

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL  
EASTERN ZONE BENCH, KOLKATA  
ORIGINAL APPLICATION NO. 201/2025/EZ**

**IN THE MATTER OF:**

Pradeep Kumar Biswal & Others ...Applicants

Versus

State of Odisha & Others ...Respondents

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9.	True copy of the Amalgamation of Consent to Establish Order bearing order No.20216 dated 09.12.2024 issued by Respondent No.2 in favor of Utkal D & E Coal Mines is enclosed at <b>Annexure-R3/8</b> .	50-60
10.	True copy of the Consent Order bearing order No.14291 dated 29.07.2025 issued by Respondent No.2 in favor of Utkal D & E Coal Mines is enclosed at <b>Annexure-R3/9</b> .	61-71
11.	True copy of the Environmental Clearance Certificate dated 07.12.2024 issued by the Ministry of Environment, Forest and Climate Change issued in favor of Utkal D & E Coal Mines is enclosed at <b>Annexure-R3/10</b> .	72-104

Through

*Neelakshi*

**Ms. NEELAKSHI BHADAURIA  
(D/5653-A/2017) ADVOCATE FOR  
RESPONDENTS NO. 1 & 3  
CHAMBER NO. 217, LAWYER'S  
CHAMBER BLOCK-1, DELHI HIGH  
COURT, DELHI-110003, Phone: +91  
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Email: [neelakshi.bhadauria1@gmail.com](mailto:neelakshi.bhadauria1@gmail.com)**

Date: 12.05.26

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

ORIGINAL APPLICATION No. 201 OF 2025 / EZ

Pradeep Kumar Biswal & others ... Applicant

Versus

State of Odisha & Others ... Respondents

**AFFIDAVIT ON BEHALF OF THE CHIEF SECRETARY,  
GOVT. OF ODISHA, BHUBANESWAR (R-1) AND  
COLLECTOR & DISTRICT MAGISTRATE, ANGUL (R-3)**

I, Sri Susanta Kumar Mishra, aged about 59 years, S/o Late  
Judhisthir Mishra, presently serving as Tahasildar, Banarpal,  
At/P.O.- Banarpal, Dist: Angul, do hereby solemnly affirm and state  
as follows:

1. That I am duly authorized by the Respondent No.1- Chief Secretary, Govt. of Odisha, Lokaseba Bhawan, Bhubaneswar and Respondent No.3- Collector & District Magistrate, Angul and as such I am well acquainted with the facts and circumstances of the case and competent to swear this affidavit.
2. That the present Original Application has been filed by the applicants before this Hon'ble Tribunal being aggrieved by the construction of the 'Sankerjang Railway Siding' by Respondent No.5 and allegation against the State Pollution Control Board (Respondent No.2) on issue of CTE regarding

*Susanta Kumar Mishra*

*At Angul*  
*12/05/25*  
**NOTARY**  
**ANGUL**



Affidavit No. 723 Date: 12/05/26  
 Deponent/Deponents is/are being identified by  
 Sr. A.R. Senapati Advocate Angul  
 before me on this day of 12th May, 2026  
 at about 1:30 PM solemnly affirm and  
 State that the facts stated above are true to the  
 Best of his/her knowledge and belief

*Dusmantra Ku*  
12/05/26

**Dusmantra Kumar Senapati**  
 NOTARY Govt of India R. No. 4668/23  
 Angul, Odisha

*Susanta Kumar Mishra*  
12/05/2026

construction of the aforesaid project. The Applicants have, therefore, sought for the closure of the Railway Siding Project, computation of environmental compensation towards illegal extraction of soil/morrum used in construction of the aforesaid Railway Siding and fixing of responsibility upon officers for failing to discharge their duties and allowing/facilitating the operation of Railway Siding on violation of environmental norms.

3. That the Hon'ble Tribunal vide order dated 09.12.2025 has directed to submit the responses on the questions raised in the matter.
4. It is a fact that the Utkal-E Coal Mines is allocated to NALCO by the Government of India.
5. The Regional Officer, State Pollution Control Board, Odisha, Angul has submitted the report in the matter vide Letter No. 1536 dated 26.03.2026 . The report revealed that the project proponent had applied online consent to establish (CTE) application for setting up of a Railway Siding for handling and transportation of coal of quantity 15,000 MT per day over at Sankerjang and Golabandha Mouza Po/Tahsil: Banarpal in the district of Angul.

The Copy of report submitted by Regional Officer, State Pollution Control Board, Odisha, Angul vide letter No. 1536 dated 26.03.2026 along with it's enclosures are enclosed herewith at **Annexure-R3/1**



*Atip all*  
*12/05/26*  
**NOTARY**  
**ANGUL**

*Suante Kumar Mishra*



- No Objection Certificate (NOC) has also been obtained from the Sarpanch of Sanakerjang G.P. dtd. 07.02.2024 and No Objection Certificate (NOC) obtained from the President, Golabandha Gramma Sabha dtd. 10.02.2024. The copies of NOC are enclosed at Annexure - R3/2 and R3/3 respectively.
6. The above mentioned all the relevant documents have been scrutinized by the State pollution Control Board as per the Guidelines for Mineral stack yard and Railway siding prepared by the Board. The Copy of the Board's Guideline is enclosed as Annexure-R3/4.
7. It has been reported that the sitting criteria indicates at point No.4 of the said Guidelines is only applicable to mineral stack-yard not for the railway siding.

*Shri. K. K. Mishra*

*Shri. K. K. Mishra*  
 12/05/24  
 NOTARY  
 ANGUL

The Railway siding: The word Railway siding has been defined in the said Guidelines at para-1(ii) which is read as follows;

“Railway siding: A railway Siding is a place /area which is used to receive, temporary store and load/unload material in the rakes & dispatch material.

8. It has been reported by the Regional Officer State Pollution Control Board, Angul that the Railway Siding unit is not a Red Category, but it is categorized as Green Category (SI. No.42) unit as per the revised classification of industrial units under Red, Orange, Green & White categories as per the direction of CPCB dated 07.03.2016

and SPC Board's Order No. 15889 dated 31.10.2016. Copy is enclosed at Annexure-R3/5.

9. From the report of Regional Officer, State Pollution Control Board, Angul it is revealed that a site verification was conducted by the Board on 01.11.2024 to verify the suitability of the new site for establishment of Railway Siding at Sankerjang. The Site inspection report submitted by the Asst. Environmental Scientist, State Pollution Control Board, Regional Office, Angul, contains the location of the proposed site from nearest human habitation, Health Care and Educational Institutions, National and State Highways, and Local Temple; proposed measures to be undertaken by Respondent No.5 for mitigating pollution and restoration of environment. True copy of the Inspection Report submitted by the Asst. Environmental Scientist, State Pollution Control Board, Regional Office, Angul dated 01.11.2024 is enclosed herewith at Annexure – R3/6 for kind perusal.
10. As per site verification report conducted on 01.11.2024 and after scrutiny of all relevant documents such as NOC from the Gram Panchayat/ Sarpanch and land allotment letter, the Board has granted consent to establish (CTE) under the provisions of section-21 of Air (PCP) Act, 1981 and Section-25 of Water (PCP) Act, 1974 in favour of the M/s. Sanakerjang Railway Siding (NALCO Ltd.) for handling and transportation of coal of quantity 15,000 MT per day over a total area acquired by the unit is about 16.23 Acers under



*Signature*  
**NOTARY**  
**ANGUL**

*Dusanta Kumar Mishra*

Sanakerjang and Golabandha villages of Banarpal tahasil in the district of Angul subject to strict compliance of certain conditions of the CTE order . The copy of the Consent to Establish Order No. 3637 dated 05.11.2024 is enclosed at **Annexure- R3/7** for kind perusal.



11. That there are 'Special Conditions enlisted under the Consent To Establish Order dated 09.12.2024 and strict compliance of the Consent To Operate order dated 29.07.2025 issued by the Respondent No.2 for construction of 'Sankerjang Railway Siding'. Moreover, the very purpose of construction of the Railway Siding is to facilitate coal transport from the coal mines to the Captive Power Plant of Respondent No.5 so as to minimize the risk of environmental pollution.

*Susanta Kumar Mishra*

*Susanta Kumar Mishra*  
12/05/26  
**NOTARY**  
**ANGUL**

True copy of the Amalgamation of Consent to Establish Order bearing order No.20216 dated 09.12.2024 issued by Respondent No.2 in favor of Utkal D & E Coal Mines is enclosed at **Annexure-R3/8**.

True copy of the Consent Order bearing order No.14291 dated 29.07.2025 issued by Respondent No.2 in favor of Utkal D & E Coal Mines is enclosed at **Annexure-R3/9**.

True copy of the Environmental Clearance Certificate dated 07.12.2024 issued by the Ministry of Environment,

Forest and Climate Change issued in favor of Utkal D & E Coal Mines is enclosed at Annexure-R3/10.



12. That Respondent No.5 is fully aware of its obligations of preserving the environment and to take all necessary precautions for minimizing environmental pollution implementing safety mechanisms for restoration of the environment.

13. It is a fact that the Respondent No.5 has been granted with the Consent to Establish order for the aforesaid project by the Respondent No.2 pursuant to the field inspection report submitted by the Asst. Environmental Scientist, State Pollution Control Board, Regional Office, Angul. The aforesaid report indicates that the Unit has changed the previous proposed site and a new alignment has specifically been selected to maximize distance from the nearby dwellings and minimize impact on the nearest habitations and to reduce potential disturbance on the surrounding community. The details of sitting criteria like distance of the proposed Railway Siding from nearest human habitation, Health Care and Educational Institutions, National and State Highways, and Local Temple; potential of Air and Water Pollution due to the Railway Siding along with the proposed remedial measures for mitigating pollution and restoration of environment have been narrated in the site inspection report. The Respondent No.2 upon satisfaction of the sitting criteria has granted the Consent to Establish order vide its order dated

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*12/07/20*  
NOTARY  
ANGUL

*Susanta Kumar Mishra*

It is further submitted that the very purpose of the construction of the Railway Siding is to reduce the distance of coal and mineral transportation by road via trucks/dumpers and to facilitate such transfer via railway. The distance of coal transportation via road will be significantly reduced from 40 km to 21 km (almost 50%) after commissioning of the Sankerjang Railway Siding thereby minimizing potential risks of environmental pollution. Also, the transportation of coal via tarpaulin covered trucks/dumpers shall only be done as per the guide lines of State pollution Control Board, Odisha.

14. That the Respondent No.3 craves the leave of this Hon'ble Tribunal to add, alter and/or make any further submissions to file additional documents for proper adjudication of the case.

15. That, in the facts and circumstances stated above, the instant application bears no merits for consideration and prayed before the Hon'ble Tribunal to reject the petition.

16. That the statements made above in Paragraphs- 1 to 15 are true and correct to the best of my knowledge, based on available official records and nothing material has been concealed therefrom.

*Sudanta Karmacharya*  
DEPONENT 12/05/2026



*Sudanta Karmacharya*  
12/05/2026  
NOTARY  
ANGUL

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**VERIFICATION**

I, the above-named deponent, do hereby verify that the contents of the above affidavit are true and correct to the best of my knowledge and belief, based on official records.

Verified at Angul on this 12<sup>th</sup> day of May, 2026.

*Susanta Kumar Mishra*  
12/05/26  
**DEPONENT**

*Dusmanta Kumar Senapati*  
12/05/26

**Dusmanta Kumar Senapati**  
NOTARY Govt. of India R.No-46669/25  
Angul, Odisha

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Annexure - R2/1

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Email : rospcb.angul@ospcbboard.org  
Website : www.ospcbboard.org

**REGIONAL OFFICE,**  
**STATE POLLUTION CONTROL BOARD, ODISHA**  
[DEPARTMENT OF FOREST, ENVIRONMENT & CLIMATE CHANGE, GOVERNMENT OF ODISHA]  
Plot No -S-3/3, Industrial Estate, Hakimoda, Angul -759143

No. 1536 /Estt./ROSPCB/AGL/301/2025-26

Date 26-03-2026

From:

Er. R. K Ekka  
Regional Officer

To

The Collector & District Magistrate,  
Angul

**Sub: Submission of factual report on O.A. No.201/2025/EZ filed by Pradeep Kumar Biswal and others – Vrs- State of Odisha & others before the Hon'ble National Green Tribunal, Eastern Zone Bench, Kolkata-reg.**

**Ref: Your office letter No.971, dtd.26.03.2026**

Sir,

With reference to the subject cited above, please find enclosed herewith the factual report on the aforesaid case matter of O.A. No.201/2025/EZ, filed by Pradeep Kumar Biswal &Ors. Vrs. State of Odisha and Others before the Hon'ble National Green Tribunal, Eastern Zone Bench, Kolkata.

This is for kind information and necessary action.

Yours faithfully,

**Encl: As above**

  
Regional Officer

Memo No. 1537 Dtd. 26-03-2026

Copy forwarded to the Sr. Law Officer, State Pollution Control Board, Odisha, Bhubaneswar for kind information.

  
Regional Officer

ofc

Factual Report on O.A. No. 201/2025/EZ, filed by Pradeep Kumar Biswal & Ors.  
Vrs. State of Odisha and Ors. before the Hon'ble National Green Tribunal, Eastern  
Zone, Kolkata-reg.

Sl. No.	Content	Remarks
1.	<p>The project proponent had applied online consent to establish (CTE) application for setting up of a Railway Siding for handling an J transportation of coal of quantity 15,000 MT per day over at Sankerjang and Golabandha Mouza Po/Tahsil: Banarpal in the district of Angul along with the following relevant documents.</p> <ol style="list-style-type: none"> <li>i. Land Documents.</li> <li>ii. No Objection Certificate (NOC) obtained from the Sarpanch of Sanakerjang G.P. dtd.07.02.2024.</li> <li>iii. No Objection Certificate (NOC) obtained from the President, Galabandha Gramma Sabha dtd.10.02.2024.</li> <li>iv. Land allotment letter of the Collector &amp; DM, Angul. dtd.08.08.2023.</li> <li>v. Divisional Railway Manager, Khurda Road letter dtd.30.05.2024.</li> </ol>	<p>All the Five (05) copies as mentioned are enclosed as <b>Annexure-I,II,III,IV &amp;V.</b></p>
2.	<p>The above mentioned all the relevant documents were scrutinized as well as the Guidelines for Mineral stack-yard and Railway siding prepared by the Board.</p> <p>It is clarified that the sitting criteria indicates at point No.4 of the said Guidelines is only applicable to mineral stack-yard not for the railway siding.</p> <p><b>The Railway siding:</b> The word Railway siding has been defined in the said Guidelines at para-1(ii) which is read as follows;</p> <p><b>Railway siding:</b> A railway Siding is a place /area which is</p>	<p>Copy of the Board's Guideline is enclosed as <b>Annexure-VI</b></p>

	used to receive, temporary store and load/unload material in the rakes & dispatch material.	
3.	The Railway Siding unit is not a Red Category, but it is categorised as Green Category (SI. No.42) unit as per the revised classification of industrial units under Red, Orange, Green & White categories as per the direction of CPCB dtd.07.03.2016 and SPC Board's order no. 15889 dtd.31.10.2016.	Copy is enclosed As <b>Annexure-VII</b> .
4.	In this context, a site verification was conducted by the Board on 01.11.2024 and after scrutiny of all relevant documents such as NOC from the Gram Panchayat / Sarpanch and land allotment letter from the Collector, Angul. The Board has granted consent to establish (CTE) under the provisions of section-21 of Air (PCP) Act, 1981 and Section-25 of Water (PCP) Act, 1974 in favour of the M/s. Sanakerjang Railway Siding (NALCO Ltd.) for handling and transportation of coal of quantity 15,000 MT per day over a total area of 16.23 Acres bearing 16 plots at Sanakerjang and Golabandha Mouza Po/Tahsil: Banarpal in the district of Angul subject to strict compliance of certain conditions.	Copy of the site inspection report is enclosed As <b>Annexure-VIII &amp; Consent</b> to establish order No. 3637 dated.05.11.2024 is enclosed as <b>Annexure-IX</b>

  
**Regional Officer**  
**State Pollution Control Board, Angul**

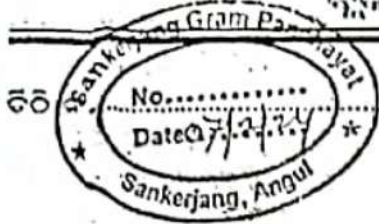
Regional Officer  
 State Pollution Control Board  
 Regional Officer, Angul

Annexure-II

OFFICE OF THE  
**SANAKERJANG GRAM PANCHAYAT**

ସାନକେରଜାଙ୍ଗ ଗ୍ରା.ପ କାର୍ଯ୍ୟାଳୟ

ବି.ନ. - ବର୍ଧରପାଳ, ଜି. - ଅନୁଗୋଳ



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TO WHOM SO EVER IT MAY CONCERN NO

OBJECTION CERTIFICATE OF GRAM SABHA

SAN-KERJANG: Gram Panchayat,

Banarpal: Tehsil

Angul District of Odisha.

Date: 07.02.2024

This is to certify that the proposed establishment Name SAN-KERJANG RAILWAY SIDING of M/s National Aluminium Company Limited, (Total Project Area -42.11 Acres.) Village - SAN-KERJANG Gram Panchayat of Banarpal Tehsil, Angul District has been going to Establish Railway Siding for Transportation of Coal by Railway Rack. We have discussed among the villagers/Gram Sabha about the matters and it has been decided that Sankerjang village Panchayat have no any objection for Establishment of SNA-KERJANG Railway Siding proposed by National Aluminium Company Limited.

