Nadu Water Supply and Drainage Board head works or any area identified for locating water supply schemes by any of the above mentioned Government Department or other bodies" and " The distance of 50 meter shall be measured in the case of railway, reservoir or canal horizontally from the outer toe of the bank or the outer edge of the cutting, as the case may be "). Also, the availability of minerals may be cross verified with the available DSR.
- The TWAD officials may verify the drinking water schemes located nearby the proposed quarry site and the minimum distance required as per statutory norms.
- Based on the feasibility report of the joint inspection by the Revenue, Tamil Nadu Water Supply and Drainage Board and Mining officials/experts, the District Collector may give consent for the Precise Area proposal.

- After getting Precise Area approval, a detailed Mining Plan and sketch shall be prepared by the Executive Engineer, PWD using the services of a NABET accredited consultant who holds the pivotal role in the preparation of mining plan. Due responsibility will be expected on the concerned consultant in the mining plan preparation taking care of adhering to all mining rules, existing as on date. The mining plan shall contain the details of quantity to be excavated, the period of mining, method of excavation, deployment of required machinery, Environment Management Plan (EMP), proposed number of laborers to be deployed and Conceptual Mining Plan, as per Rule 41 of TNMMC Rules 1959. It is also the duty of the consultant to give the safe distance of 50 m or twice the bank height from the toe of the riverbank, whichever is higher and fixing the Geo coordinates for boundaries using DGPS instruments.
- The concerned Executive Engineer, PWD shall submit the Mining Plan prepared by the NABET accredited consultant to the concerned Assistant/Deputy Director, Department of Geology and Mines for approval, as per Rule 42 of TNMMC 1959. After scrutiny, the Assistant/Deputy Director, Department of Geology will present the Mining plan before the State Level Environment Impact Assessment Authority (SEIAA) for granting Environmental Clearance.
- The Executive Engineer, PWD shall prepare Form I and Pre-feasibility report with the help of the consultant and submit to SEIAA for an area less than 50 Ha. or to the Ministry of Environment and Forest and Climate Change (MoEF&CC) for the area more than 50 Ha.
- The State Expert Appraisal Committee (SEAC) under SEIAA, consisting of experts from renowned fields such as Mines, Environment, Sociology etc. shall conduct a site inspection of the proposed sand quarry site and after intense scrutiny, may recommend the proposal to SEIAA for approval.

- SEIAA shall grant Environmental Clearance for the sand quarry proposal after analyzing all the statutory provisions and based on the recommendation of the SEAC.
- The Environmental Clearance shall be informed to the public with basic details through advertisement in at least two widely circulated local newspapers with at least one in the vernacular language of the locality, within 7 days of the receipt of the clearance.
- On receipt of the Environmental Clearance, the Executive Engineer, PWD shall apply for Consent to Establish (CTE), from the Tamil Nadu Pollution Control Board as per the Air and Water Act, to enter upon the sand quarry site and commence the preliminary works such as construction of temporary sheds, bio-toilets, formation of biodegradable road using sugar cane leaves etc., drilling of bore wells etc. as per the statutory requirements. After all the preliminary works are completed, the Executive Engineer, PWD shall apply for the Consent to Operate (CTO) from the Tamil Nadu Pollution Control Board. Earmarking boundary of the identified land site through the concrete posts along with red flags need to be established.
- On receipt of the CTO, the Executive Engineer, PWD shall request the consent of the District Collector to commence the quarries. The District Collector shall request the Taluk Level Task Force comprising of Tahsildar, Inspector of Police, Officials from the Departments of Geology and Mining, Transport and Forest, Assistant Engineer, PWD and the Village Administrative Officer concerned, to verify the compliance of all preconditions mentioned in the Environmental Clearance and grant necessary permission to start the functioning of new sand quarries.

II. STEPS TO BE FOLLOWED DURING EXECUTION:

- Before the commencement of mining operations, the depth of sand quarrying needs to be measured accurately using Advanced technology and new gadgets like Total Stations, Global Positioning System (GPS) instruments etc. The Total Station and GPS instruments also need to be calibrated before measurement. Both the traditional and modern techniques may be infused in the right blend to get an accurate measure of the depth. A clear contour map (0.25m interval) of the levels within 2Km (one Km U/s and one Km D/s) needs to be prepared and submitted to both the Project Director, Sand Quarrying Operations and all the Monitoring Committee members. The depth of sand quarrying shall be restricted to 1 m from the theoretical/design bed level.
- The mining area must be demarcated at a minimum distance of at least 50 m away from the river embankment on either side. The boundaries of the quarries may be fixed with reference to the existing survey marks from the survey fields adjacent to the river. Sand quarrying lease area shall be demarcated on the ground with pucca stone or concrete pillars to show the present natural bed level and the depth of mining allowed.
- Modern techniques such as drone survey may be adopted to assess the depth and quantity of the mined area. Boundary pillars shall be erected at an interval of 50 m each on all four sides of the sand quarry site with red flags on every pillar and also in site pillars. The levels of shoal height, river bed height and depth to be excavated up to one meter downwards shall be marked in the pillars to avoid any deviation from the approved depth of excavation.
- It shall be ensured that no sand quarrying of any type is undertaken within 50m of the distance mentioned in the proposal (whichever is higher)