In view of the above It has been resolved that there is NO OBJECTION to Gram Panchayat for establishment of SAN-KERJANG Railway Siding by M/s. National Aluminium Company Limited.

*Namrata Pradhan*

Signature with Stamp of Gram Panchayat Head /Sarpanch

Sarpanch  
Sanakerjang G.P

OF 461 THE  
**SANAKERJANG GRAMPANCHAYAT**  
 ସାନକେରଜାଙ୍ଗ ଗ୍ରା.ପ କାର୍ଯ୍ୟାଳୟ  
 କଳ- ବଅଁରପାଳ. ଜି.- ଅନୁଗୋଳ



ତାରିଖ 07/02/24

TO WHOM SO EVER IT MAY CONCERNNO

OBJECTION CERTIFICATE

Golabandha: Gram Panchayat,  
 Banarpal: Tehsil  
 Angul District of Odisha.

Date: 07.02.2024

This is to certify that the proposed establishment Name **SAN-KERJANGE RAILWAY SIDING** of M/s National Aluminium Company Limited, (Total Project Area - 42.11 Acres .) Village - Golabandha, Gram Panchayat of Banarpal Tehsil, Angul District has been going to Establish Railway Siding for Transportation of Coal by Railway Rack. We have discussed among the villagers/Gram Sabha about the matters and It has been decided that Golabandha village Panchayat have no any objection for Establishment of SNA-KERJANG Railway Siding proposed by National Aluminium Company Limited.

In vlew of the above It has been resolved that there is NO OBJECTION to Gram Panchayat for establishment of **SAN-KERJANG Railway Siding** by M/s. National Aluminium Company Limited.

*Namrata Pradhan*

Signature with Stamp of Sarpanch /Gram Panchayat Head

Sarpanch  
**Sanakerjang G. P**

*Annexure-VI*

**GUIDELINES FOR ENVIRONMENTAL  
MANAGEMENT IN MINERAL STACK YARDS  
AND RAILWAY SIDINGS**

**16<sup>th</sup> April -2010**



**STATE POLLUTION CONTROL BOARD, ORISSA**

Paribesh Bhawan, A/118, Nilakanthanagar, Unit-VIII,  
Bhubaneswar – 751 012, INDIA

## GUIDELINES FOR PROCESSING OF CONSENT APPLICATION FOR MINERAL STACK YARDS AND RAILWAY SIDING

Transportation, storage, loading and unloading of minerals at Stack-yards / Railway sidings have considerable air pollution potential. These activities have been brought under consent administration of the Board under **RED category** as per **Board's Resolution No. 3369 dt. 16.2.08**. Applications for grant of consent to these activities are to be disposed of by concerned Regional Offices as per the **delegated power vide letter No. 2186 dt. 31.1.08**. The Board issued guidelines to regulate stack-yards and railway siding in April 2008. The Board received certain submissions from various stakeholders indicating certain ambiguity and operational difficulties in implementing the guidelines. Thus to further streamline it and to make it implementable, a consultative meeting with all stakeholders was convened on 31.10.09 and their views were considered. In order to facilitate timely disposal of applications and to make the procedure uniform, the following guidelines are issued. These guidelines superceed the guidelines issued in April 2008 vide Board's letter no.9718 Dt. 24/04/08 and the additional guidelines issued vide Board's letter no.17924 Dt. 29/10/09

### 1. DEFINITION:

#### 1.

- i) **Stack-yard** : Stack-yard means mineral stack yard over an area, which is used to receive, store either for a short period or long period, load / unload and dispatch minerals from the site and requires a trading license under Orissa Mineral (Prevention of Theft, Smuggling and Illegal Mining and Regulation of Possession, Storage, Trading and Transportation) Rules 2007.
- ii) **Railway-siding** : A railway-siding is a place/ area which is used to receive, temporarily store and load / unload material in the rakes and dispatch materials.
- iii) **Cluster of stack-yards** : A cluster of stack-yards means a group of stack-yards having at least one common boundary, who enter into an agreement among them to remain collectively responsible to maintain the pollution control system while operating the stack-yards.

## 2. APPLICABILITY:

- i) The railway-sidings ,stack-yards and clusters of stack-yards of minerals, which are already established and operating prior to the date of Board's Resolution I.e 16.2.08 are required to only obtain consent to operate from the Board.
- ii) Railway-sidings ,stack-yards and clusters of stack-yards, which are established after the date of Board's Resolution I.e 16.2.08 or, to be established thereafter are required to obtain consent to establish first and then consent to operate from the Board.
- iii) For cluster of stack-yards the proponent will apply separately depositing prescribed fee for each stack-yard and submit all the application in a single bunch along with original agreement and undertaking that, they will remain collectively liable for complying to the conditions stipulated by Board. Violation of any condition by any one member of the cluster of stack-yards shall be treated as a violation.
- iv) Mineral stack-yard or railway-siding located inside the premises of industry / mines which are already covered under consent administration will not require separate consent.
- v) The consent granted under section 25 of Water (Prevention & Control of Pollution) Act. 1974 and section 21 of Air (Prevention & Control of Pollution) Act. 1981 shall be subject to Trade License issued under Orissa Mineral (Prevention of Theft, Smuggling and Illegal Mining and Regulation of Possession, Storage, Trading and Transportation) Rules 2007.
- vi) The applicant can make application for consent to operate for a minimum period of one year; however the validity of consent shall be co-terminus with the financial year.

## 3. APPLICATION FORM :

The applicant shall apply for consent to establish and consent to operate (as applicable) in the prescribed form of the Board alongwith additional information in the format as.per Annexure-I.

**4. SITING CONSIDERATIONS (MINERAL STACK-YARD) :**

Consent to Establish applications for mineral stack-yards shall be considered on the basis of the following site suitability criteria.

- i) The boundary of proposed site shall be at an aerial distance of at least 100 meter from State/National Highway.
- ii) The boundary of the proposed site shall be at an aerial distance of at least 500 meter away from Schools, Colleges, Hospitals, Archeological monuments, and other sensitive areas.
- iii) It shall be ensured that run-off during rain from the proposed site, any water body, which is used by local people, remains at minimum possible level.
- iv) Location of the stack-yard should be such that there is no public inconvenience for parking or movement of vehicles.
- v) The applicant for consent to establish shall obtain a NOC from Sarpanch following a gram sabha if it is proposed in a rural area or obtain NOC from the concerned ULB in case of urban area.
- vi) In case of new cluster the proposed site shall conform to the above stipulations for siting as a whole.

**5. ENVIRONMENTAL ASSESSMENT :****a) Check list of Environmental Issues :**

The following issues shall be taken into consideration for environmental assessment.

- i) Siting of facility and proximity of nearby dwellings.
- ii) Compatibility of the activities with surrounding land use.
- iii) Need for isolating the operational areas or any additional precautionary measure to be undertaken.
- iv) Likelihood of the materials proposed to be handled to create dust nuisance.
- v) Proposed dust control measures.
- vi) Storm water management system and disposal practice.
- vii) Possibility of discharge to nearby water bodies.

- viii) Bunding of storage area and its appropriateness.
- ix) Impact on nearby residents, beyond normal working hours.

b) **Standard conditions (RAILWAY SIDING AND MINERAL STACK YARDS) :**

The following conditions may be imposed for pollution control while granting consent to establish / consent to operate for railway siding and mineral stack-yards. These conditions are only indicative and not exhaustive.

**House Keeping:**

1. All entry points, internal roads and loading/unloading areas must be adequately compacted for movement of heavy vehicles by using low permeability material and be cleaned regularly to minimize potential of dust generation and off-site impact.
2. A boundary wall of at least 3 meter height shall be constructed along the periphery of the mineral stack-yard to prevent the dust particles from being air borne and / or getting carried away with surface run off to nearby water bodies.
3. The height of material stack within storage areas must be kept below the height of the boundary wall at all times to prevent the material from being air borne.
4. All mineral storage areas containing fines or dusty materials must be either:
  - covered with tarpaulins when not in use, or
  - fitted with Water Sprinkling / Dry fog systems.
5. Green belt of at least one row of trees shall be developed along the boundary of material storage yard., in case of stack-yards and railway siding which are located in close proximity to villages and residential areas, a green belt of adequate width between the habitation and the stack-yard is recommended.

6. Planting of trees all along the connecting road and regular grading of such road shall be carried out to prevent generation of dust due to movement of dumpers/trucks.
7. Adequate care shall be taken to prevent creation of ruts and pot holes in the connecting roads.
8. Proper house keeping at the material storage areas, loading & dispatch areas, service facilities, etc., shall be practiced.

**Air Pollution Control:**

9. Dust suppression arrangement shall be provided on approach road by using water sprinklers / mobile water tanker.
10. Wheel wash facilities are to be provided to minimize transfer of mud from unpaved approach roads to main paved and/or public roads.
11. At the material storage areas, atomized stationery mist spray of water or conditioning of material with water shall be practiced to prevent dust getting air borne during loading/unloading.
12. Sprinkler systems must be maintained and be kept in a good operable condition at all times.
13. Appropriate transfer chutes shall be provided at material discharge points at material storage areas, loading points etc., to minimize the discharge height and spread of air borne dust.
14. Appropriate preventive measures shall be taken for control of fire hazards at the stack-yard / Railway-Siding handling coal.
15. Smoke emission from heavy duty vehicle operating in the stack-yard / Railway-Siding shall conform to the standards prescribed under the Motor Vehicle Rules, 1989.
16. Ambient Air Quality inside the premises shall conform to the National Ambient Air Quality Standard prescribed for industrial and mixed used area under the Environment Protection Act, 1986.

**Water Pollution Control :**

17. Domestic effluent shall be discharged to soak pit through septic tank constructed as per BIS specifications.
18. Garland drain shall provided along the boundary wall at the appropriate places depending upon the slope of the area, inside the mineral stack-yard. Provision shall be made for collection of wash water from the garland drain and the water, so collected shall be treated in a sedimentation tank for further use inside the premises for green belt or water sprinkling etc. In case of a cluster, a common facility shall be developed, operated and maintained by the cluster operators.
19. In case the wastewater contains any substance which is harmful to the environment, the same shall be treated to remove the substance so as to meet the prescribed norms.

**Good Operating Practice:**

20. Speed limit of dumpers/trucks inside the premises shall not exceed 10 kmph.
21. Occupiers of the stack-yard / Railway siding shall ensure that vehicles used have valid "Pollution Under Control (PUC)" certificate.
22. During transportation of material by trucks / tippers / wagons through public roads, the vehicles shall be properly covered with tarpaulin sheets.
23. Provisions of the E(P) Act, 1986 and the relevant rules framed thereunder, shall be applicable where necessary.

The concerned Regional Officer may stipulate site specific additional conditions, if he feels so, after assessing ground reality and local conditions.

**c) Annual Return :**

Every operating mineral stack-yards and Railway sidings shall submit an annual return to concerned Regional Office in the prescribed format as per Annexure – II by 31<sup>st</sup> May every year incorporating the quantities and types of materials handled during the preceding financial year (i.e. 1<sup>st</sup> April to 31<sup>st</sup> March). Stack-yards in a cluster shall prepare individual returns and submit those in a single bunch.



## STATE POLLUTION CONTROL BOARD, ORISSA

Paribesh Bhawan, A/118, Nilakanthanagar, Unit-VIII,  
Bhubaneswar - 751 012, INDIA

### ADDITIONAL INFORMATION

A. Mineral Stack yard

B. Railway Siding

Tick appropriate box

#### 1. GENERAL INFORMATION :

1.1 Name of the applicant :

Father's/husband's name :

Designation

1.2 Mailing Address :

e-mail :

Telephone No. :

Mobile phone No

Fax :

1.3 Does the activity relate to :

1.3.1 New	Yes	<input type="checkbox"/>	No.	<input type="checkbox"/>
1.3.2 Expansion	Yes	<input type="checkbox"/>	No.	<input type="checkbox"/>
1.3.3 Existing	Yes	<input type="checkbox"/>	No.	<input type="checkbox"/>

#### 2. SITE DETAILS :

2.1 Area of Mineral Stack-yard /Railway Siding in \_\_\_\_\_ Sq.m/Sq.ft/Acre.

✓ Encl : Patta and/or other relevant land document.

2.2 Site Address	Plot and Khata no	Village	Tehsil	District

✓ Enclose a revenue site map

2.3 Name of the person/ company :  
(owner of the company)

2.4 Distance from the following features ( Within 500 m radius.)

Features	Distance	Details
Human settlement / villages		
Schools / Colleges		
National/state highway		
Hospitals		
Rivers / Streams / Ponds		
Other sensitive area		

✓ Indicate these feature in the site map :

2.5 Length of approach road from nearest Highway (NH/SH) / Railway connectivity / port :

2.6 Category of approach road to be used for transportation :

2.7 Name of the villages through which approach road from NH/SH passes

### 3. ACTIVITY DETAILS :

3.1 Type of material to be handled :

Sl. No.	Type of material	Qty. per year.	Maximum storage quantity at any point of time
1.			
2.			
3.			
4.			

**3.2 Mode of transport :**

Incoming mode : By truck/Tipper  
 : By rake,  
 By tractor  
 : Any other means.

Outgoing mode : By truck  
 : By rake,  
 By tractor  
 : Any other means.

**3.3 Manner of loading / unloading :****3.3.1 Manual Loading :**

- ✓ Maximum daily receipt of material :
- ✓ Maximum daily dispatch of material :
- ✓ Nos of people to be engaged for loading/unloading :

**3.3.2 Mechanized loading / unloading :**

Type of machines	Nos.	Capacity
Loader, Dumper		
Stacker reclaimer		

**4. ENVIRONMENTAL MANAGEMENT PLAN :**

Sl. No.	Environmental issues *	Already practiced if applicable	Proposed
01.	Air pollution (fugitive dust emission)		
02.	Water Pollution (Run off Water Management)		
04.	Plantation		
05.	Others		

[\* As applicable]

**CHECK LIST FOR DOCUMENTS**

1.	Revenue site map indicating all features.
2.	Patta/ Lease deed/ Agreement/ and other relevant land documents if any in support of proof of ownership.
3.	NOC from the local bodies
4.	Permission from Railway authority for railway siding.

**Verification :**      **The data and information given in this form are true to the best of my knowledge and belief.**

**Date :**

**Place :**

**Signature of Applicant\***  
**With full name & address**

**[\* Owner or occupier]**

**Given under the seal of organization  
onbehalf of whom the applicant is signing**



# 473

Annexure - 23/5  
Annexure-VII  
EPABX : 2561909/2562847  
paribesh1@ospceboard.org  
Website: www.ospceboard.org

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**STATE POLLUTION CONTROL BOARD, ODISHA**  
(Department of Forest & Environment, Govt. of Odisha)  
Paribesh Bhawan, A/118, Nilakanthanagar, Unit-VIII  
Bhubaneswar - 751012

No 15889 /Ind-I-Con-(M) 1204

Date 31-10-2016 /

**ORDER**

**WHEREAS**, Forest & Environment Department, Govt. of Odisha from time to time have categorized different types of industrial units into Red, Orange, Green and Non-Polluting depending upon the pollution potential vide the Department Order No ENV 1-40 /2007/6194/F&E dated 24th April, 2007; ENV-I-01/2012/13131/F&E dated 16th July, 2012 and ENV-I-82/2015/14198/F&E dated 7th August 2015 for management of consent under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981;

**And Whereas**, Central Pollution Control Board (CPCB), Delhi vide it's order No B-29012/ ESS(CPA)/2015-16/8583, dtd. 07.03.2016 has issued a direction under section 18(1)(b) of Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 to all the SPCBs & Pollution Control Committees(PCCs) to follow an uniform pattern of classification of industries under Red/ Green/ Orange/White category, which is mandatory and binding upon State Pollution Control Board, Odisha;

**And whereas** to comply with the above direction of CPCB, a revised classification of industrial units based on the revised criteria and guidelines of CPCB was made by SPC Board, Odisha incorporating the state specific industrial units;

**And whereas**, Forest & Environment Department, Govt. of Odisha vide its order No. ENV-I-75/2016/16780/F & E, dtd. 09.09.2016, in pursuant to the direction of CPCB, have communicated the decision of the State Government that the orders No. Env-I/40/2007/6194/F&E dtd, 24.04.2007 & No.Env-I/01/2012/13131/F&E, dtd.16.07.2012 & Env-I-82/2015/14198/F&E, Dtd. 07.08.2015 will stand revoked with effective from the date of issue of the order by the State Pollution Control Board, Odisha in respect of revised categorization of the industries;

1

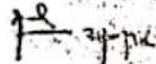
Now, therefore after careful consideration, the State Pollution Control Board, Odisha do hereby notify the following in respect of revised categorization of industrial units;

- i. The list of industrial units classified under Red (81 nos), Orange (91 nos), Green (73 nos) and White (42 nos) categories is annexed. Further addition of any new or left over industrial unit/ process which are not enlisted in this revised list of Red, Orange, Green and White categories shall be done following the revised criteria/ guideline of CPCB;
- ii. The list of industrial units under White category are hereby exempted from obtaining Consent to Establish and Consent to Operate;
- iii. The order of Forest & Environment Department, Govt. of Odisha vide no. ENV-1-82/2015/14198/F&E dated 7th August 2015 exempting the Green category of industries from Consent Administration of this Board stands revoked;
- iv. The industrial units now as per the revised classification under Red, Orange and Green categories are required to obtain Consent to Establish and Consent to Operate from this Board under Water ((Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 and pay consent fees as per the notification of F&E Dept., Govt. of Odisha vide notification no. Env-I-01/2012/13123 and 13127, dated 16.07.2012 or as revised from time to time.