from both the banks of the river to control and avoid erosion of river banks.

- Temporary access roads or Katcha roads shall be formed between the banks of the river and the mining area with locally available bio-degradable materials such as sugarcane waste (bagasse), hay, etc.
- Proper entry and exit point for the movement of loading vehicles in and out of the sand quarry site shall be carefully located taking into consideration the habitations/settlements in the area.
- To monitor the groundwater level during sand quarrying operations, a network of existing wells may be established around the sand quarrying area and new piezometers must be installed at all sand quarry sites. Monitoring of Ground Water Quality in the vicinity (one Km radius from the sand quarrying site) shall be carried out once in two months.
- Periodic Monitoring (at least four times in a year – pre-monsoon, Monsoon, Post monsoon and winter) once in each season shall be carried out by PWD and the data thus collected may be sent regularly to SEIAA/TNPCB. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity; necessary corrective measures shall be carried out, which includes immediate stopping of mining.
- Similar to the Baseline studies for data on water, soil and air etc., that is being done before the sand quarrying operations, the air and water quality may be checked periodically by Tamil Nadu Pollution Control Board to ensure that no pollution is caused due to Sand Quarrying Operations. 10. Safety gadgets such as earplugs, goggles, respiratory

devices, luminescent vests etc. may be provided to the workers at the sand quarry site.

- First aid kit with all essentials shall be kept ready at all quarry/depot site, in case of any emergency.
- To prevent air pollution due to the dust during sand quarrying operations and safeguard the persons in the sand quarry and depot site, constant water sprinkling on the pathways and dust prone areas may be done. The sand loaded vehicles are to be covered with a tarpaulin before moving out of the quarries/depots.
- Suitable depots shall be located in the vicinity of the sand quarry site to facilitate the sale of sand. While selecting the site for depots, it must be ensured that the site is within 25 km from the sand quarry site and has an area of around 10-15 Acres with parking facilities and proper entry and exit for smooth movement of the vehicles. The depot site shall preferably be a Government poramboke land, foreshore area of tank bund etc., near an NH/SH/MDR/ODR. In the absence of any Government land in the vicinity, private Patta land may be leased out and rent fixed as per the approved Government rates applicable therein.
- Permission must be obtained from the Electricity Board for power supply to operate the CCTV cameras at sand quarry site and depots.
- Minimum of two CCTV cameras, one each at the entry and exit point and one PTZ camera may be installed at all quarries/depots to monitor illegality if any taking place in the sand quarry/depot.
- To ensure uninterrupted seamless live streaming of videos from the surveillance cameras, a high-speed Internet Lease Line connection may

be made available at all quarries/depots. Arrangements may also be made for online monitoring of the sand quarrying, Centre for Assessing Real-Time Sand Mining (CARS) that could be located at the office of the Project Director in Chennai.

- The live streaming of the videos shall be monitored at a Centralised control room and the data shall be stored in the Server for future references. A robust Customer Care may also be functional 24 x 7 at the Control Room, to redress the grievance of the public.
- Drop gates shall be installed at the entry and exit points of all quarries/depots.
- Display boards shall be erected in local vernacular language at sand quarry/depot site, in the nearest village by which sand transportation will be carried and at the entrance of the village road from the main road.
- The concerned authority of PWD shall call for e-tender to select the contractors for loading/raising of sand at the quarry site, transporting contractors to transport sand from the quarry site to depots and loading/maintenance contractors at depots.
- Sand shall be loaded in the quarries in the PWD tendered GPS fitted vehicles and online transmit permit shall be issued by the competent authorities in PWD to the transporting vehicles to transport sand from the quarry to depots.
- On the arrival of the sand shunting vehicles from quarry to the depot, an online authentication shall be done to confirm the arrival of the

appropriate quantity of sand mentioned in the transport permit into the depot.