This order supersedes all earlier orders issued in this regard with immediate effect.

Encl: List of revised classification of industrial units (15 pages)


By order of Chairman



Member Secretary

Memo No. 15890 /Dt. 31-10-2016 /By Speed Post/ E-Mail

Copy forwarded to the Chairman, Central Pollution Control Board, Paribesh Bhawan, CBD-cum-Office Complex East Arjun Nagar, Delhi - 110 032 for kind information with reference to the direction issued by CPCB.



Member Secretary

**TYPED COPY OF PAGE NO. 27**

**Now, therefore,** after careful consideration, the State Pollution Control Board, Odisha do hereby notify the following in respect of revised categorization of industrial units;

- i. The list of industrial units classified under Red (81 nos), Orange (91 nos), Green (73 nos) and White (42 nos) categories is annexed. Further addition of any new or left over industrial unit/processs which are not enlisted in the revised list of Red, Orange, Green and White categories shall be done following the revised criteria guidelines of CPCB;
- ii. The list of industrial units under White category are hereby exempted from obtaining consent to establish and Consent to operate;
- iii. The order of Forest & Environment Department, Govt. of Odisha vide no. ENV-1-82/2015/14198/F&E dated 7<sup>th</sup> August 2015 exempting the green category of industries from Consent Administration of this Board Stands revoked;
- iv. The industrial units now as per the revised classification under Red, Orange, and Green categories are required to obtain Consent to Establish and Consent to Operate from this Board under Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 and pay consent fees as per the notification of F&E Dept. Govt. of Odisha vide notification no. Env-1-01/2012/13123 and 13127, dated 16.07.2012 or as revised from time to time.

This order supersedes all earlier orders issued in this regard with immediate effect.

Encl: List of revised classification of industrial units (15 pages)

**By order of Chairman**

**Sd/-  
Member Secretary**

Memo No. 15890/ Dt. 31.10.2016 / By speed Post / E-Mail

Copy forwarded to the Chairman, Central Pollution Control Board, Paribesh Bhawan, CBD- cum – Office Complex East Arjun Nagar, Delhi – 110 032 for kind information with reference to the direction issued by CPCB.

**Sd/-  
Member Secretary**

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Memo No. 15891 /Dt. 31-10-2016

Copy forwarded to Principal Secretary, Forest & Environment Dept., Govt. of Odisha for kind information and necessary action.

  
Member Secretary

Memo No. 15892 /Dt. 31-10-2016

Copy forwarded to Principal Secretary, Industries Department/ MSME Dept./ Steel & Mines Dept./ Energy Dept./ Housing and Urban Dept./ Health & Family Welfare Dept./ Agriculture Dept./ Works Dept./ Water Resources Dept./ F& ARD / Excise Dept./ Commerce & Transport/ Textile & Handlooms/ CMD, IPICOL/ CMD, IIDCO/ Special Secretary P&C Dept./ Director, Factory & Boilers, Govt. of Odisha for information and necessary action.

  
Member Secretary

Revised classification of industrial units under Red, Orange, Green and White categories as per direction of CPCB, dtd. 07.03.2016

Sl. No.	Red Category
1.	Airports and Commercial Air Strips
2.	Aluminium Smelter
3.	Asbestos and asbestos based industries
4.	Automobile Manufacturing (integrated facilities)
5.	Automobile servicing, repairing and painting (excluding only Fuel dispensing) having wastewater generation 100 KLD or more.
6.	Basic chemicals and electro chemicals and its derivatives including manufacturing of acid.
7.	Building and construction project more than 20,000 sq.m built up area having wastewater discharge more than 100 KLD.
8.	Cement
9.	Ceramics and Refractories (More than 12 Tons / day coal consumption)
10.	Chloro Alkali
11.	Chlorates, per-chlorates & peroxides
12.	Chlorine, fluorine, bromine, iodine and their compounds.
13.	Coke making, liquification, coal tar distillation or fuel gas making.
14.	Common Effluent Treatment Plant (CETP)/ Common Sewage Treatment Plant
15.	Common Hazardous Waste Treatment, Storage, Disposal facility (CHWTSDF)
16.	Common Solid Waste Management facility (CSWMF) as per Solid Waste Management Rules, 2016.
17.	Copper Smelter
18.	DG Set of capacity (> 5 MVA)
19.	Distillery (Molasses/ grain / yeast based)
20.	Dyes and Dye- Intermediates



Sl. No.	Red Category
21.	Fermentation industry including manufacture of Yeast, Beer, Distillation of Alcohol extra Neutral Alcohol having wastewater discharge more than 100 KLD
22.	Ferrous / Non ferrous metal extraction ((i) more than 1 Metric ton / hour secondary production, (ii) lead secondary production, (iii) Induction furnace followed with AOD
23.	Fertilizer (basic) (excluding formulation)
24.	Fiber glass production and processing (excluding moulding)
25.	Fire crackers manufacturing and bulk storage facilities
26.	Foundries with production capacity more than 5T/hour and more, coal/coke consumption more than 500 kg/hr.
27.	Gold and silver smithy -purification with acid smelting operation and sulphuric acid polishing operation having more than 1 liter of sulphuric acid / nitric acid per month.
28.	Health-care Establishment (as defined in BMW Rules, 2016) whose wastewater is more than 100 KLD or with incinerator.
29.	Hotels having overall wastewater generation @100 KLD and more.
30.	Hydro Cyanide Acid and its derivatives
31.	Industrial Carbon including electrodes and graphite blocks, activated carbon, carbon black
32.	Industrial or inorganics gases namely (a) chemical gases like acetylene, hydrogen, chlorine, flourine, ammonia, sulphur dioxide, ethylene, hydrogen sulphide, phosphine, (b) hydrocarbon gases like methane, butane, ethane, propane.
33.	Industry or process involving metal surface treatment or process such as pickling/ electroplating / paint stripping / heat treatment using cyanide bath / phosphating or finishing and anodizing / enamellings / galvanizing.
34.	Industries engaged in recycling / reprocessing / recovery / reuse of Hazardous waste under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016- (A) Spent cleared metal catalyst containing copper, Spent cleared metal catalyst containing zinc  (B) Spent catalyst containing nickel, cadmium, zinc, copper, arsenic, vanadium and cobalt.



Sl. No.	
	(C) Dismantlers Recycling Plants - Components of waste electrical and electronic assembles comprising accumulators and other batteries included on list A, mercury-switches, activated glass cullets from cathode-ray tubes and other activated glass and PCB-capacitors, or any other components contaminated with Schedule-2 constituents (e.g., cadmium, mercury, lead polychlorinated biphenyl) to an extent that they exhibit hazard characteristics indicated in part C of this schedule.
	(D) Lead acid battery plates and other lead scrap / ashes / residues not covered under batteries (Management & handling) Rules, 2001. [Battery scrap, namely: Lead battery plates covered by ISRI, Code Word "Rails" Battery lugs covered by ISRI, Code word "Rakes". Scrap drained/ dry while intact, lead batteries covered by ISRI, Code Word "rains".
	(E) Integrated Recycling Plants - Components of waste electrical and electronic assembles comprising accumulators and other batteries included on list A, mercury-switches, activated glass cullets from cathode-ray tubes and other activated glass and PCB-capacitors, or any other component contaminated with Schedule 2 constituents (e.g., cadmium, mercury, lead, polychlorinated biphenyl) to an extent that they exhibit hazard characteristics indicated in part C of this schedule.
35.	Insecticides / fungicides / herbicides / agrochemical formulation.
36.	Industrial Estates/ Parks /Complexes/ Areas, Export Processing Zones (EPZs), Special Economic Zones (SEZs), Biotech Parks
37.	Iron and steel (involving processing from ore / integrated steel plants) and or Sponge Iron units.
38.	Isolated storage of hazardous chemicals (as per schedule of manufacturing, storage of hazardous chemicals Rules, 1989 as amended)
39.	Laboratory chemicals involving distillation and purification process.
40.	Lead acid battery- manufacturing (excluding assembling and charging of lead acid battery in micro scale)
41.	Lead manufacturing including smelting
42.	Manufacturing of Glue and Gelatin
43.	Manufacturing of lead glass
44.	Manufacturing of explosives, detonators fuses including management and handling activities.



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Sl. NO.	Red Category
	<p>(c) Dismantlers Recycling Plants- Components of Waste electrical and electronic assemblies comprising accumulators and other batteries included on list A, mercury-switches, activated glass culets from cathode-ray tubes and other activated glass and PCB capacitors or any other components contaminated with schedule-2 constituents (e.g., cadmium, mercury, lead polychlorinated biphenyl) to an extent that they exhibit hazard characteristics indicated in part C of this schedule.</p> <p>(D) Lead acid battery plates and other lead scrap/ ashes/ residues not covered under batteries (Management &amp; handling) Rules, 2001 [Battery scrap, namely; Lead battery plates covered by ISRI, Code word “Rails” Battery lugs covered by ISRI, Code word “Rakes”. Scrap drained / dry white intact, lead batteries covered by ISRI, Code Word “rains”.</p> <p>(E) Integrated Recycling Plants – Components of waste electrical and electronic assemblies comprising accumulators and other batteries included on list A, mercury-switches, activated glass culets from cathode – ray tubes and other activated glass and PCB-capacitors or any other component contaminated with Schedule 2 constituents (e.g., Cadmium, mercury, lead, polychlorinated biphenyl) to an extent that they exhibit hazard characteristics indicated in part C of this schedule.</p>
35.	Insecticide/ Fungicides/herbicides/agrochemical formulation
36.	Industrial Estates/ Parks / Complexes/ Areas, Export Processing Zone [EPZs], Special Economic ZONES [Sezs], Biotech Parks
37.	Iron and Steel (involving processing from ore / integrated steel plants and or Sponge Iron units.
38.	Isolated Storage of hazardous chemicals (as per schedule of manufacturing, storage of hazardous chemical Rules, 1989, as amended)
39.	Laboratory chemicals involving distillation and purification process.
40 .	Lead acid battery – manufacturing (excluding assembling and charging of lead acid battery in micro scale)
41.	Lead manufacturing including smelting
42.	Manufacturing of Glue and Gelatin
43.	Manufacturing of lead glass
44.	Manufacturing of explosives, detonators fuses including management and handling activities.

Sl. No.	Red Category
45.	Manufacturing of lubricating oils, grease and petroleum based products.
46.	Manufacturing of Paints, varnishes, pigments & intermediates (excluding blending / mixing)
47.	Milk processes and dairy products (integrated projects)
48.	Mining and ore beneficiation
49.	Non-alcoholic beverages (soft drink) & bottling of alcohol / non-alcoholic products, where wastewater generation is more than 100 KLD.
50.	Nuclear power plant
51.	Oil and gas extraction including CBM (offshore and on-shore extraction through drilling wells)
52.	Oil Refinery (Mineral oil or Petro refineries)
53.	Organic Chemicals manufacturing
54.	Parboiled Rice Mills having wastewater more than 100 KLD and/or Fuel consumption more than 12 T/Day.
55.	Pesticides (technical) (excluding formulation)
56.	Petrochemicals manufacturing (including processing of Emulsions of oil and water)
57.	Petroleum products / crude oil storage and transfer excluding cross country pipeline.
58.	Pharmaceuticals
59.	Pharmaceuticals (R&D purpose)
60.	Phosphate rock processing plants
61.	Phosphorous & its compounds
62.	Photographic film and its chemicals
63.	Ports and harbor, jetties and dredging operations.
64.	Power generation plant (Except wind and solar renewable power plants of all capacities and Mini Hydel power plants of capacity <25MW)



Red Category	
65.	Processes involving chlorinated hydrocarbons.
66.	Pulp & Paper (Large-Agro + wood), Small Pulp and Paper (Agro based wheat straw / rice husk)
67.	Pulp & Paper (waste paper based with bleaching process for manufacture writing and printing paper)
68.	Pulp & Paper (waste paper based without bleaching- process for manufacture Kraft paper)
69.	Railway locomotive workshop/ integrated road transport workshop / Authorized service centers.
70.	Ship Breaking Industries.
71.	Slaughter house (as per notification S.O. 270(E ), dtd. 26.03.2001) and meat processing industries, bone mill, processing of animal horn, hooves and other body parts.
72.	Sugar (Excluding Khandsari)
73.	Synthetic Detergents and soaps (excluding formulation) having wastewater generation more than 100 KLD
74.	Synthetic fibers including rayon, tyre cord, polyester filament yarn.
75.	Tanneries
76.	Thermal Power Plants
77.	Township and area development projects covering an area more than or equal to 50 Ha. Or built up area more than or equal to 1.5 lakh sq.m.
78.	Vegetable oil manufacturing including solvent extraction and refinery / hydrogenated oils having wastewater generation more than 100 KLD.
79.	Water softening and demineralized plant
80.	Yarn / Textile processing involving any effluent / emission generating processes including bleaching, dyeing, printing and colouring.
81.	Zinc Smelter
Orange Category	
1.	Aluminium & copper extraction from scrap using oil fired furnace (dry process only)
2.	Automobile servicing, repairing and painting (excluding fuel dispensing), where wastewater generation is less than 100 KLD.
3.	Ayurvedic and homeopathic medicine



SI NO.	Red Category
65.	Process involving Chlorinated hydrocarbons.
66.	Pulp & Paper [Large – Agro + Wood], Small Pulp and Paper (Agro based wheat straw/ice husk)
67.	Pulp & Paper (Waste paper based with bleaching process to manufacture writing and printing paper)
68.	Pulp & Paper [Waste paper based without bleaching – Process to manufacture kraft paper]
69.	Railway locomotive workshop/ integrated road transport workshop / Authorized service centres.
70.	Ship Breaking Industries.
71.	Slaughter house (as per notification S.O. 270€, dtd. 26.03.2001) and meat processing industries, bone mill, processing of animal ( <b>ILLEGIBLE</b> ) and other body parts.
72.	Sugar (Excluding Khandsari)
73.	Synthetic Detergents and soaps (excluding formulation) having wastewater generation more than 100 KLD
74.	Synthetic fibers including rayon, fyre cord, polyester filament yarn.
75.	Tanneries
76.	Thermal Power Plants
77.	Township and area development projects covering an area more than or equal to 50 Ha. Or built up area more than or equal to 1.5 lakh sq. m
78.	Vegetable oil manufacturing including solvent extraction and refinery/hydrogenated oils having wastewater generation more than 100 KLD:
79.	Water softening and demineralized plant
80.	Yarn/Textile processing involving any effluent / emission generating processes including bleaching, dyeing, printing and colouring
81	Zinc smelter
Orange Category	
1.	Aluminum & Copper extraction from scrap using oil fired furnaces Ind. process only)
2.	Automobile servicing, repairing and painting (excluding dispensing), where wastewater generation is less than 100 KLD.
3.	Ayurvedic and homeopathic medicine

Sl. No.	Orange Category
4.	Bakery & Confectionery units with production capacity >1 TPD (with ovens / furnaces)
5.	Brickfields excluding fly ash brick manufacturing using lime process.
6.	Building and construction project more than 20,000 sq.m built up area. (Wastewater discharge upto 100 KLD)
7.	Cashew nut processing
8.	Ceramics and Refractories (coal consumption less than 12 tons per day)
9.	Chanachur and laddoo from puffed and beaten rice (muri and shira) using husk fired oven.
10.	Chilling plant and ice plant using Ammonia
11.	Coal briquetting
12.	Coal washeries
13.	Coated electrode manufacturing
14.	Coffee seed processing
15.	Compact disc computer floppy and cassette manufacturing / Reel manufacturing.
16.	Cotton spinning and weaving ( Medium and large scale)
17.	Dairy and dairy products (Small scale)
18.	DG set ( >1MVA but < 5MVA)
19.	Dismantling of rolling stocks (Wagons / Coaches)
20.	Dry cell battery (Excluding manufacturing of Electrodes) & Assembling and charging of acid lead battery on microscale.
21.	Dry coal processing, mineral processing, industries involving ore sintering, pelletisation, grinding and pulverisation
22.	Dumping of Ash/ Char /Slag / Other Non hazardous industrial waste outside the factory premises (including mine void / or low lying area filling)
23.	Fermentation industry including manufacture of yeast, beer, distillation of alcohol (Extra Neutral Alcohol) (Wastewater discharge upto 100 KLD)
24.	Ferrous and Non-ferrous metal extraction involving different furnaces through melting, refining, re-processing, casting and alloy-making. (Secondary production upto 1 Ton / hour excluding lead)
25.	Fertilizer (granulation / formulation / blending only)
26.	Fish feed, poultry feed and cattle feed
27.	Fish landing centre
28.	Fish processing and packing (excluding chilling of fishes)



Sl. No.	Orange Category
29.	Flakes from rejected PET bottle
30.	Foam manufacturing
31.	Food and food processing including fruits and vegetable processing.
32.	Forging of ferrous and non-ferrous metals (using oil and gas fired furnaces)
33.	Formulation/pelletization of camphor tablets, naphthalene balls from camphor / naphthalene powders
34.	Glass ceramics, earthen potteries and tile manufacturing using oil and gas fired kilns, coating on glasses using cerium fluorides and magnesium fluoride etc.
35.	Gravure printing, digital printing on flex, vinyl.
36.	Health-care Establishment (as defined in BMW Rules, 2016) having wastewater generation upto 100 KLD and without incinerator.
37.	Heat treatment using oil fired furnace (without cyaniding)
38.	Hot mix plants
39.	Hotels (<3 star) or hotels having >20 rooms and less than 100 rooms. Hotels having more than 20 rooms and wastewater generation less than 100 KLD and having coal or oil fired boiler. (Hotels with more than 20 rooms with wastewater generation <10 KLD and without any boiler and no generation of hazardous waste will be under Green Category)
40.	Ice cream
41.	Incineration plants
42.	Industries engaged in recycling / reprocessing / recovery / reuse of Hazardous Waste under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 : (A) Paint and ink sludge/ residues (B) Brass Dross, Copper Dross, Copper Oxide Mill Scale, Copper Reverts Cake and Residues, Waste Copper and Copper Alloys in dispersible form, Slags from copper processing for further processing or refining Insulated Copper Wire, Scrap / Copper with PVC sheathing including ISRI-code material namely "Druid" Jelly filled Copper cables, Zinc Dross -Hot dip Galvanizers SLAB, Zinc Dross-Bottom Dross, Zinc Ash / Skimming arising from galvanizing and die casting operations, Zinc ash / Skimming / other zinc bearing wastes arising from smelting and refining Zinc Ash and residues including zinc alloy residues in dispersible form. (C) Used oil or waste oil - As per specifications prescribed from time to time.