- The loading of sand from the depots shall be carried out by booking through the online portal "www.tnsand.in" as done presently. Online transit passes will also be issued to the loaded vehicles which could be verified by using an Android app "TNSand Investigator".
- During operation of the quarries, the PWD officers shall ensure that at no point in time, the depth of quarry exceeds 1 m depth from the river bed level and quarrying is done in a uniform manner over the entire mining area to avoid overexploitation and formation of pits at fixed places.
- Proper registers may be maintained at the entry and exit points of the sand quarry/depot sites and a Loading Register may be made available during inspection. An Inspection Register and a Complaint Register may be made available at the sand quarry/depot site.
- The functioning time of quarries/depots shall be from 7.00 AM to 6.00 PM. No sand transporting vehicles to be parked inside the quarry/depot site during night time.
- A copy of the approved mining plan may be kept at the quarry site for ready reference.
- Photographs and sketch showing the pit dimensions, depth etc. may be recorded every week and maintained in the sand quarry. The Executive Engineer, PWD may inspect each sand quarry on a weekly basis and ensure that mining activities are taking place within the approved boundaries/depth.

- The sand quarrying activity shall be stopped if the entire quantity is quarried even before the expiry of the sand quarry lease period and the same shall be mentioned by the PWD authorities.
- The Taluk Level Taskforce shall inspect the quarries every fortnight, as per G.O. (Ms) No. 135 of Industries Department, dated 13.11.2009 and record the status of the compliance in the registers maintained at the sand quarry site.
- The Taluk Level Task Force has to submit its inspection report to the District Level Task Force chaired by the District Collector. The District Level Task Force has to be convened every month to discuss cases of illegal quarrying. An Environmentalist from reputed State / Central Institution and a legal expert on environmental matters may be part of the District Level Task Force. The District Level Task Force shall also dispose of the petitions on illegal sand quarrying after due enquiry and scrutiny, and pass orders within a period of two months from the date of receipt of the complaint. If any person is aggrieved with the orders passed by the District Level Task Force, an appeal may be preferred before the Appellate Forum.
- The District Collector shall take necessary steps to strengthen the existing District and Taluk Level Committees and act on the complaints received, if any, on illegal sand quarrying and take strict remedial measures to rectify the same in a time-bound manner. The District Level Task Force may send its monthly report to the Appellate Forum formed as per G.O. (Ms) No. 27 of Industries Dept. dated 17.02.2015.
- The Appellate Forum shall hear the appeals filed against the orders passed by the District Level Task Force. The Appellate Forum comprises

of the Secretaries to Government from Industries Department, Public Works Department, Revenue Department, Environment and Forests Department, Commissioner of Geology and Mining and an Expert from a reputed Government Institution.

- The Appellate Forum may convene once in 2 months to deliberate on the reports from the District Level Task Force and shall dispose of the appeals made by the petitioners aggrieved with the orders passed by the District Level Task Force.
- Periodical Capacity building and sensitization of PWD officials on the environmental and legal aspects of sand quarrying may be made mandatory. Continuous training and awareness programs shall be scheduled and conducted by IIT/Anna University for the PWD staff to keep themselves aware of the best practices in this field. It may be ensured that the enforcement officials from the Departments of Revenue, Police, Geology and Mining and Transport in the districts where quarries are situated are given adequate training and capacity building on their duties and responsibilities with respect to inspection of sand quarries and sand transporting vehicles at specified time intervals.
- No blasting shall be carried out any point in time.
- It is the obligation of the Public Works Department to run the quarry in an environmentally friendly and ecologically sustainable manner.
- The Hon'ble High Court-appointed Monitoring Committee shall inspect the sand quarries periodically and submit a report to the Hon'ble High Court.

- The PWD should explore/take necessary steps to introduce Mining Surveillance System (MSS) in line with MSS evolved by the Indian Bureau of Mines and Bhaskaracharya Institute for Space Applications and Geo-informatics (BISAG).

III. STEPS TO BE FOLLOWED AFTER EXECUTION:

- A Judicious mine closure plan may be formulated once the quarry is closed after exhaustion of the quantity of sand.
- Reclamation works may be factored into the contract agreement and strict monitoring by the PWD officials may be initiated to scrupulously follow up the mine closure plan.
- It may be ensured that the total quantity of sand permitted in the EC shall not be exceeded in any case.
- After the exhaustion of the quantity of sand, the sheds constructed at the quarry site may be removed. All the roads and pathways may be levelled so that there is no obstruction for the normal flow in the river.
- All the records/registers may be carefully maintained by the PWD for future reference.

True Copy



ANNEXURE - III



A.P. POLLUTION CONTROL BOARD
REGIONAL OFFICE; D.No-8-30-19, Sai Nagar,
Thotapalem, Vizianagaram



Lr. No. PCB/ROVZ/Tech/2024-

Date: 19-12-2024

To
 The Member Secretary,
 A.P. Pollution Control Board,
 Vijayawada.