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Sl. No.	Orange Category
29	Flakes from rejected PET bottle
30	Foam manufacturing
31	Food and food processing including fruits and vegetable processing.
32	Forging of ferrous and non- ferrous metals (using oil and gas fired furnaces)
33	Formulation/pelletization of camphor tablets, naphthalene balls from camphor / naphthalene powders
34	Glass ceramics, earthen potteries and tile manufacturing using oil and gas fired kilns, coating on glasses using cerium fluorides and magnesium fluoride etc.
35	Gravure printing, digital printing on flex, vinyl.
36	Health-care Establishment (as defined in BMW Rules, 2016) having [partially invisible] wastewater generation upto 100 KLD and without incinerator.
37	Heat treatment using oil fired furnace (without cyaniding)
38	Hot mix plants
39	Hotels (<3 star) or hotels having >20 rooms and less than 100 rooms. Hotels having more than 20 rooms and wastewater generation less than 100 KLD and having coal or oil fired boiler. (Hotels with more than 20 rooms with wastewater generation <10 KLD and without any boiler and no generation of hazardous waste will be under Green Category)
40	Ice cream
41	Incineration plants
42	<p>Industries engaged in recycling/reprocessing/recovery/reuse of [partially invisible] Hazardous Waste under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 :</p> <p>A) Paint and ink sludge/ residues</p> <p>(B) Brass Dross, Copper Dross, Copper Oxide Mill Scale, Copper Reverb [partially invisible] Cake and Residues, Waste Copper and Copper Alloys in dispersible form, Slags from copper processing for further processing or refining, Insulated Copper Wire, Scrap / Copper with PVC sheathing including [partially invisible] ISRI-code material namely "Druid" Jelly filled Copper cables, Zinc Dross / Hot dip Galvanizers SLAB, Zinc Dross-Bottom Dross, Zinc Ash / Skimming arising from galvanizing and die casting operations, Zinc ash / Skimming / other zinc bearing wastes arising from smelting and refining, Zinc Ash and residues including zinc alloy residues in dispersible form.</p>

	(C) Used oil or waste oil - As per specifications prescribed from time to time.
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Sl. No.	Orange Category
43.	Industry or processes involving foundry operations. (less than 5 T/hour and coal consumption less than 500 kg/hr)
44.	Jute processing without dyeing
45.	Lime manufacturing (using lime kiln)
46.	Liquid floor cleaner, black phenyl, liquid soap, glycerol mono-stearate manufacturing.
47.	Manufacturing of Pasted veneers (using gas fired boiler or thermic fluid heater by sun drying) (Coal fired boiler only)
48.	Manufacturing of glass (excluding lead glass)
49.	Manufacturing of iodized salt from crude/ raw salt
50.	Manufacturing of mirror from sheet glass
51.	Manufacturing of mosquito repellent coil
52.	Manufacturing of Silica gel
53.	Manufacturing of Starch/Sago
54.	Manufacturing tooth powder, toothpaste, talcum powder and other cosmetic items.
55.	Mechanized laundry using oil fired boiler
56.	Modular wooden furniture from particle board, MDF/swan limber etc. Ceiling tiles / partition board from saw dust, wood chips etc., and other agricultural waste using synthetic adhesive resin, wooden box making (with boiler)
57.	New highway construction project
58.	Non-alcoholic beverages (soft drink) & bottling of alcohol / non-alcoholic products. where wastewater generation is less than 100 KLD
59.	Paint blending and mixing (Ball mill)
60.	Paints and varnishes (mixing and blending)
61.	Parboiled Rice Mills. where wastewater generation is up to 100 KLD and/or Fuel consumption less than 12 T/Day.
62.	Pharmaceutical formulation for R&D purpose.(for sustained release / extended release of drugs only and not for commercial purpose)



# 490

Orange Category

Sl. No.	Orange Category
63.	Ply-board manufacturing (including Veneer and Laminate) with oil fired boiler / thermic fluid heater (without resin plants)
64.	Potable alcohol (IMFL) by blending, bottling of alcohol products.
65.	Printing ink manufacturing
66.	Printing or etching of glass sheet using hydrofluoric acid.
67.	Printing press
68.	Producer gas plant using conventional up drift coal gasification (linked to rolling mills, glass and ceramic industry, refractories for domestic fuel supply)
69.	Reprocessing of waste plastic including PVC
70.	Rolling mill (oil or coal fired) and cold rolling mill.
71.	Ship building
72.	Silk screen printing, sari printing by wooden blocks (with boiler)
73.	Sports goods
74.	Spray painting, paint baking, paint shipping.
75.	Steel and steel products using various furnaces like blast furnace, / open hearth furnace / induction furnace / arc furnace / submerged arc furnace / basic oxygen furnace / hot rolling reheated furnace.
76.	Steel furniture, Almirah, Grill Manufacturing (Dry mechanical process) with spray painting
77.	Stone crushers
78.	Surgical and medical products including prophylactics and latex.
79.	Synthetic detergents and soaps (excluding formulation), where wastewater generation is upto 100 KLD
80.	Synthetic resins
81.	Synthetic rubber excluding moulding
82.	Tea processing with boiler
83.	Teflon based products
84.	Thermocol manufacturing (with boiler)
85.	Thermometer manufacturing.



Sl. No.	Orange Category
63	Ply-board manufacturing (including Veener and Laminate) with oil fired boiler / thermic fluid heater (without resin plants)
64	Potable alcohol (IMFL) by blending, bottling of alcohol products.
65	Printing ink manufacturing
66	Printing or etching of glass sheet using hydrofluoric acid.
67	Printing press
68	Producer gas plant using conventional up drift coal gasification (linked [partially invisible] to rolling mills, glass and ceramic industry, refractories for decentralized [partially invisible] fuel supply)
69	Reprocessing of waste plastic including PVC
70	Rolling mill (oil or coal fired) and cold rolling mill.
71	Ship building
72	Silk screen printing, sari printing by wooden blocks (with boiler)
73	Sports goods
74	Spray painting, paint baking, paint shipping.
75	Steel and steel products using various furnaces like blast furnace / open [partially invisible] hearth furnace / induction furnace / arc furnace / submerged arc [partially invisible] furnace / basic oxygen furnace / hot rolling reheated furnace.
76	Steel furniture, Almirah, Grill Manufacturing (Dry mechanical process) with spray painting
77	Stone crushers
78	Surgical and medical products including prophylactics and latex.
79	Synthetic detergents and soaps (excluding formulation), where wastewater generation is upto 100 KLD
80	Synthetic resins
81	Synthetic rubber excluding moulding
82	Tea processing with boiler
83	Tephlon based products
84	Thermocol manufacturing (with boiler)
85	Thermometer manufacturing.

Sl. No.	Orange Category
86.	Tobacco products including cigarettes and tobacco / opium processes.
87.	Transformer repairing/ manufacturing (Dry process only)
88.	Tyres and tubes vulcanization/ hot retread
89.	Vegetable oil manufacturing including solvent extraction and refinery / hydrogenated oils, where wastewater generation is upto 100 KLD
90.	Wasting of used sand by hydraulic discharge
91.	Wire drawing and wire netting
Green Category	
1.	Aluminium utensils from Aluminium Circle by pressing only (Dry Mechanical Operation)
2.	Avurvedic & Homeopathic medicines (without boiler)
3.	Bakery /confectionery / sweets products with production capacity <1 TPD (with Gas and electrical oven)
4.	Bi-axially oriented PP film along with metalizing operations.
5.	Biomass briquettes (sun drying) without using toxic hazardous wastes.
6.	Blending of melamine resins & different powder additives by physical mixing.
7.	Block making for printing
8.	Brass and bell metal utensils from circles (dry mechanical operation without re-rolling facility)
9.	Bulk cement terminal
10.	Candy
11.	Cardboard / corrugated box & Paper products (excluding paper or pulp manufacturing and without using boilers)
12.	Carpentry & wooden furniture manufacturing (Excluding saw mill) with the help of electrical (motorized) machines such as electrical wood planner, steel saw cutting circular blade etc.
13.	Carpentry excluding saw mill and excluding motorized machines.
14.	Cement products (without using asbestos / boiler / steam curing) like pipe, pillar, jaffery, well ring, tiles etc.) should be done in closed covered shed to control fugitive emissions



Sl. No.	Green Category
15.	Ceramic colour by mixing & blending only (not using boiler and wastewater recycling process)
16.	Chilling plant, ice making and / or cold storage (without using Ammonia)
17.	Chuda mill
18.	CO <sub>2</sub> recovery
19.	Coke briquetting (sun drying)
20.	Cotton spinning and weaving (Small scale)
21.	Cutting, sizing and polishing of marble stone
22.	Dal Mills
23.	Decoration of ceramic cups and plates by electric furnace
24.	Digital printing on PVC clothes
25.	Distilled water (without boiler) with electricity as source of heat
26.	Emery powder (fine dust of sand manufacturing)
27.	Facility of handling, storage and transportation of food grains in bulk
28.	Flour mills (Dry process)
29.	Fly ash export, transport and disposal facilities
30.	Glass, ceramic, earthen potteries, tile and tile manufacturing * using electrical kiln or not involving fossil fuel kiln.
31.	Glue from starch (physical mixing) with gas / electrically operated oven/ boiler.
32.	Gold and silver smithy (purification with acid smelting operation and sulphuric acid polishing operation) using less or equal to 1 litre of sulphuric acid / nitric acid per month
33.	Granite Polishing Units
34.	Heat treatment with any of new technology like ultra sound probe, induction hardening, ionization beam, gas carburizing etc.
35.	Hotels upto 20 rooms & without boilers and wastewater generation less than 10 KLD and no boiler and no Hazardous Waste generation.



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Sl. No.	Green Category
15	Ceramic colour by mixing & blending only (not using boiler and [partially invisible] wastewater recycling process)
16	Chilling plant, ice making and / or cold storage (without using [partially invisible] Ammonia)
17	Chuda mill
18	CO <sub>2</sub> recovery
19	Coke briquetting (sun drying)
20	Cotton spinning and weaving (Small scale)
21	Cutting, sizing and polishing of marble stone
22	Dal Mills
23	Decoration of ceramic cups and plates by electric furnace
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28	Flour mills (Dry process)
29	Fly ash export, transport and disposal facilities
30	Glass, ceramic, earthen potteries, tile and tile manufacturing using electrical kiln or not involving fossil fuel kiln.
31	Glue from starch (physical mixing) with gas / electrically operated oven/ boiler.
32	Gold and silver smithy (purification with acid smelting operation and sulphuric acid polishing operation) using less or equal to 1 litre of sulphuric acid / nitric acid per month
33	Granite Polishing Units
34	Heat treatment with any of new technology like ultra sound probe, induction hardening, ionization beam, gas carburizing etc.
35	Hotels up to 20 rooms & without boilers and wastewater generation [Illegible] than 1[partially visible] KLD and no boiler and no Hazardous Waste generation.

Sl. No.	Green Category
36.	Insulation and other coated papers (excluding paper or pipe manufacturing)
37.	Leather foot wear /products (excluding tanning and hide processing except collage scale)
38.	Lubricating oil, greases or petroleum based products (only blending at normal temperature)
39.	Manufacturing of Pasted veneers using gas fired boiler or thermic fluid heater and by sun drying
40.	Manufacturing of food additives, nutrients and flavours.
41.	Manufacturing of optical lenses (using electrical furnace)
42.	Mineral stock yard / railway siding
43.	Mineralized water
44.	Musical instrument and manufacturing
45.	Modular wooden furniture from particle board, MDF & sawn timber etc. Ceiling tiles / partition board from saw dust, wood chips etc., and other agricultural waste using synthetic adhesive resin, wooden box making (without boiler)
46.	Oil and gas transportation pipeline
47.	Oil mill Ghani and extraction (no hydrogenation / refining)
48.	Optical frames
49.	Packing materials manufacturing from non-asbestos fibre, vegetable fiber, yarn
50.	Phenyl/toilet cleaner (formulation and bottling)
51.	Polythene and plastic products manufacturing (virgin plastic)
52.	Poultry, Hatchery and Piggery (Poultry farms handling 1,00,000 or more birds at a given time in single location as per CPCB guidelines)
53.	Power looms (without dye and bleaching)
54.	Puffed rice (muri) using gas or electrical heating system.
55.	Pulverization of bamboo & scrap wood
56.	Pulverizing units



## Green Category

Sl. No.	
57.	Raw Rice Mill (Pre Boiled)
58.	Ready mix cement concrete
59.	Reprocessing of waste cotton
60.	Rice mill (Rice hullers only)
61.	Rolling mill (Gas fired) and cold rolling mill
62.	Rubber goods industry (with gas operated baby boiler)
63.	Saw mills
64.	Seasoning of wood in steam heated chamber
65.	Shoe lace manufacturing
66.	Soap manufacturing (hand made without steam boiling / boiler)
67.	Spice grinding
68.	Steel furniture without spray painting
69.	Steeping and processing of grains
70.	Synthetic detergent formulation
71.	Tamarind powder manufacturing
72.	Tea processing without boiler
73.	Tyres and tube retreating without boiler
<b>White (Non-polluting industries)</b>	
1	Assembly of Air coolers /conditioners, repairing and servicing
2	Assembly of Bicycles, baby carriages and other small motorizing vehicles.
3	Bailing (hydraulic press) of waste papers
4	Bio fertilizer and bio-pesticides without using inorganic chemicals.
5	Biscuits trays etc. from rolled PVC sheets. (using automatic vacuum foaming machine)
6	Blending / packing of tea
7	Block making of printing without foundry (excluding wooden block making)
8	Candles manufacturing



Sl. No.	White (Non-polluting) Category
9	Chalk making from plaster paris by casting without boilers etc..( sun drying / electrical oven)
10	Compressed oxygen gas from crude liquid oxygen (without use of any solvents and by maintaining pressure & temperature only for separation of other gases)
11	Cotton and woolen hosiers making (dry process only without any drying / washing operation)
12	Diesel pump repairing and servicing (complete mechanical dry process)
13	Electric lamp (bulb) and CFL (by assembling only)
14	Electrical and electronic item assembling (dry process)
15	Engineering and fabrication units (dry process without any heat treatment/metal surface finishing operations/painting)
16	Flavoured betel nuts (production / grinding) completely by dry mechanical operation.
17	Fly ash bricks/ block manufacturing
18	Fountain pen manufacturing and assembling only
19	Garment Stitching and tailoring
20	Glass ampules & vials making from glass tubes.
21	Glass putty and sealant (by mixing with machine only)
22	Gold and silver thread zari work
23	Ground nut decorticating
24	Handloom/ carpet weaving (without drying and bleaching operation)
25	Jobbing and machining
26	Leather cutting and stitching (more than 10 machine and using motor)
27	Manufacturing of steel trunk / suitcases
28	Manufacturing of Coir items from coconut husk
29	Manufacturing of Metal caps, containers etc
30	Manufacturing of Shoe brush and wire brush
31	Medical oxygen
32	Organic and inorganic nutrients (by physical mixing)



Sl. No.	White (Non-polluting) Category
33	Organic manure (manual mixing)
34	Packing of powdered milk
35	Paper pins and U clips
36	Radio Assembling
37	Repairing of electric motors /generators (dry mechanical process)
38	Rope (plastic and cotton)
39	Scientific and mathematical instrument manufacturing
40	Solar module for non-conventional energy apparatus manufacturing unit
41	Solar power generation through solar photovoltaic cell, wind power and mini hydel power (less than 25 MW)
42	Surgical and medical products assembling only (not involving effluent/ emission generating process)



Sl. No.	White (Non-polluting) Category
33	Organic manure (manual mixing)
34	Packing of powdered milk
35	Paper pins and U clips
36	Radio Assembling
37	Repairing of electric motors /generators (dry mechanical process)
38	Rope (plastic and cotton)
39	Scientific and mathematical instrument manufacturing
40	Solar module for non-conventional energy apparatus manufactu[partially invisible]ring unit
41	Solar power generation through solar photovoltaic cell, wind pow[partially invisible]er and mini hydel power (less than 25 MW)
42	Surgical and medical products assembling only (not involving effluent/ emission generating process)

## Annexure-VIII

**INSPECTION REPORT OF M/S. SANKERJANG RAILWAY SIDING**  
**AT/PO- SANKERJANG, TAHSIL: BANARPAL, DIST-ANGUL**

The proposed site for establishment and operation of railway siding (RS) at Sankerjang Railway Station, Sankerjang, Tahsil: Banarpal in the district of Angul was visited on date: 01.11.2024 to verify the suitability of the new site for the establishment of railway siding at Sankerjang Railway Station, Sankerjang, Tahsil: Banarpal, Dist-Angul for handling of Coal (bulk commodities) – 15000 Metric Tonnes/Month. Sri S.R. Jha, A.G.M., Environment, Mythri Infra & Mining Pvt. Ltd. accompanied the undersigned during the site visit.

**Consent Status:**

- The unit had previously applied for CTE, vide application No.: 5244504, dtd. December 20th, 2023 and the file was rejected on August 6, 2024, vide Board's Letter No.: 2872 due to close proximity of the nearby dwellings to the proposed site for railway siding.
- Now the unit has again applied a fresh Consent to Establish vide online application No.5876765, dtd.17.10.2024 for the establishment of railway siding at Sankerjang Railway Station, Sankerjang, Tahsil: Banarpal, Dist-Angul for handling of Coal (bulk commodities) – 15000 Metric Tonnes/day.
- The unit has already paid CTE fees of amount Rs.2,35,136/- on dtd.20.12.2023 vide money receipt no.39662 which is adequate.

**1.0 Project at a glance**

Correspondence Address	National Aluminum Company Ltd City:Nalco Bhawan, P/1,Nayapalli.Bhubaneswar Tehsil:Bhubaneswar, District:Khordha Telephone:0674-2301988 E-mail: <a href="mailto:kmucob@nalcoindia.co.in">kmucob@nalcoindia.co.in</a>
Category	GREEN
Coal Handling Capacity	15000 Metric Tonnes/Month
Land Requirement	16.23 Acres (Acquired)
Water Requirement	02 KLD, Source: Groundwater
Project Cost	Rs.82.83 Crores (as mentioned in the CA certificate submitted by the unit.)

**2.0 Location of the unit:**

1. The unit has now changed the previously proposed site and a new alignment has specifically been selected to maximise distance from the nearby dwellings and minimise impact on the nearest habitations and to reduce potential disturbances on the surrounding community.
2. Co-ordinates of the proposed site are 20°51'36.13"N (Latitude) & 84°59'51.78"E (Longitude). The proposed site for railway siding is at Sankerjang village, Tahsil: Banarpal, Dist-Angul.
3. The total area acquired by the unit is about 16.23 acres, bearing 31 plots under Sankerjang and Golabandha Panchayat.
4. From the KML file submitted online by the unit followed by field visit, it was observed that the proposed site is located at about 150m (approximately) away in the south from the nearest human habitation, Badadanda Sahl is also at a distance of 155m (approx.) away in south from the nearest human habitation, Golabandha village and at a distance of 200m (approx.) away in east

from the nearest human habitation. Jindal Stainless Private Ltd. plant exists at a distance of 300m (approx.) in the North direction.

5. Kerjang Railway Station is at an aerial distance of 1.8 km (approx.) and Derjang Reservoir is at a distance of 1.8 kms (approx.) from the proposed site.
6. Nearest Health centre is at a distance of about 1.6 km (approx.) and School (Government Primary School, Golabandha) at a distance of 530m (approx.) from the proposed site.
7. NH-55 is at a distance of 4.5kms and SH-63 is at a distance of 3.5kms (approx.) from the proposed site. And also a small temple named Mallikeswar Temple is at a distance of 220m (approx.) from the proposed site.

### 3.0 Brief Description about the unit:

- It is proposed to transport coal from mines of M/s. Utkal-D Coal Mine of M/s. National Aluminium Company Ltd. located in Chendipada area of Angul district to the proposed site through road. Siding will be used for storage of coal and loading of wagons for further transportation of coal through rail to M/s NALCO, CPP.
- As per NALCO's letter vide no. 816/2024 received on dtd.28.10.2024, IDCO had acquired the land in favour of KCMPL during the year 2006, and there was no permanent or temporary civil structures were present near the vicinity of 300m from the proposed Railway Siding project and all the construction near the proposed area have been constructed after the allotment of land to NALCO for RS project.
- Moreover, Railway Siding is categorised as a green category industry as per Board's notification vide letter no.8333, dtd.11.07.2018 which implies that it may be assessed as a comparatively minimal polluting industry in comparison to other category industries.
- Most importantly, the sole purpose of construction of this railway siding proposed by NALCO is for maximum reduction of truck movement for coal transportation to NALCO which may prove to be a vital contributor for reduction of overall pollution load and may be a major step for greener environment in Angul.

### 4.0 Pollution Potential:

#### Water:

Industry has proposed to consume 2.0 m<sup>3</sup>/day of water for sprinkling (dust suppression) purpose which will be sourced from groundwater. The siding has proposed measures for water pollution control as:

- I. Garland drain shall be provided all along the boundary wall inside the RS and mineral stack yard.
- II. Provision shall be made for collection of wash water from the garland drain and water so collected shall be treated in a sedimentation tank for further use inside the premises for watering plantations and dust suppression etc.
- III. Under no circumstances the wash water shall be allowed to go outside the premises.
- IV. All mineral storage areas containing fine or dusty materials shall be covered with tarpaulins when not in use and fitted with Automatic Water Sprinkling/Dry fog systems shall be done.
- V. Dry fog cannon of throw put 100m with 1800 rotational axis should be installed at stockyards and siding areas at regular intervals.

Annexure-IX

E-mail: [rospcb.angul@ospboard.org](mailto:rospcb.angul@ospboard.org)Website: [www.ospboard.org](http://www.ospboard.org)

**OFFICE OF THE REGIONAL OFFICER  
STATE POLLUTION CONTROL BOARD, ODISHA**

(DEPARTMENT OF FOREST, ENVIRONMENT & CLIMATE CHANGE, GOVT. OF ODISHA)

Plot No. S-3/3, Industrial Estate, Hakimpada, Angul-759143

No. 3637 /RS/ROSPCB/AGL/13/2023-24

Date: 05.11.2024

"By Registered post"

**CONSENT TO ESTABLISH ORDER**

In consideration of the online application No. 5876765, dtd.17.10.2024 for obtaining consent to establish (NOC) for M/s. Sankerjang Railway Siding the State Pollution Control Board is pleased to convey its Consent to Establish under Section 25 of Water (Prevention & Control of Pollution) Act, 1974 and Section 21 of Air (Prevention & Control of Pollution) Act, 1981 and the Rules framed there under for establishment of Railway Siding for Handling & Transportation of Coal- 15,000 Metric Tonnes/Day, over a total area of 16.23 acres, bearing 31 plots At: Sankerjang & Golabandha Mouza, PO/PS/Tahasil: Banarpal (Plot nos. and Khata nos. as mentioned in the submitted documents along with application form) in the district of Angul subjected to the following conditions.

**GENERAL CONDITIONS:**

01. This Consent to establish is valid for the raw materials, product, manufacturing process and capacity mentioned in the application form. This order is valid for five years, which means the proponent shall commence construction of the project within a period of five years from the date of issue of this order. If the proponent fails to do substantial physical progress of the project within five years then a renewal of this consent to establish shall be sought by the proponent.
02. The industry shall comply to the provisions of Environment Protection Act, 1986 and the rules made there under with their amendments from time to time such as the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended from time to time, Hazardous Chemical Rules, / Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 etc. and amendments there under. The industry shall also comply to the provisions of Public Liability Insurance Act, 1991, if applicable.
03. The industry is to apply for grant of Consent to operate under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 & Air (Prevention & Control of Pollution) Act, 1981 at least 3 (three) months before the commercial production and obtain Consent to Operate from this Board.
04. This consent to establish is subject to statutory and other clearances from Govt, of Odisha and/or Govt, of India, as and when applicable.

**SPECIAL CONDITIONS:**

**A. GENERAL:**

1. This consent to establish is granted for the capacity as mentioned above and any expansion in the capacity change or modification in the process addition, alternation any nature has to be undertaken with prior approval of the Board. For any change in the site or area, fresh consent to establish has to be obtained from the Board.
2. The land on which the unit is proposed to be established shall be converted to industrial use Kسام by the competent authority (if any). The copy of said land

conversion document shall be submitted to the Board along with consent to operate application.

3. The civil construction shall be carried out with the fly ash bricks. If the fly ash bricks are not available locally the civil construction may be carried out with other bricks with prior intimation to the concerned Regional Office of SPC Board. A quarterly statement indicating the use of fly ash bricks during civil construction shall be submitted to the Board for record.
  4. If any information furnished by the applicant is found to be incorrect or suppressed and detected on a later stage, the consent to establish shall be revoked including initiation of appropriate legal action as deemed fit as per the provisions of Water (Prevention & Control of Pollution) Act, 1974 & Air (Prevention & Control of Pollution) Act, 1981 as amended thereof and rules framed thereunder.
  5. The Board may impose further conditions or modify the conditions as stipulated in this order during installation and/or at the time of obtaining consent to operate and may revoke this order in case the stipulated conditions are not implemented and/or information is found to have been suppressed / wrongly furnished in the application form.
  6. Unit shall abide by the provisions of Environment (Protection) Act, 1986 and rules framed there under.
- B. WATER POLLUTION:**
1. Garland drain shall be provided all around the boundary wall at the appropriate places depending upon the slope of the area, inside the mineral stack-yard. Provision shall be made for collection of wash water from the garland drain and the water so collected shall be treated in a sedimentation tank for further use inside the premises for green belt or water sprinkling etc.
  2. In case the wastewater contains any substance which is harmful to the environment, the same shall be treated to remove the substance so as to meet the prescribed norms.
  3. Domestic effluent shall be discharged to soak pit through septic tank constructed as per BIS specifications.
  4. No wastewater would be discharged to outside premises by any means.
  5. Rain water harvesting practices shall be followed by utilizing the rain water collected from the roof of the administrative buildings for recharging of ground water within the premises as per the concept and practices prescribed by CPCB.
  6. Domestic effluent shall be discharged to septic tank followed by soak pit via which is to be constructed as per BIS specifications.
  7. Wheel washing system with wastewater treatment facility shall be provided at the entry and exit point of the site.
- C. AIR POLLUTION:**
1. Reinforced concrete boundary shall be constructed around the stockyard, particularly on the side facing human habitation, to enhance containment and safety.
  2. Metallic wind barrier of designated height will be constructed to reduce dust dispersal beyond the stockyard.
  3. The unit shall install adequate fog cannons & fixed sprinklers (fog/mist type) at regular intervals at the railway siding and mineral stack yards to prevent the dust getting air borne during handling of coal.
  4. Dust suppression arrangement such as vehicle mounted mobile fog cannons and sprinkling by water tankers shall be deployed and operated regularly at the proposed site.

5. Separate shortest road shall be constructed at the end of the railway siding to public road with black top/concrete/paver block facility to reduce fugitive emission during transportation.
  6. All entry point, internal roads and loading/unloading areas must be made road worthy for movement of heavy vehicles by using low permeability material (e.g. concrete or bitumen) and be cleaned regularly to minimise potential for dust generation and off-site impact. In case the road condition deteriorated due to movement of heavy vehicle, the unit shall repair the same and there shall be no public inconvenience.
  7. A boundary wall of adequate height shall be constructed along the periphery of the mineral stack yard to prevent the fine particles from being carried away with surface run off to nearby water bodies. Metallic wind barrier of designated height will be constructed to reduce dust dispersal beyond the stockyard.
  8. The height of material within storage areas must be kept below the height of the boundary wall at all times to prevent the material getting air borne.
  9. All mineral Storage areas containing fine or dusty materials must be either:
    - covered with tarpaulins when not in use, or
    - fitted with Automatic Water Sprinkling / Dry fog systems
  10. Appropriate preventive measures shall be taken for control of fire hazards at the Railway Siding.
  11. Multi-tier (2-3 tier) greenbelt plantation shall be established all around the boundary, creating a natural barrier to improve air quality and reduce noise.
  12. Planting of trees all along the connecting road and regular grading of such road shall be carried out to prevent generation of dust due to movement of dumpers/trucks.
  13. The operators' cabin in the dumpers and trucks shall be provided with dust proof enclosure and the persons working at high dust prone areas shall be provided with dust mask.
  14. Smoke emission from heavy duty vehicle operating in the stack yard/railway siding shall conform to the standards prescribed under the Motor Vehicle Rules, 1989 and amendments thereof.
  15. Use of high pressure horns in the heavy duty vehicles operating in the mineral stack yard and railway siding shall be avoided.
  16. Noise level should remain within the ambient noise standard.
  17. Speed limit of dumpers/trucks used for loading /unloading of materials shall not exceed 10 kmph. Overloading of vehicles shall be avoided.
  18. Occupiers of the stack yard/railway siding shall ensure that vehicles used have valid "Pollution Under Control (PUC)" certificate.
  19. During transportation of material by trucks/tippers /wagons through public roads, the vehicles shall be properly covered with tarpaulin sheets and shall play in safe speed. The truck/tippers shall have sufficient free board. Spillage of material on public roads shall be cleared immediately on occurrence.
  20. Regular cleaning and wetting of the ground should be done within the premises.
  21. Adequate care shall be taken to prevent creation of ruts and pot holes in the connecting roads.
  22. Proper housekeeping at the material storage areas, loading & dispatch areas, service facilities, etc., shall be practiced.
  23. The Industry shall maintain the emission standards, noise standards and stack height of DG Sets as prescribed under E (P) Rule, 1986 as amended thereof.
- D. SOLID & HAZARDOUS WASTE:**
1. The solid waste generated from the plant in form of shell, fines, etc. shall be disposed off inside the plant premises in an environmental sound manner and the coal fines shall be sold to outside parties without causing public nuisance.

To  
Sri Srinivasa Subrahmanyam Neralla,  
Executive Director (Smelter and Power)  
M/s. NALCO Ltd.  
At: NALCO Bhawan P/1, Nayapalli,  
Bhubaneswar, Odisha.

Memo No. 3638 /Date 05.11.2024 /

Copy forwarded to:

1. The Member Secretary, SPC Board, Odisha, Bhubaneswar
2. The Collector and District Magistrate, Angul
3. The DDM, Talcher, Angul
4. The GM, DIC, Angul
5. Guard File, Regional Office, Angul.

  
Regional Officer  
~~Regional Officer~~  
State Pollution Control Board  
Regional Office, Angul

  
Regional Officer  
~~Regional Officer~~  
State Pollution Control Board  
Regional Office, Angul

*etc*

Signature Not Verified

Digitally Signed by : Regional  
Officer

Date: 2024.11.05 15:03:47 IST

Page 4 of 4



E-mail: [parihesh1@ospcboard.org](mailto:parihesh1@ospcboard.org)  
Website: [www.ospcboard.org](http://www.ospcboard.org)

## STATE POLLUTION CONTROL BOARD, ODISHA

[DEPARTMENT OF FOREST, ENVIRONMENT & CLIMATE CHANGE, GOVERNMENT OF ODISHA]  
Parihesh Bhawan, A/118, Nilakantha Nagar, Unit - VIII  
Bhubaneswar - 751012

No. 20216 /

IND-II-CTE-7356

Date: 09.12.2024 /  
Through online/  
By speed post

### AMALGAMATION OF CONSENT TO ESTABLISH ORDER

In consideration of the online application no **5890205** for obtaining Consent to Establish for **Utkal- D and Utkal-E Coal Mines of M/s National Aluminium Company Limited (NALCO)**, the State Pollution Control Board is pleased to convey its Consent to Establish under Section 25 of Water (Prevention & Control of Pollution) Act, 1974 and Section 21 of Air (Prevention & Control of Pollution) Act, 1981 for **amalgamation with modification for existing Consent to Establish Utkal D Coal Block (ML Area 301.28 ha with granted production capacity 2.0 MTPA Vide Letter no. 11898 (27.11.2020) Subsequent corrigendum vide letter no. 2204 dt.15.02.2021 for mining lease area of 301.28 ha and subsequent CTE amendment vide letter no. 84 dated 11.01.2023 for coal transportation) and Utkal E Coal Block (ML area 523.036 ha with granted production capacity 2.0 MTPA vide Letter no. 12001 dated 13.08.2021) by modifying and amalgamating the Utkal- D & Utkal- E block with total coal production capacity of 4 MTPA and total lease area of 824.316 ha located at Villages- Rajjharan, Nandicchor, Kosal and Similisahi and At- Utkal- Coal Block, Chendipada, Tehsil- Chhendipada in the District of Angul with the following conditions:**

#### GENERAL CONDITIONS:

This Consent to Establish is valid for the product, method of mining and capacity mentioned in the application form. This order is valid for **five years** from the date of issue of first CTE Order Dt. 27.11.2020. The proponent shall do substantial mining activities for the proposal within a period of validity period of five years from the date of issue of first Consent to Establish order Dt. 27.11.2020. If the proponent fails to do substantial mining activities for the proposal within five years then a renewal of this Consent to Establish shall be sought by the proponent.