Sir,

Sub: APPCB-RO-Vizianagaram - OA 66 of 2024 (EZ), at Hon'ble NGT (EZ), Kolkata in the matter Pooja Phillo and Others Vs. State of Odisha & Others, earlier registered as OA 20 of 2024 at Hon'ble NGT (PB), New Delhi - Implementation of Hon'ble NGT(EZ), Kolkata disposal order dt.09.08.2024 on illegal sand mining activities at Machkund River - Report-Submitted - Reg.

- Ref: 1) Hon'ble NGT order dt.19.02.2024 in OA NO.20 / 2024 in Eastern Bench, Kolkata (Earlier OA No.20/2024 in Principal Bench)
 2) Joint Committee inspection held on 04.04.2024.
 3) Hon'ble NGT Order dt.23.04.2024 in OA NO.66 of 2024 in Eastern Bench, Kolkata (Earlier OA No.20/2024 in Principal Bench)
 4) Hon'ble NGT Order dt.09.08.2024 in OA NO.66 of 2024 in Eastern Bench, Kolkata (Earlier OA No.20/2024 in Principal Bench)
 5) BO Lr.No.21/APPCB/Legal/NGT-EZ/OA No.66 of 2024/2024 dt.27.10.2024-483
 6) TO Lr.No.PCB/ROVZ/Tech/2024 Dt.22.11.2024.
 7) DD Mines & Geology, ASR District Lr.No.192/Sand/2023 dt.26.11.2024.
 8) BO Lr. No.21/APPCB/Legal/NGT-EZ/OA No.66 Dt. 11.12.2024

It is to submit that Ms. Pooja Phillo and others, resident of Nandapur Tahsil, District-Koraput, Odisha have sent by post the petition to Hon'ble NGT, New Delhi, which has been treated and registered as O.A. No. 20/2024. In the letter petition, it is enumerated that due to illegal sand lifting from the Machkund river by using JCP machine day by day the river is going to deeper from the previous, by which the flowing of water going deeper and side by farmers are not able to use the river water for their farming.

The Hon'ble NGT, Principal Bench heard the case on 19/02/2024 and directed the following:

"In view of the averments made in the application, we consider it appropriate that a Joint Committee be constituted to verify the factual position and suggest appropriate remedial action.

Accordingly, we constitute a Joint Committee comprising of representatives of Central Pollution Control Board, Odisha State Pollution Control Board, Andhra Pradesh Pollution Control Board, Collector, Koraput, Orissa, Integrated Regional Office of MoEF&CC, Bhubaneswar, Odisha, Directorate Geology, Odisha and Department of Mines and Geology, Andhra Pradesh and direct the same to undertake visits to the site, look into the grievances of the applicant, associate the applicant and representative of the concerned project proponents, verify the factual position and suggest to the concerned Authorities appropriate remedial action. The Central Pollution Control Board will be the nodal agency for coordination and compliance.”

Further, the matter was transferred to the Hon’ble NGT, Eastern Bench, Kolkata and numbered as OA No 66 of 2024.

In compliance to the Hon’ble NGT directions, the Joint Committee was constituted by CPCB with following members:

Sl	Name	Department	Designation
1.	Sri Q J Khan	Directorate of Mines and Geology, Steel & Mines Department, Govt. of Odisha	Joint Director Geology, Koraput
2.	Sri Benudhar Sabar	District Magistrate, Koraput	Sub-Divisional Magistrate and Sub-Collector, Koraput
3.	Dr B B Saritha	Andhra Pradesh Pollution Control Board	Environmental Engineer
4.	Sri D E V S S N Raju	Directorate of Mines and Geology, Govt. of Andhra Pradesh	Assistant Director
5.	Sri Deepesh Biswal	Odisha State Pollution Control Board, Regional Office, Koraput	Regional Officer
6.	Sri Sandeep Nandi	Ministry of Environment, Forest & Climate Change, Integrated Regional Office, Bhubaneswar	Scientist ‘B’
7.	Smt Sowmya D	Central Pollution Control Board, Regional Directorate, Chennai	Scientist ‘E’
8.	Sri Sandeep Roy	Central Pollution Control Board, Regional Directorate, Kolkata	Scientist ‘D’

The Joint Committee visited the following locations on 04.04.2024 at Machkund riverbed at Nandapur Tahsil, Koraput, Odisha:

1. Sobhaput Bridge
2. Sand mining locations along the river at Sudu, Sariapall, Mariput, Ratulput, Pradhaniput and Sobhaput.

The applicant Smt. Pooja Phillo, with spouse, was present during the inspection and showed the locations of sand mining mentioned in Application.

The Central Pollution Control Board, Kolkata being the Nodal Agency in this matter, filed the Joint Committee report to Hon'ble NGT.

The Hon'ble NGT has considered the observations of the Joint Committee and mentioned that

- *We have considered the Joint Committee Inspection Report and we find that illegal sand mining using Hyva trucks has been found to be carried out in Sudu area at the spot in the meandering region of River Machkund towards Andhra Pradesh.*
- *Similarly, illegal mining activities have been observed at the sand site in Pradhaniput on the Andhra Pradesh side in the area meandering region of River Machkund towards Andhra Pradesh.*
- *Similarly, illegal sand mining in an unscientific manner was found being carried out at the sariapal where physical remnants of sand mining was found on the Odisha side and at Rutuluput –Mariput on the odisha side where mining activities have been carried out in the past and penalties have been recovered.*
- *Illegal sand mining has also been found to be carried out in Galganda-Duruba where sand has been stored in the river bank at Duruba and Galganda.*
- *The Committee has also noted that at places the river bank has been broken to make way for the approach road connecting to the loading site. This is a serious matter which shows damage to the river bank which if not corrected and not checked for future will lead to disastrous consequences to the river in ecology. Preventive measures have been recommended to be taken with regard to both the state of Odisha and Andhra Pradesh.*

Further, the case was disposed with a direction to the Chief Secretaries Of Andhra Pradesh and Odisha to forthwith take steps for constituting a committee as provided in the Enforcement and Monitoring Guidelines for sand mining 2020 and ensure strict and due compliance of the aforesaid Guidelines to prevent illegal sand mining mechanical or otherwise.

The State Respondents shall also take steps forthwith for taking appropriate legal action against illegal miners as well as for computation of Environmental Compensation. Action in this regard shall be taken within two months and action taken report shall be filed by the Member Secretaries of the state Pollution Control Board, Odisha and Andhra Pradesh respectively by 30.11.2024.

As per Orders of Hon'ble NGT (EZ), Kolkata dt.09.08.2024, the Member Secretary of the Andhra Pradesh State Pollution Control Board, addressed a letter to the Mines and Geology Dept., GoAP., dt.27.10.2024 to take necessary follow-up action in the matter as per the directions of the Hon'ble Tribunal and to communicate to the Board at the earliest so as to file action taken report before the Hon'ble Tribunal. The Member Secretary of the Andhra Pradesh State Pollution Control Board, also addressed a letter to the Special Chief Secretary to Govt., Govt of A.P., to take the matter with the Chief Secretary to Government, Govt. of Andhra Pradesh as per the directives of the Hon'ble Tribunal.

Further, the Hon'ble NGT (EZ), Kolkata in its Orders dt.09.08.2024, mentioned that the State Respondents shall also take steps forthwith for taking appropriate legal action against illegal miners as well as for computation of Environmental Compensation. Action in this regard shall be taken within two months and action taken report shall be filed by the Member Secretaries of the state Pollution Control Board, Odisha and Andhra Pradesh respectively by 30.11.2024.

In this regard, it is submitted that the Govt. of AP has recently modified free sand policy 2024 through G.O.Ms.No.66, Ind. & Com. (Mines-III) Dept., dated 25.10.2024, for the extraction of sand for local uses in the local body areas adjoining the streams as follows:

- a) Customary extraction of sand by the consumers for personal use or community works within the local body areas adjoining the streams is permitted within the provisions under the EIA Notification of MoEF & CC.
- b) Extraction is permitted through manual methods and transportation through bullock carts/ tractors.
- c) Transportation of sand from local body areas through mechanical means out of local jurisdiction is not permitted.
- d) For extraction of sand for local use in the local body areas prior information by consumers online or in GS/ WS should be done.
- e) DMG shall develop an application / portal and provide training to the district level staff who will create awareness at the last mile level.
- f) The DLSC shall monitor such prior information data and free permit/ receipt generation and designate an officer for each local body who will be responsible for adherence of such process.
- g) The designated officer shall be provided the details of all free permits/ receipts generated for post verification every fortnight and such officer shall submit the report online to the DLSC after verification.

The DD Mines & Geology informed that the sand is utilized by the local villagers as per SO No: 1224(E), Dt. 28-03-2020 and G.O.Ms No: 66, Dt. 25.10.2024 i.e., "the customary extraction of sand and ordinary earth from sources situated in Gram Panchayat for personal use or community work in villages through manual methods and the transportation through bullockarts/ Tractors.