2. The mine shall apply for grant of Consent to Operate under Section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of Air (Prevention & Control of Pollution) Act, 1981 at least 3 (three) months before the commencement of production and obtain Consent to Operate from this Board.
3. No change in mining technology and scope of work shall be made without prior approval of the Board.
4. This Consent to Establish is subject to statutory and other clearances from Govt. of Odisha and/or Govt. of India, as and when applicable.

**SPECIAL CONDITIONS:****A. GENERAL:**

1. The proponent shall carry out mining activity as per Environmental Clearance issued vide EC Identification No- EC24A0101OR5612898N Dt. 7-12-2024 by MoEF&CC, Govt. of India modification of existing Environmental Clearance (ECs) of Utkal D Coal Block (ML Area 301.28 ha with Granted production capacity 2.0 MTPA) and Utkal E Coal Block (ML area 523.036 ha with Granted production capacity 2.0 MTPA) by amalgamating the Utkal- D & Utkal- E block with total coal production capacity of 4 MTPA and total lease area of 824.316 ha by M/s National Aluminium Company Limited (NALCO) located at Village- Nandichhod (Gopiballavpur), Gopinathpur Jungle, Kosala, Kundajhari Jungle, Korada, Rajjharan Similisahi, Tehsil- Chhendipada, District- Angul, Odisha.
2. The proponent shall mix the fly ash generated by thermal power plant with OB for back filling of the mine as per Fly Ash Notification of MoEF&CC, Govt. of India Dt. 31-12-2021 and amendments made thereafter.
3. The mine shall obtain Forest Clearance under Van (Sanrakshan Evam Samvardhan) Adhiniyam Act 1980 for the forest land involved in the mining lease.
4. Any Nalla passing through Utkal-E Coal block shall not be diverted without the prior permission from the Department of Water Resources (DoWR), Govt. of Odisha. Further, all protection measures as suggested by DoWR shall be implemented at site to protect the nallas.
5. The mine shall implement the Pollution Control Measures and safeguards as proposed in the Environment Management Plan (EMP) of Environment Impact Assessment (EIA) report.
6. The proponent shall submit six monthly progress report every year (i.e. June and December) of mining activity of the project to the Board (at Head Office and Regional Office) for record and verification.
7. The mine shall follow the Rules and Guidelines of Steel and Mines Department, Govt. of Odisha on stacking of mineral and OB.
8. The mine shall not store for more than seven days of coal production to avoid coal fire in stock yards as well as coal seam. The mine shall take adequate preventive measures for spontaneous fire in the coal seam as well as stock yard and an action plan regarding this shall be submitted at the time of consent to operate application.
9. The method of mining shall be opencast mining by shovel-dumper in overburden and surface miner, loader and tipper in coal. No change in mining technology and scope of working shall be made without prior approval of the Board.
10. Coal transportation from the Coal Stockyard of mine to the CPP NALCO through roads (including forest road, state highway SH-63 and NH-55 approx. 40 km) is allowed till Rail transport infrastructure at San-Kerjang is developed and made operational. The project proponent shall ensure that the operationalization of San-Kerjang Railway siding by July, 2025 after which the road transport of coal shall be reduced by 50%. The mine shall submit definite proposal for complete coal transportation through railway.
11. A green belt of adequate width and density preferably with local species along the periphery of the mine, inactive dumps, backfilled area, vacant area and any other vacant area shall be raised so as to provide protection against particulates and noise to ameliorate the

environment. A detailed plantation programme in conformity with approved Mining Plan shall be prepared and submitted at the time of making application for consent to operate for assessment.

12. Adequate measures shall be taken for control of noise levels below 85 dB (A) in the work environment.
13. Environmental laboratory should be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board.
14. A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the Organization.
15. The mine shall obtain NOC from CGWA for using and dewatering of mine pit water for the amalgamated lease.
16. The mine shall take permission from Department of Water Resources, Govt. of Odisha for use/ withdrawal of ground water and surface water.
17. The construction shall be carried out with the fly ash bricks. If the fly ash bricks are not available locally the construction may be carried out with other bricks with prior intimation to the concerned Regional Office of SPC Board. A statement indicating use of fly ash bricks during construction period shall be submitted to the Board quarterly for record.
18. The construction and demolition waste to be generated from the proposed project shall be disposed of in accordance with the provision under "Construction & Demolition Wastes Management Rules 2016".
19. The proponent shall comply to the provisions of E-Waste (Management) Rules, 2022 and amendments made thereafter and shall handover e-waste to registered producers/ recyclers/ re-furbishers for proper disposal of E-Waste.
20. Adequate measures shall be taken for control of noise levels to meet the standards as per the Rule 2(1) of the Environmental (Protection) Amendment Rules, 2000 notified vide notification G.S.R. 742 (E). dated 25.09.2000 and Noise Pollution Rule, 2016.
21. The conditions as stipulated in this consent to establish order shall be enforced, inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974 the Air (Prevention & Control of Pollution) Act, 1981 the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
22. The Board may impose further condition or modify the conditions stipulated in this order during installation, and / or at the time of obtaining consent to operate and may revoke this clearance in case the stipulated conditions are not implemented and / or any information suppressed in the application form.
23. The unit shall abide by the provision of Environment (Protection) Act, 1986 and rules framed thereafter.

**B. WATER POLLUTION:**

24. The mine shall construct settling tanks in series/ sedimentation pond to settle the suspended solids in the surface run-off water and seepage water.

25. Under no circumstances shall there be discharge of mine wastewater outside the ML area except during monsoon.
26. Garland drains (size, gradient and length) and sump capacity shall be designed keeping 50% safety margin over and above the hourly peak rain fall and maximum discharge in the area adjoining the mine site. Sump capacity should have adequate retention period to allow proper settling of silt material.
27. Dimension of the retaining wall at the toe of dumps and OB benches within the mine to check run-off and siltation shall be based on the rainfall data. The detail specification shall be worked out and submitted to the Board
28. Catch drains of appropriate size should be constructed to divert the run off from the OB dump to the siltation pond of appropriate size to arrest silt and sediment flows from soil, OB and mineral dumps. Similar arrangement shall be done around the coal stack pile area. The drains should be regularly desilted and maintained properly. Surface run-off from OB dump area, coal pile area, top soil storage area shall be routed through adequate settling pond (designed maximum hourly rain fall basis) to meet prescribed standard of SS-100 mg/l and Oil & Grease-10 mg/l before discharge into natural stream/water courses during monsoon.
29. Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells. The monitoring should be done four times a year in pre-monsoon (April/May), monsoon (August), Post - monsoon (November) and winter (January) seasons. Data thus collected should be submitted to the Board quarterly.
30. The domestic wastewater generated from the mine shall be treated in sewage treatment plant to meet the following standards as notified by the MoEF & CC, Govt. of India vide G.S.R. 1265 (E), dated 13.10.2017. The treated water shall be reused for gardening and plantation. Under no circumstances there shall be any discharge of untreated wastewater to outside the premises.

Sl. No.	Parameters	Standards
1	pH	6.5-9.0
2	BOD (mg/l)	30
3	TSS (mg/l)	<100
4	Fecal Coliform (MPN/100 ml)	<1000

31. ETP Comprising of Oil and grease trap shall be installed before discharge of effluent from workshop. Wastewater from the mine pit, check dams or any other discharge leaving lease boundary of the mine should be properly collected, treated in ETP so as to conform the following standard  
i.e. pH = 5.5 - 9.0, SS = 100 mg/l, COD = 250,mg/l & Oil & Grease = 10 mg/l.
32. The proponent shall ensure installation of ETP of adequate capacity for treatment of wastewater to be generated from the mining and other activities.
33. Rainwater harvesting practice shall be followed by utilizing the rain water collected from the roof of the buildings for recharging of ground water within the premises and other large structures as per the concept and practices prescribed by CPCB, New Delhi and details of which is available in the web site. The management of mine drainage water shall be efficiently done as per the directive of the Central Ground Water Board, New Delhi.

34. The Mine shall provide mechanized wheel washing system along with effluent treatment and recycling facilities at the exit point of the mine. Wheel wash facilities shall be provided to minimize transfer of mud from unpaved approach roads to main paved and/or public roads.

**C. AIR POLLUTION:**

35. Transportation road shall be black topped / concreted and sustainable coal transport measures shall be adopted to minimize air pollution.
36. No village road shall be used for transportation of coal and no road transport route shall be adopted, which is passing through any sensitive location such as schools, hospitals etc.
37. High efficiency bag filters shall be installed at crushers of the Coal Handling Plants if any. Water sprinkling systems shall be provided to check fugitive emissions from crushing operations, conveyor system, haulage roads, transfer points etc. Provision of movable chutes shall be made during loading at CHP to avoid free fall of coal.
38. Drilling shall be avoided to the maximum possible extent. However, drills should be wet operated or with dust extractors and controlled blasting should be practiced.
39. The mine shall develop wind barrier wall of 10 meters height all around the coal stack yard to control fugitive coal dust emission.
40. The mine shall provide adequate number of trolley mounted and mobile Fog Cannons for dust suppression.
41. Water sprinkling shall be carried out on unplanted surface of OB dump to control fugitive emission.
42. The mine shall provide water or water mixed chemicals for dust suppression at all strategic points such as coal stack yards, loading and unloading points, all transfer points, conveyors etc. to suppress dust fine atomizer nozzles arrangement shall be provided on the coal heaps and on land around the crusher / pulverizes. As far as possible conveyors and transfer points etc. shall be provided with enclosures.
43. Four (4) ambient air quality monitoring stations for 24 hours operation should be established in the core zone as well as in the buffer zone for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> monitoring. Location of the stations shall be decided based on the metrological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Data on ambient air quality (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>) shall be regularly submitted to the State Pollution Control Board once in six months.
44. The mine shall comply the following standard at the loading or unloading, haul road, coal transportation road, coal handling plant (CHP), blasting, drilling, overburden dumps or any other dust generating external sources as per the Rule 2(1) of the Environmental Amendment Rules, 2000 notified vide notification G.S.R. 742 (E), dated 25.09.2000.

Pollutant	Time weighted average	Concentration in Ambient Air	Method of Measurement
1	2	3	4
SPM	Annual Average* 24 hours**	360µg/m <sup>3</sup> 500µg/m <sup>3</sup>	High volume sampling (Average flow rate not less than 1.1m <sup>3</sup> /min)
RPM (size less	Annual Average*	180µg/m <sup>3</sup>	Respirable Particulate matter

Pollutant	Time weighted average	Concentration in Ambient Air	Method of Measurement
1	2	3	4
than 10 $\mu\text{m}$ )	24 hours**	250 $\mu\text{g}/\text{m}^3$	sampling and analysis
SO <sub>2</sub>	Annual Average* 24 hours**	80 $\mu\text{g}/\text{m}^3$ 120 $\mu\text{g}/\text{m}^3$	Improved west and Gaeke method Ultraviolet fluorescence
NO <sub>2</sub>	Annual Average* 24 hours**	80 $\mu\text{g}/\text{m}^3$ 120 $\mu\text{g}/\text{m}^3$	Jacob & Hochheiser Modified (Na-Arsenic) Method Gas phase Chemiluminescence

(\*Annual Arithmetic mean for the measurements taken in a year, following the guidelines for frequency of sampling laid down in clause-2.

\*\*24 hourly/ 8 hourly values shall be met 92% of the time in a year. However, 8% of the time may exceed but not on two consecutive days.)

45. The haul roads and arterial roads shall be made black topped / concrete with avenue plantation.
46. The unit shall strictly comply with the consent conditions and adequate air pollution control measures shall be installed in different potential dust emission points for control of the air pollution.
47. Coal stockpile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust side cladding all along the conveyor gantry shall be made to avoid air borne dust.
48. Water sprinkling shall be carried out on unplanted surface of QB dump to control fugitive emission.
49. Continuous ambient air quality monitoring stations (CAAQMS) with data transfer facility shall be established in the core zone as well as in the buffer zone for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> monitoring. Location of the stations shall be decided based on the metrological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board.

#### D. SOLID & HAZARDOUS WASTE:

50. The Hazardous Wastes generated from the mine shall be stored on concrete floor under covered shed and disposed of as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended from time to time.
51. Top soil of mining area shall be stacked separately with proper slope at earmarked site (s) with adequate measures and shall be used for reclamation and rehabilitation of mined out areas.
52. Back filling of abandoned pit shall be carried out as per approved mining plan. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status in this regard shall be submitted to the Board on yearly basis. The mine shall explore the possibility for back filling of mine voids by fly ash generation from nearby thermal power plant.
53. The management practices for Over Burden shall be carried out as per the approved Mining Plan and subsequent amendments. The Mine shall submit compliances in this regard for any change in Mine Plan.

54. Municipal solid waste generated from the township shall be disposed-off as per Solid Waste Management Rules, 2016.
55. The proponent shall segregate organic waste segregated organic waste shall be converted to manure through organic waste converter. The proponent shall store the organic waste in closed shed inside the proposed township, if any, before use of the same in organic waste converter.
56. All required sanitary and hygienic measures shall be in place before starting construction activities of township and to be maintained throughout the construction phase.

Encl.: As above

  
MEMBER SECRETARY

To

The GGM Smelter and Power,  
M/s Utkal-D and E Coal Mines of M/s NALCO  
City- NALCO Bhawan, P/1 Nayapalli  
Tehsil- Bhubaneswar, District- Khurda

Memo No. \_\_\_\_\_ / Date: \_\_\_\_\_ /

Copy forwarded to:

1. The Director, Directorate of Mines, Govt. of Odisha, Bhubaneswar
2. The Collector and District Magistrate, Angul
3. The DFO, Angul
4. The Regional Officer, SPCB, Odisha, Angul
5. CTO Cell (Mines), SPCB, Odisha, Bhubaneswar
6. HWM Cell, SPCB, Odisha, Bhubaneswar
7. Guard file

  
ADDL. CHIEF ENV. ENGINEER



**NATIONAL AMBIENT AIR QUALITY STANDARDS**  
**CENTRAL POLLUTION CONTROL BOARD**  
**NOTIFICATION**

New Delhi, the 18th November, 2009

No. B-29016/20/90/PCI-I.—In exercise of the powers conferred by Sub-section (2) (h) of section 16 of the Air (Prevention and Control of Pollution) Act, 1981 (Act No.14 of 1981), and in supersession of the Notification No(s). S.O. 384(E), dated 11<sup>th</sup> April, 1994 and S.O. 935(E), dated 14<sup>th</sup> October, 1998, the Central Pollution Control Board hereby notify the National Ambient Air Quality Standards with immediate effect, namely:-

**NATIONAL AMBIENT AIR QUALITY STANDARDS**

S. No.	Pollutant	Time Weighted Average	Concentration in Ambient Air		
			Industrial, Residential, Rural and Other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Annual* 24 hours**	50 80	20 80	- Improved West and Gaeke - Ultraviolet fluorescence
2	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Annual* 24 hours**	40 80	30 80	- Modified Jacob & Hochheiser (Na-Arsenite) - Chemiluminescence
3	Particulate Matter (size less than 10µm) or PM <sub>10</sub> , µg/m <sup>3</sup>	Annual* 24 hours**	60 100	60 100	- Gravimetric - TOEM - Beta attenuation
4	Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub> , µg/m <sup>3</sup>	Annual* 24 hours**	40 60	40 60	- Gravimetric - TOEM - Beta attenuation
5	Ozone (O <sub>3</sub> ), µg/m <sup>3</sup>	8 hours** 1 hour**	100 180	100 180	- UV photometric - Chemiluminescence - Chemical Method
6	Lead (Pb), µg/m <sup>3</sup>	Annual* 24 hours**	0.50 1.0	0.50 1.0	- AAS/ICP method after sampling on EPM 2000 or equivalent filter paper - ED-XRF using Teflon filter
7	Carbon Monoxide (CO), mg/m <sup>3</sup>	8 hours** 1 hour**	0.2 0.4	0.2 0.4	- Non Dispersive Infra Red (NDIR) spectroscopy
8	Ammonia (NH <sub>3</sub> ), µg/m <sup>3</sup>	Annual* 24 hours**	100 400	100 400	- Chemiluminescence - Indophenol blue method

## THE GAZETTE OF INDIA : EXTRAORDINARY

[PART III—S.C. 4]

	(3)	(4)	(5)	(6)	
9	Benzene (C <sub>6</sub> H <sub>6</sub> ) µg/m <sup>3</sup>	Annual*	05	05	<ul style="list-style-type: none"> <li>Gas chromatography based continuous analyzer</li> <li>Adsorption and Desorption followed by GC analysis</li> </ul>
10	Benzo(a)Pyrene (BaP) - particulate phase only, ng/m <sup>3</sup>	Annual*	01	01	<ul style="list-style-type: none"> <li>Solvent extraction followed by HPLC/GC analysis</li> </ul>
11	Arsenic (As), ng/m <sup>3</sup>	Annual*	06	06	<ul style="list-style-type: none"> <li>AAS /ICP method after sampling on EPM 2000 or equivalent filter paper</li> </ul>
12	Nickel (Ni), ng/m <sup>3</sup>	Annual*	20	20	<ul style="list-style-type: none"> <li>AAS /ICP method after sampling on EPM 2000 or equivalent filter paper</li> </ul>

Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

- \*\* 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

Note — Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further investigation.