Further, the DD Mines & Geology, ASR District informed that the alleged areas in OA No 66 of 2024 (EZ): i.e., Sudu, Sariapalli, Mariput, Ratulput, Pradhaniput, Sobhaput are falls in Orissa State. These locations are not in purview of their office jurisdiction.

As per the Hon'ble NGT Orders dt.09.08.2024, the Environmental Engineer, Andhra Pradesh Pollution Control Board, Vizianagaram has monitored the River Machkund towards Andhra

Pradesh and visited the following locations on 12.12.2024 at Machkund River bed to verify the illegal sand mining activities towards Andhra Pradesh.

1. Sobhaput Bridge
2. Sudu
3. Sariapalli
4. Pradhaniput

During the Inspection, the officials of Mines Department, Paderu, ASR District, Andhra Pradesh and Revenue department of Pedabayalu Mandal Officials, ASR District, Andhra Pradesh were attended. The details of inspection are submitted below.

1. Sobhaput Bridge:

The location of Sobhaput Bridge is $18^{\circ}17'33''\text{N} - 82^{\circ}35'37''\text{E}$ in the River Machkund. The northwest side of the bridge belongs to Andhra Pradesh, while the southeast side belongs to Odisha State. In Andhra Pradesh State, the villages of Seethagunta and Pedabayalu are located in this area, whereas in Orissa State, Sobhaput village is situated in that region. There is no sand mining activity carrying out and no-one or machinery present in that area. Water flows in the River through this region.

2. Sudu

The location in the River Machkund is $18^{\circ}14'25''\text{N} - 82^{\circ}38'05''\text{E}$ in Sudu. The South side of the area belongs to Andhra Pradesh, while the North direction belongs to Odisha. In Andhra Pradesh, the village of Mangabandha is located near to the River, whereas in Orissa, Sudu village is situated near to the River. There is no sand mining activity, and no-one or machinery present in that area. Water flows in the River through this region.

3. Sariapall

The location in the River Machkund is $18^{\circ}15'3.649''\text{N} - 82^{\circ}37'10.716''\text{E}$ in Sariapall. The South side of the area belongs to Andhra Pradesh, while the North direction belongs to Odisha. In Andhra Pradesh, the village of Chuttumetta is located near to the River, whereas in Odisha, Sariapall village is situated near to the River. There is no sand mining activity, and no-one or machinery present in that area. Water flows in the River through this region.

4. Pradhaniput

The location in the River Machkund is $18^{\circ}15'25''\text{N} - 82^{\circ}36'59''\text{E}$ in Pradhaniput. The South side of the area belongs to Andhra Pradesh, while the North direction belongs to Odisha. In Andhra Pradesh, the village of Chuttumetta is located near to the river, whereas in Odisha, Pradhaniput village is situated near to the River. There is no sand mining activity, and no-one or machinery present in that area. Water flows in the River through this region.

It is submitted that there was no evidence of sand mining activities and no movement of vehicles, populace and machinery around these areas.

As per the information given by the Irrigation department, the River Machkund is 2nd order stream and need not require Environmental Clearance from MoEF&CC and Consent from Andhra Pradesh State Pollution Control Board for sand excavation.

Submitted for favor of kind information and necessary action.

Encl: A/a

Yours faithfully,
BULLI SARITHA BOKKA
BOKKA
ENVIRONMENTAL ENGINEER

Digitally signed by
BULLI SARITHA BOKKA
Date: 2024.12.19
13:24:18 +05'30'

Copy submitted to Joint Chief Environmental Engineer (Legal), APPCB, Vijayawada for favor of kind information.

Copy submitted to Joint Chief Environmental Engineer, APPCB, Zonal Office, Visakhapatnam for favor of kind information.

PHOTOGRAPHS

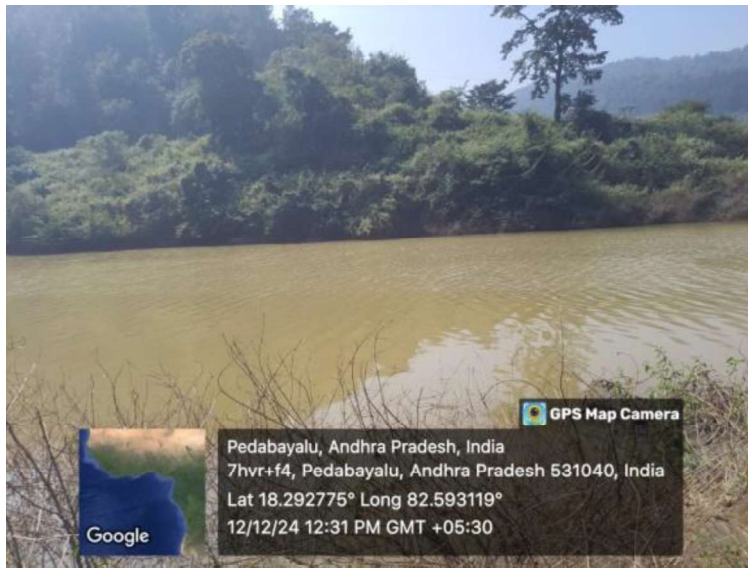
1. Sobhaput Bridge:



2. Sudu



3. Sariapall



4. Pradhaniput



True Copy
[Signature]



ANNEXURE - IV



ANDHRA PRADESH POLLUTION CONTROL BOARD
Dr. YSR Paryavaran Bhavan, APIIC Colony Road,
Gurunanak Colony, Autonagar, Vijayawada- 520007



Lr. No.21/APPCB/Legal/NGT-EZ/OA No.66 of 2024/2025

Dt. 30-01-2025 - 735

To
The Special Chief Secretary to Govt.,
EFS & T Dept., Govt of A.P.,
A.P. Secretariat, Velagapudi.

Sir,

Sub: APPCB - Legal - O.A. No. 66 of 2024(EZ) (earlier O.A. No. 20 of 2024_PB, New Delhi), filed by Ms. Pooja Phillo & ors, resident of Nandapur Tahsil, Koraput District, Odisha State- Implementation of Hon'ble NGT, Eastern Zone Bench, Kolkata directions issued in disposal order dt.09.08.2024-Action taken- Requested - Reg.

- Ref:**
1. The Hon'ble NGT, Eastern Zone Bench, Kolkata Order dt. 09.08.2024 in O.A. No. 66 of 2024(EZ) (Earlier O.A. No. 20 of 2024(PB)).
 2. APPCB Lr. No. 21/APPCB/Legal/NGT-EZ/OA No.66 of 2024/2024 - 483, dt. 27.10.2024 addressed to the Mines and Geology Dept., GoAP.
 3. APPCB Lr. No. 21/APPCB/Legal/NGT-EZ/OA No.66 of 2024/2024 -581, dt.11.12.2024 addressed to the Special Chief Secretary to Govt., Govt of A.P.
 4. The Hon'ble NGT, Eastern Zone Bench, Kolkata Order dt.12.12.2024 in M.A.No.45 of 2024(EZ) in O.A. No. 66 of 2024(EZ) (Earlier O.A. No. 20 of 2024(PB)).

**

It is to submit that the Original Application (O.A.) No. 20 of 2024(PB) was registered by the Hon'ble National Green Tribunal (NGT), Principal Bench (PB), New Delhi based on the letter petition submitted by the Applicants, Ms. Pooja Phillo and others, resident of Nandapur Tahsil, Koraput District, Odisha State. The case was transferred to the Eastern Zone (EZ) of the Hon'ble NGT at Kolkata and re-numbered as O.A. No.66 of 2024(EZ).

30.01.2025
DISPATCHED
6

The Hon'ble NGT, Eastern Zone, Kolkata disposed the matter in the order dt.09.08.2024 with certain following directions:

28. *We, therefore, dispose of this Original Application No.66/2024/EZ with a direction to the Chief Secretaries of Andhra Pradesh and Odisha to forthwith take steps for constituting a committee as provided in the Enforcement and Monitoring Guidelines for Sand Mining 2020 and ensure strict and due compliance of the aforesaid Guidelines to prevent illegal sand mining mechanical or otherwise.*
29. *The State Respondents shall also take steps forthwith for taking appropriate legal action against illegal miners as well as for computation of Environmental Compensation. Action in this regard shall be taken within two months and action taken report shall be filed by the Member Secretaries of the State Pollution Control Board, Odisha and Andhra Pradesh respectively by 30.11.2024.*

In compliance with the above, the Mines and Geology Dept., GoAP, was requested in the reference 2nd cited to take necessary follow-up action in the matter as per the directions of the Hon'ble Tribunal and to communicate to the Board at the earliest so as to file action taken report before the Hon'ble Tribunal. The action taken report is awaited.

In this regard, the Board, in the reference 3rd cited, requested the Special Chief Secretary to Govt., Govt of A.P. to take necessary follow-up action in the matter as per the directions of the Hon'ble Tribunal and to communicate the Action Taken, to the Board at the earliest, so as to file action taken report before the Hon'ble Tribunal. The action taken report is awaited

Now, Miscellaneous Application. No.45 of 2024 has been taken up by the Hon'ble NGT, Eastern Zone in Suo Motu in O.A. No. 66 of 2024 (EZ) and issued the order on 12.12.2024, commenting that APPCB has not filed affidavit of compliance and directed to file the same. The matter is listed on 06.02.2025.