SANT PRASAD GAUTAM, Chairman  
[ADVT-III.4/18409/Envy]

The notifications on National Ambient Air Quality Standards were published by the Central Pollution Control Board in the Gazette of India, Extraordinary vide notification No(s) S.O. 384(I), dated 11<sup>th</sup> April, 1994 and S.O. 935(E), dated 14<sup>th</sup> October, 1998.

ANNEXURE-II**SCHEDULE**  
(see rule 3(l) and 4(l))

## Ambient Air Quality Standards in respect of Noise

Area Code	Category of Area/Zone	Limits in dB(A) Leq *	
		Day Time	Night Time
(A)	Industrial area	75	70
(B)	Commercial area	65	55
(C)	Residential area	55	45
(D)	Silence Zone	50	40

## Note

1. Day time shall mean from 06:00 A.M. to 10:00 P.M.
2. Night time shall mean from 10:00 P.M. to 06:00 A.M.
3. Silence zone is defined as an area comprising not less than 100 meters around hospitals, educational institutions and courts. The silence zones are zones which are declared as such by the competent authority.
4. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.

\*dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

A "decibel" is a unit in which noise is measured.

"A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

Leq : It is an energy mean of the noise level, over a specified period.

Validity unknown  
VIJ. R. Secy.

Digitally Signed by: H.A. PANA  
BEHERA

Date: 2024.12.09 11:36:17 IST

*True Copy attested  
B. Behera  
Adh*

516

~~ANNEXURE B/S~~

Page 1 of 15

CONSENT ORDER  
 UTKAL-D AND UTKAL-E COAL MINES OF M/S NALCO LTD.

BY REGD. POST WITH AD

**STATE POLLUTION CONTROL BOARD, ODISHA**

(DEPARTMENT OF FOREST, ENVIRONMENT & CLIMATE CHANGE, GOVERNMENT OF ODISHA)  
 A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012  
 Phone-2561909, Fax: 2562822, 2560955 E-mail: paribesh1@ospboard.org, Website: www.ospboard.org

**CONSENT ORDER**No. 14291 /

IND-I-CON-7003

Dt. 29.07.2025CONSENT ORDER NO. 4096.

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

Ref: Your online application No.6056264, Dated 30-12-2024 and online reply dated 23-07-2025.

Consent to operate is hereby granted under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act, 1981 and rules framed thereunder to

Name of the Industry: UTKAL-D AND UTKAL-E COAL MINES OF M/S NALCO LTD.

Name of the Occupier & Designation: SRI SRINIVASA SUBRAHMANYAM NERALLA,  
 GGM (SMELTER) & EPO ED S & P,

Address: AT: RAJHARAN, NANDICCHOR, KOSAL, PO: CHHENDIPADA, DIST: ANGUL

This consent order is valid for the period upto 31.03.2026.

*This consent order supersedes the earlier consent order issued vide letter No.6581, dated 28.03.2025.*

**Details of Products Manufactured**

Sl. No.	Product	Quantity
1.	Coal	4.0 MTPA

This consent order is valid for the specified outlets, discharge quantity and quality, specified chimney/stack, emission quantity and quality of emissions as specified below. This consent is granted subject to the general and special conditions stipulated therein.

CONSENT ORDER  
UTKAL-DAND UTKAL-1 COAL MINES OF M/S NALCO LTD.

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

Out let No.	Description of outlet	Point of discharge	Quantity of discharge KL/hr	Prescribed Standard				
				pH	TSS (mg/l)	Oil & Grease (mg/l)	BOD (mg/l)	COD (mg/l)
01	Septic tank (Domestic effluent)	Soak pit	--	5.5 to 9.0	200	--	100	--
02	Mine Drainage water/surface runoff/other wastewater	On land/ inland surface water body	--	5.5 to 9.0	100	10	--	250

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

Chimney Stack No.	Description of Stack	Stack height (m)	Quantity of emission	Prescribed Standard		
				PM (mg/Nm <sup>3</sup> )	SO <sub>2</sub>	NO <sub>x</sub>
						--

C. Disposal of solid waste permitted in the following manner

Sl. No.	Type of Solid waste	Quantity generated (TPD)	Quantity to be reused on site (TPD)	Quantity to be reused off site (TPD)	Quantity disposed off (TPD)	Description of disposal site.
1.	Top soil/over burden	As per approved mining plan	--	--	--	As per approved mining plan

**D. GENERAL CONDITIONS FOR ALL UNITS**

1. The consent is given by the Board in consideration of the particulars given in the application. Any change or alternation or deviation made in actual practice from the particulars furnished in the application will also be the ground for liable to review/variation/revocation of the consent order under section 27 of the Water (Prevention & Control of Pollution) Act, 1974 and section 21 of Air (Prevention & Control of Pollution) Act, 1981 and to make such variations as deemed fit for the purpose of the Acts.
2. The occupier would immediately submit revised application for consent to operate to this Board in the event of any change in the quantity and quality of raw material / products / manufacturing process or quantity / quality of the effluent rate of emission / air pollution control equipment / system etc.
3. The applicant shall not change or alter either the quality or quantity or the rate of discharge or temperature or the route of discharge without the previous written permission of the Board.
4. The application shall comply with and carry out the directives/orders issued by the Board in this consent order without any negligence on his/her part. In case of non-compliance of any order/directives issued at any time and/or violation of the terms and conditions of this consent order, the applicant shall be liable for legal action as per the provisions of the Law.
5. The applicant shall make an application for grant of fresh consent at least 90 days before the date of expiry of this consent order.
6. The issuance of this consent does not convey any property right in either real or personal property or any exclusive privileges nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State laws or regulation.
7. This consent does not authorize or approve the construction of any physical structure or facilities or the undertaking of any work in any natural water course.
8. The applicant shall display this consent granted to him in a prominent place for perusal of the public and inspecting officers of this Board.
9. An inspection book shall be opened and made available to Board's Officers during the visit to the factory.
10. The applicant shall furnish to the visiting officer of the Board any information regarding the construction, installation or operation of the plant or of effluent treatment system / air pollution control system / stack monitoring system any other particulars as may be pertinent to preventing and controlling pollution of Water / Air.
11. The applicant shall display suitable caution board at the place where the effluent is entering into any water-body or any other place to be indicated by the Board, indicating therein that the area into which the effluents are being discharged is not fit for the domestic use/bathing.
12. Storm water shall not be allowed to mix with the trade and/or domestic effluent on the upstream of the terminal manholes where the flow measuring devices will be installed.
13. The applicant shall maintain good house-keeping both within the factory and the premises. All pipes, valves, sewers and drains shall be leak-proof. Floor washing shall be admitted into the effluent collection system only and shall not be allowed to find their way in storm drains or open areas.
14. The applicant shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems install or used by him to achieve with the term(s) and conditions of the consent.
15. Care should be taken to keep the anaerobic lagoons, if any, biologically active and not utilized as mere stagnation ponds. The anaerobic lagoons should be fed with the required nutrients for effective digestion. Lagoons should be constructed impervious.
16. The utilization of treated effluent on factory's own land, if any, should be completed and there should be no possibility of the effluent gaining access into any drainage channel or other water courses either directly or by overflow.
17. The effluent disposal on land, if any, should be done without creating any nuisance to the surroundings or inundation of the lands at any time.
18. If at any time the disposal of treated effluent on land becomes incomplete or unsatisfactory or create any problem or becomes a matter of dispute, the occupier must adopt alternate satisfactory treatment and disposal measures.
19. The sludge from treatment units shall be dried in sludge drying beds and the drained liquid shall be taken to equalization tank.
20. The effluent treatment units and disposal measures shall become operative at the time of commencement of production.
21. The applicant shall provide port holes for sampling the emissions and access platform for carrying out stack sampling and provide electrical outlet points and other arrangements for chimneys/stacks and other sources of emissions so as to collect samples of emission by the Board or the applicant at any time in accordance with the provision of the Acts or Rules made therein.

## CONSENT ORDER

UKAL-D AND UKAL-E COAL MINES OLEM'S NALCO LTD.

22. The applicant shall provide all facilities and render required assistance to the Board staff for collection of samples / stack monitoring / inspection.
23. The applicant shall not change or alter either the quality or quantity or rate of emission or install, replace or alter the air pollution control equipment or change the raw material or manufacturing process resulting in any change in quality and/or quantity of emissions, without the previous written permission of the Board.
24. No control equipments or chimney shall be altered or replaced or as the case may be erected or re-erected except with the previous approval of the Board.
25. The liquid effluent arising out of the operation of the air pollution control equipment shall be treated in the manner so as to meet the standards prescribed by the Board in accordance with the provisions of Water (Prevention and Control of Pollution) Act, 1974 (as amended).
26. The stack monitoring system employed by the applicant shall be opened for inspection to this Board at any time.
27. There shall not be any fugitive or episodal discharge from the premises
28. In case of such episodal discharge/emissions the occupier shall take immediate action to bring down the emission within the limits prescribed by the Board and stop the operation of the plant if required. Report of such accidental discharge /emission shall be brought to the notice of the Board within 24 hours of occurrence.
29. The applicant shall keep the premises and air pollution control equipments clean and make all hoods, pipes, valves, stacks/chimneys leak proof. The air pollution control equipments, location, inspection chambers, sampling port holes shall be made easily accessible at all times
30. Any upset condition in any of the plant/plants of the factory which is likely to result in increased effluent discharge/emission of air pollutants and / or result in violation of the standards mentioned shall be reported to the Headquarters and Regional Office of the Board by E-mail within 2 hours of its occurrence.
31. The occupier has to ensure that minimum three varieties of trees are planted at the density of not less than 1000 trees per acre. The trees may be planted along boundaries of the premises. This plantation is stipulated over and above the bulk plantation of trees in that area.
32. The solid waste such as sweeping, wastage packages, empty containers residues, sludge including that from air pollution control equipments collected within the premises of the shall be disposed off scientifically to the satisfaction of the Board.
33. All solid wastes arising in the premises shall be properly classified and disposed off to the satisfaction of the Board by :
- i) Land fill in case of inert material, care being taken to ensure that the material does not give rise to leachate which may percolate into ground water or carried away with storm run-off.
  - ii) Controlled incineration, wherever possible in case of combustible organic material.
  - iii) Composting, in case of bio-degradable material.
34. Any toxic material shall be detoxicated if possible, otherwise be sealed in steel drums and buried in protected areas after obtaining approval of this Board in writing. The detoxication or sealing and burying shall be carried out in the presence of Board's authorized persons only. Letter of authorization shall be obtained for handling and disposal of hazardous wastes.
35. If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above requires variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard, vary all or any of such condition and thereupon the applicant shall be bound to comply with the conditions so varied.
36. The applicant, his/his/legal representatives or assignees shall have no claim whatsoever to the condition or renewal of this consent after the expiry period of this consent.
37. The Board reserves the right to review, impose additional conditions or condition, revoke change or alter the terms and conditions of this consent
38. Notwithstanding anything contained in this conditional letter of consent, the Board hereby reserves to it the right and power under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 to review any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Act by the Board.
39. The conditions imposed as above shall continue to be in force until revoked under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 and section 21 A of Air (Prevention & Control of Pollution) Act, 1981
40. The occupier shall comply to the conditions stipulated in CTE order issued by Odisha State Pollution Control Board and conditions stipulated in Environmental Clearances issued by MoEF&CC, Govt. of India.
41. The occupier shall abide by E(P) Act, 1986 and Rules framed there-under.
42. In case the consent fee is revised upward during this period, the industry shall pay the differential fees to the Board (for the remaining years) to keep the consent order in force. If they fail to pay the amount within the period stipulated by the Board the consent order will be revoked without prior notice.



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

1. The applicant shall analyse the emissions every month for the parameters indicated in TABLE. B & C as mentioned in this order and shall furnish the report thereof to the Board by the 10<sup>th</sup> of the succeeding month.
2. The applicant shall provide and maintain at his own cost three ambient air quality monitoring stations for monitoring Suspended Particulate Matter, Sulphur Dioxide, Oxides of Nitrogen, Hydro-Carbon, Carbon-Monoxide and monitor the same once in a day/week/fortnight/month. The data collected shall be maintained in a register and a monthly extract be furnished to the Board.
3. The applicant shall provide and maintain at his own cost a meteorological station to collect the data on wind velocity, direction, temperature, humidity, rainfall, etc. and the daily reading shall be recorded and the extract sent to the Board once in a month.
4. The applicant shall forward the following information to the Member Secretary, State Pollution Control Board, Odisha, Bhubaneswar regularly.
  - a. Report of analysis of stack monitoring, ambient air quality monitoring meteorological data as required every month.
  - b. Progress on planting of trees quarterly.
5. The applicant shall install mechanical composite sampling equipment and continuous flow measuring / recording devices on the effluent drains of trade as well as domestic effluent. A record of daily discharge shall be maintained.
6. The following information shall be forwarded to the Member Secretary on or before 10<sup>th</sup> of every month.
  - a. Performance / progress of the treatment plant.
  - b. Monthly statement of daily discharge of domestic and/or trade effluent.
7. Non-compliance with effluent limitations
  - a) If for any reason the applicant does not comply with or is unable to comply with any effluent limitations specified in this consent, the applicant shall immediately notify the consent issuing authority by telephone and provide the consent issuing authority with the following information in writing within 5 days of such notification.
 

Causes of non-compliance

    - i) A description of the non-compliance discharge including its impact on the receiving waters.
    - ii) Anticipated time of continuance of non-compliance if expected to continue or if such condition has been corrected the duration or period of non-compliance.
    - iii) Steps taken by the applicant to reduce and eliminate the non-complying discharge and
    - iv) Steps to be taken by the applicant too prevent the condition of non-compliance.
  - b) The applicant shall take all reasonable steps to minimize any adverse impact to natural waters resulting from non-compliance with any effluent limitation specified in this consent including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.
  - c) Nothing in this consent shall be construed to relieve the applicant from civil or criminal penalties for non-compliance whether or not such non-compliance is due to factors beyond his control, such as break-down, electric failure, accident or natural disaster.
8. The applicant shall at his own cost get the effluent samples collected both before and after treatment and get them analysed at an approval laboratory every month for the parameters indicated in Part-D and shall submit in duplicate the report thereof to the Board.
9. The addition of various treatment chemicals should be done only with mechanical dosers and proper equipment for regulation of correct dosages determined daily and for proper uniform feeding. Crude practices such as dumping of chemicals in drains or sumps or trickling of acids or alkalis arbitrarily and utilizing poles for stirring etc. should not be resorted to.
10. In the disposal of treated effluent on land for irrigation, the industry shall keep in view of the need for;
  - a. Rotation of crops
  - b. Change of point of application of effluent on land
  - c. A portion of land kept fallow.
11. The adoption of these would avoid soil becoming sick or slate, the industry may ensure this in consultation with the Agriculture Department.
12. It is the sole responsibility of the industry to ensure that there are no complaints at any time from the royats in the surrounding areas as a result of discharge of sewage or trade effluent if any.
13. Proper housekeeping shall be maintained by a dedicated team.
14. The industry must constitute a team of responsible and technically qualified personnel who will ensure continuous operation of all pollution control devices round the clock (including night hours) and should be in a position to explain the status of operation of the pollution control measures to the inspecting officers of the Board at any point of time. The name of these persons with their contact telephone numbers shall be intimated to the concerned. Regional Officer and Head Office of the Board and in case of any change in the team it shall be intimated to the Board immediately.