In view of the above, it is once again requested that the matter may please be taken up with the Chief Secretary to Government, GoAP as per the directives of the Hon'ble Tribunal and requested to inform the action taken well before the listing date, so as to file the action taken report, in the form of compliance affidavit before the Hon'ble NGT, EZ.

This is submitted for kind information and further necessary action.

Encl: As above.

Yours faithfully,
S SRI SARAVANAN

MEMBER SECRETRY

Copy to:

1. Submitted to the Principal Secretary to Govt., GoAP, Department of Mines and Geology, A.P. Secretariat, Velagapudi for kind information.
2. The Director, Department of Mines and Geology, GoAP, Sri Anjaneya Towers, D.No.7-104, B- Block, 5th and 6th Floors, Ibrahimpatnam, Vijayawada - 521 456 for favor of information.
3. The JCEE(ECS), APPCB, BO: Vijayawada for information and necessary action with instructions to co-ordinate with EE, RO: Vizianagaram to obtain status report in the matter and to file the action taken report in the Hon'ble Tribunal.
4. The JCEE, APPCB, ZO: Visakhapatnam for information and necessary action.
5. The EE, APPCB, RO: Vizianagaram for information and necessary action and directed to co-ordinate with District officials and submit status report to the JCEE(ECS), APPCB, BO: Vijayawada for information and necessary action.

Item No.01

Court No.1

**BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, KOLKATA
(THROUGH PHYSICAL HEARING WITH HYBRID MODE)**

Miscellaneous Application No.45/2024/EZ

In

Original Application No.66/2024/EZ
(Earlier O.A. No.20/2024/PB)

Pooja Phillo & Ors.

Applicant(s)

Versus

State of Odisha & Ors.

Respondent(s)

Date of hearing: 12.12.2024

**CORAM: HON'BLE MR. JUSTICE B. AMIT STHALEKAR, JUDICIAL MEMBER
HON'BLE DR. SATYAGOPAL KORLAPATI, EXPERT MEMBER**

For Applicant(s) : *Suo Motu*,

For Respondent(s) : Ms. Gayatri Patra, ASC for R-1 & 2 (in Virtual Mode)
in O.A. 66/2024/EZ,
Mr. Dipanjan Ghosh, Adv. for R-4 (in Virtual Mode),
Ms. Papiya Banerjee Bihani, Adv. for R-5 (OSPCB)
(in Virtual Mode)

ORDER

1. The M.A. No.45/2024/EZ filed in Original Application No.66/2024/EZ is being taken up.
2. The Original Application No.66/2024/EZ was disposed of by this Tribunal vide its order dated 09.08.2024 with the following directions:-

28. *We, therefore, dispose of this Original Application No.66/2024/EZ with a direction to the Chief Secretaries of Andhra Pradesh and Odisha to forthwith take steps for constituting a Committee as provided in the Enforcement and Monitoring Guidelines for Sand Mining 2020 and ensure strict and due compliance of the aforesaid Guidelines to prevent illegal sand mining mechanical or otherwise.*

29. *The State Respondents shall also take steps forthwith for taking appropriate legal action against illegal miners as well as for*

computation of Environmental Compensation. Action in this regard shall be taken within two months and action taken report shall be filed by the Member Secretaries of the State Pollution Control Board, Odisha and Andhra Pradesh respectively by 30.11.2024.”

3. Accordingly, the Member Secretary, Odisha State Pollution Control Board has filed affidavit of compliance dated 25.11.2024. The same is taken on record.
4. However, the Member Secretary, Andhra Pradesh Pollution Control Board has not filed its affidavit of compliance.
5. We, therefore, direct notices be issued to the Member Secretary, Andhra Pradesh Pollution Control Board, returnable within four weeks. The Board shall file affidavit of compliance before the next date of listing.
6. The office of the Tribunal shall communicate copy of this order along with copy of the M.A. No.45/2024/EZ to the office of the Member Secretary, Andhra Pradesh Pollution Control Board, for compliance within 24 hours.
7. **List on 06.02.2025.**

.....
B. Amit Sthalekar, JM

.....
Dr. Satyagopal Korlapati, EM

December 12, 2024,
Miscellaneous Application No.45/2024/EZ
In
Original Application No.66/2024/EZ
(Earlier O.A. No.20/2024/PB)
OM

True Copy