**E. SPECIAL CONDITIONS :**

- 1) This Consent Order to the aforesaid mining project is under provisions of Water (PCP) Act, 1974 and Air (PCP) Act, 1981. It does not tantamount to approvals / consent / permissions etc. required to be obtained under any other Act / Rule / Regulation. Operation of the mining project is subject to availability of all other statutory clearances required under relevant Acts/Rules.
- 2) The quantity of production shall be determined on a monthly pro-rata basis from the date of issue of this order. If the date of issue is 15<sup>th</sup> of the month, or earlier, then the entire month will be considered for calculation, otherwise the quantity shall be determined from the next month on pro-rata basis.
- 3) Mining operation in the amalgamated block of Utkal-D & Utkal-E Mines of M/s. NALCO Ltd is subject to permission from MoEF & CC, Govt. of India, Steel & Mines Department, Govt. of Odisha and State Forest Department.
- 4) Permission from competent authority shall be obtained for drawl of surface water/ground water for usage.
- 5) Excavation of coal shall be done using surface miners. The surface miner shall be operated along with dust control measures.
- 6) Drills shall either be operated with dust extractors or equipped with water injection system to minimize dust generation in the work environment. Controlled blasting shall also be done and blasting shall be carried out during day time.
- 7) Loading, unloading and coal stack yard shall have adequate dust suppression measures. The pollution control systems shall be properly maintained and operated.
- 8) The haul roads and arterial roads shall be made black topped / concrete with avenue plantation. Necessary dust suppression measures shall also be taken in these roads to prevent generation of dust during movement of vehicles. Plantation of thick leaf trees on both sides of the road shall be done.
- 9) Mobile water sprinkling shall be provided for dust suppression on the temporary quarry haul roads and sprinkling of water shall be done at desired intervals so as to prevent generation of fugitive dust.
- 10) All internal coal transportation roads, temporary mine haul roads and other material transportation roads of the mine shall be maintained properly to avoid creation of ruts and pot holes.
- 11) Coal transportation from the Coal Stockyard of mine to Captive Power Plant NALCO shall be done through road over a distance of 40 km [2 km within the lease area (In plt to ML boundary) + 38 km outside the ML Area (Approach Road to SH-63, SH-63 & NH-55)] is allowed with permission from concerned authority till Rail transport infrastructure at San-Kerjang is developed and made operational. The project proponent shall ensure that the operationalization of San-Kerjang

- Railway siding by December, 2026 to reduce the coal transportation by road (19 km distance)
- 12) Plantation shall be carried out with the saplings of native species of not less than 2 meter height, on both the sides of the coal transportation route in consent with the highway authorities (wherever required). The community plantation shall be carried out within the Angul town with fruit bearing species and ensure the survival of the same.
  - 13) Ambient Air Quality (AAQ) and Noise quality data along the entire coal transportation route shall be monitored and data shall be submitted to Board on annual basis. In case of exceedance observed in monitoring value, remedial action shall be taken to bring down the values within prescribed limit.
  - 14) The railway sidings shall be upgraded to silo-loading facilities integrated with air pollution control facilities. A time-bound action plan shall be prepared and submitted to the Board.
  - 15) Coal transportation through roads shall be done in covered vehicles. To ensure that the trucks are covered with tarpaulin, IP cameras shall be installed at the exit points of mine and shall be connected to the SPCB server. No village road shall be used for transportation of coal and no road transport route shall be adopted, which is passing through any sensitive location such as schools, hospitals etc.
  - 16) After commissioning of the Mahanadi Coal Rail Ltd. (MCRL) Railway siding, coal shall be conveyed from the coal stockyard through Coal Handling Plant and Rapid Loading Silo (of 4000 T capacity) through a series of conveyors of 2000 Tonnes per hour rated capacity for loading of coal into wagons at proposed MCRL Railway Siding for further transportation of coal to the delivery point in accordance with the provisions of the Coal Mining Agreement. For the establishment of MCRL railway siding, separate Consent to Establish shall be obtained from the Board.
  - 17) Instant water shower system at the exit point of the quarry shall be provided and all heavy vehicles loaded with coal shall move through the instant shower system. Mechanized wheel washing facility for coal transport vehicles at the exit point of the quarry or at the coal stack yard as per the requirement shall be provided. The wheel washing facility shall be integrated with complete recirculation system. The existing wheel washing facility shall be upgraded to body washing facility alongwith wastewater treatment and recirculation system.
  - 18) Transportation of coal through rail shall be enhanced to 80% of total coal to be despatched in the year 2025-26.
  - 19) All necessary precaution shall be taken to prevent fire in coal stack yards and coal seams. Necessary precautionary measures, inter alia, maintaining a minimum stock shall be taken to avoid fire hazards in the coal stack yard. A technology based mechanism shall be adopted for monitoring and mitigation of coal fire.
  - 20) The mine shall develop wind barrier wall of 10 meters height all round the coal stack yard to control fugitive coal dust emission.
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CONSENT ORDER  
UKAL-D AND UKAL-J COAL MINES OF M/S NALCO LTD.



- 21) Fog canons shall be deployed at the coal stockyard for control of fugitive dust emission.
- 22) Ambient air quality measured at a distance of 500m from the dust generating sources {Loading or un-loading, haul road, coal transportation road, coal handling plant (CHP), Railway siding, Blasting, Drilling, overburden dumps or any other dust generating source like nearby roads etc.} in the down wind direction shall meet the following standards.

<u>Pollutant</u>	<u>Concentration in (microgram/m<sup>3</sup>) (24 hourly)</u>	
SPM	-	500
RPM	-	250
SO <sub>2</sub>	-	120
NO <sub>x</sub>	-	120

In case any residential or commercial or industrial place falls within 500 metres of any generating sources, the National Ambient Air Quality Standards for industrial area notified shall be applicable.

- 23) Adequate Ambient Air Quality Monitoring Stations (at least 04 nos.) shall be established in core as well as in buffer zone and locations shall be decided in consultation with the Regional Officer, State Pollution Control Board. Monitoring of parameters shall as SPM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> shall be done.
- 24) Monitoring of Ambient Air Quality of the mine shall be done once in a fortnight (24 hourly) and data shall be submitted to the State Pollution Control Board once in a year.
- 25) Continuous ambient air quality monitoring stations (CAAQMS) with data transfer facility shall be established in the core zone as well as in the buffer zone for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> monitoring. Location of the stations shall be decided based on the metrological data, topographical features and environmentally and ecologically sensitive targets in consultation with the Regional Officer, State Pollution Control Board. The action plan with time limit for installation of CAAQMS shall be submitted within 07 days. Till installation of CAAQMS, AAQ monitoring shall be carried out as per Special Condition No.22 & 23.
- 26) The top soil and overburden shall be removed separately and stored it in separate heaps, duly covered with grass and vegetation and shall be utilized for backfilling of mined out area in future. No OB dumping shall be done outside the mine lease area.
- 27) The proponent shall mix the fly ash generated by thermal power plant with OB for back filling of the mine as per Fly Ash Notification of MoEF&CC, Govt. of India Dt. 31-12-2021 and amendments made thereafter.
- 28) Action shall be taken for removal of residual coal going along with overburden so that spontaneous fire in the dump site can be eliminated. Water sprinkling arrangements shall also be provided at the coal seam faces and active dump sites to control fire.

- 29) The surface runoff generated from the mining area during monsoon shall be diverted to adequate size of sedimentation pond for storage and use. Systems shall be in place for collection and channelizing the surface runoff to the sedimentation pond.
- 30) Strata water generated during mining operation shall be diverted to adequate size of sedimentation pond for storage and use.
- 31) Water from sedimentation pond shall be used for sprinkling purposes on haulage roads, other dust generating areas, vehicle washing and plantation activities. In case of discharge of strata water and runoff to outside, it shall conform to the prescribed standard (Part-A, Sl. No. 2).
- 32) Workshop from where water pollution due to wash out of oil and grease and suspended solids is expected, Effluent Treatment Plant (ETP) shall be operated at all the time and the quality of the treated wastewater shall remain within the following standards and shall be re-used for washing of vehicles:

pH	-	6.5 -8.5
TSS	-	50 mg/l
Oil & grease	-	10 mg/l
COD	-	150 mg/l

No wastewater from workshop shall be allowed to be discharged to outside under any circumstances.

- 33) Domestic effluents shall be treated in a sewage treatment plant (STP) and or shall be discharged to soak pit via septic tank constructed as BIS specification. The treated wastewater quality of STP shall remain within the following standards and shall be used for plantation:

pH	-	6.5 -9.0
TSS	-	<100 mg/l
BOD	-	30 mg/l
Fecal Coliform	-	<1000 MPN/100 ml.

- 34) Acid mine drainage water if any, shall be treated adequately and used only for sprinkling activity.
- 35) Mining in Utkal-E block may be started after grant of EC in a way that the nallah is diverted only after completion of Nallah diversion study covering the impact on biodiversity by the proponent and PP shall ensure the submission of same to RO, Bhubaneswar, and MoEFCC, New Delhi.
- 36) Any Nalla passing through Utkal-E Coal block shall not be diverted without the prior permission from the Department of Water Resources (DoWR), Govt. of Odisha. Further, all protection measures as suggested by DoWR shall be implemented at site to protect the nallas.
- 37) The pre-mining and mining activities shall be commenced with a restriction not to excavate and dump overburden within 15 mtrs. on both side of nallah till clearance



CONSENT ORDER  
UTKAL-D AND UTKAL-E COAL MINES OF M/S NALCO LTD.

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- from Water Resources Department, Govt. of Odisha for diversion of nallah is obtained.
- 38) Adequate safety measures like construction of retaining wall, garland drain and settling ponds and embankment shall be made to prevent wash out during rain from the excavation area, OB dumping areas, topsoil dump, coal stockyard and other areas to these nallahs.
  - 39) The diversion of nallah and realignment shall be done as per the design and plan approved by Water Resources Dept., Govt. of Odisha. A copy of the permission from the Water Resources Dept. regarding diversion of nallah shall be submitted to the Board for record.
  - 40) Mining shall be carried out as per statuette at a safe distance from the SinghadaJhor and the nallah flowing within the lease boundary. An embankment of 3m height shall be constructed within 2 years of start of mining operations along the southern bank of the Jhor and also by the side of the diverted nallahs. The slope of the embankment shall at least 2:1 towards the ML: The height of the embankment shall be at least 5 m higher than the HFL.
  - 41) Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells. The monitoring should be done four times a year in pre-monsoon (April/May), monsoon (August), post-monsoon (November) and winter (January) seasons. Data thus collected should be submitted to the Board quarterly.
  - 42) Adequate measures shall be taken for control of noise levels below the following limits.
 

(06.00 AM – 10.00 PM)	-	Leq 75 dB(A)
(10.00PM – 06.00 AM)	-	Leq 70 dB(A)
  - 43) Ambient air quality monitoring data, noise monitoring data and wastewater quality monitoring data shall be electronically displayed at the entry point of the mine or at a suitable location of the mine for public view.
  - 44) The mine shall take action to supply of drinking water in the peripheral villages.
  - 45) The height of the stack connected to DG sets of capacity more than 800 KW (1000 KVA) shall conform to the following:
    - i)  $14Q^{0.3}$ , Q = Total SO<sub>2</sub> emission from the plant in kg/hr.
    - ii) Minimum 6m. above the building where generator set is installed.
    - iii) 30 m.
  - 46) The height of the stack connected to DG set of capacity less than and upto 800 KW (1000 KVA) shall conform to the following:
    - i)  $H = h + 0.2\sqrt{KVA}$
    - ii) h = Height of the building where it is installed in meter
    - iii) KVA = Capacity of DG set
    - iv) H = Height of the stack in meter above ground level.
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 UTKAL-D AND UTKAL-E COAL MINES OF M/S NALCO LTD.

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- 47) All DG sets installed before 1.7.2004 shall be scrapped. DG sets complying with either State-I or Stage-II emission norms shall reduce Particulate Matter Emission by 70% by installing RECD without affecting any other emission parameters as per the CPCB guidelines and Board's letter vide No.17927, dated 14.11.2023 and letter No.7146, dated 10.05.2024, in this regard.
- 48) Plantation of trees shall be undertaken in the colony/ township, over top soil dumps, OB dumps, along the side of haul road and in other areas of the mines not being utilized for mining activities. The mine shall take up avenue plantation and plantation in nearby village areas in consultation with DFO/Horticulture Department. The plantation details shall be submitted to the Board before end of April every year.
- 49) The annual coal production status shall be submitted to the Board latest by 30<sup>th</sup> April every year.
- 50) The environmental statement report for the financial year ending 31<sup>st</sup> March shall be submitted to the Board in Form-V on or before 30<sup>th</sup> September every year.

  
 MEMBER SECRETARY  
 STATE POLLUTION CONTROL BOARD, ODISHA

TO,  
 THE GGM (SMELTER) & EPO ED S & P,  
 UTKAL-D & UTKAL-E COAL MINES OF M/S NALCO LTD.,  
 AT: NALCO BHAWAN, P-1, NAYAPALLI,  
 BHUBANESWAR, DIST: KHURDA, PIN: 751 013.

Memo No. \_\_\_\_\_ /Dt. \_\_\_\_\_ /

Copy forwarded to :

- i) Regional Officer, State Pollution Control Board, Angul
- ii) District Collector, Angul
- iii) Director of Mines, Govt. of Odisha, Bhubaneswar
- iv) Director, Environment-cum-Special Secretary, F, E & CC Dept., Govt. of Odisha, Bhubaneswar.
- v) D.F.O, Angul
- vi) Deputy Director of Mines, Talcher
- vii) Chief Env. Scientist, Central Laboratory, SPCB, Bhubaneswar
- viii) Addl. Chief Env. Engineer, (Hazardous Waste Management Cell)
- ix) Guard File

CHIEF ENV. ENGINEER (M)  
 STATE POLLUTION CONTROL BOARD, ODISHA

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ANNEXURE - 13/10

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File No.: J-11015-31-2007-IA-II-M  
 Government of India  
 Ministry of Environment, Forest and Climate  
 Change  
 IA Division  
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Dated 07/12/2024

To,

Sh. Anil Kumar Panda  
 M/s National Aluminium Company Limited (NALCO)  
 NALCO Bhawan, P-1, Nayapalli P.O.-RRL, Bhubaneswar, Nayapalli, KHORDHA, ODISHA,  
 Nayapalli, 751013  
 E-mail: gm\_uecb@nalcoindia.co.in

Subject:

Modification of existing Environment Clearances (ECs) of Utkal D Coal Block (ML Area 301.28 ha with Granted production capacity 2.0 MTPA) and Utkal E Coal Block (ML Area 523.036 ha with Granted production capacity 2.0 MTPA) by amalgamating the D & E block with total coal production capacity of 4 MTPA and total lease area of 824.316 ha by M/s. National Aluminium Company Limited (NALCO) located at Village: Nandichhod (Gopiballavpur), Gopinathpur Jungle, Kesala, Kundaajari Jungle, Korada, Rajjharan, Simlilsahl, Tehsil: Chhendipada District: Angul, Odisha – Grant of Environment Clearance under Para 7 (ii) of EIA Notification, 2006-Regarding.

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/OR/CMIN/500323/2024 dated 11/10/2024 for grant of prior Environmental Clearance (EC) to the project under the provision of the EIA Notification 2006-and as amended thereof.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC24A0101OR5612898N
(ii) File No.	J-11015-31-2007-IA-II-M
(iii) Clearance Type	Fresh EC
(iv) Category	A
(v) Project/Activity Included Schedule No.	I(a) Mining of minerals
(vi) Sector	Coal Mining
(vii) Name of Project	Modification in existing ECs of Utkal D Coal Block (ML Area 301.28 ha with Granted production capacity 2.0 MTPA) and Utkal E Coal Block (ML Area 523.036 ha with Granted



- (ix) Location of Project (District, State)  
 (x) Issuing Authority  
 (xi) Applicability of General Conditions

production capacity 2.0 MTPA) by amalgamating the D & E block with total coal production capacity of 4 MTPA and total lease area of 824.316 ha Revenue villages of Tehsil: Chhendipada District: Angul, Odisha - Environment Clearance under Para 7 (ii) of EIA Notification, 2006  
 ANUGUL, ODISHA  
 MoEF&CC  
 No

3. M/s. National Aluminium Company Limited (NALCO) has made an online application vide proposal No-IA/OR/CMIN/500323/2024 dated 10.10.2024 along with copy of EIA/EMP Report (based on standard ToR), certified compliance report and Common Application Form (CAF) for the amalgamated Utkal D&E block and sought for Environment Clearance (EC) under the provisions of the para 7(ii) of EIA Notification, 2006 for the project mentioned above.

4. The proposed project activity is listed at schedule no 1 (a) 'Mining of Minerals' under Category "A" of the EIA Notification, 2006. Hence, the project is being appraised at Central Level.

5. The instant Proposal was considered by the EAC (Coal) in its 17th meeting held during 21-22nd Oct. 2024. The PP has uploaded the written information on 04.11.2024. The PP has uploaded the written information on 04.11.2024. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed at <https://parivesh.nic.in>.

#### Details submitted by the project proponent

6. The project of M/s. NALCO is located in Nandichhod (Gopiballavpur), Gopinathpur Jungle, Kosala, Kundajhari Jungle, Korada, Rajjharan, Similisaahi, Tehsil: Chhendipada District: Angul, Odisha is for modification of existing Environment Clearances (ECs) of Utkal D Coal Block (ML Area 301.28 ha with Granted production capacity 2.0 MTPA) and Utkal E Coal Block (ML Area 523.036 ha with Granted production capacity 2.0 MTPA) by amalgamating the D & E block with total coal production capacity of 4 MTPA and total lease area of 824.316 ha.

#### 7. Details of existing ECs, FCs, implementation and its compliance status

##### A. Status of ECs obtained for Utkal D & E block and its present status

S. No	Details of letter No	EC/Amendment EC/Validity Extension /Transfer EC	Capacity (MTPA) & Life of the mine	Area (Ha)	Date of Issuance	Status of Implementation
<b>Utkal D Block – Public hearing held on 24/01/2006</b>						
1.	J-11015/203/2006-IA. II (M) EC in the name of M/s Orissa Mining Corporation Limited transferred OMC to NALCO (Utkal-D Coal Block)	EC	2.0 & 52 years	301.28	29.01.2007	Implemented (CTO obtained under Air and water act for 2.0 MTPA capacity vide letter no. 4328/IND-I- CON-6762 dated 28.03.2024 valid up to 31.03.2025)
2.	J-11015/203/2006-IA. II (M) EC transferred from M/s OMC to M/s NALCO	EC transfer	2.0	301.28	11.08.2020	
<b>Utkal E Block – Public Hearing held on 30/05/2008</b>						

S. No	Details of letter No	EC/Amendment EC/Validity Extension /Transfer EC	Capacity (MTPA) & Life of the mine	Area (Ha)	Date of Issuance	Status of Implementation
3.	J-11015/31/2007-IA. II (M) Corrigendum dtd. 26.12.2013 (Utkal E Coal Mine)	EC	2.0 & 36 years	729.49	10.12.2009	Yet to be implemented (CTO obtained under Air Act and Water Act for 2.0 MTPA vide letter no. 13906 IND-I- CON-6791 dated 31.08.2024 valid up to 31.03.2025).
4.	J-11015/31/2007-IA. II (M) Corrigendum dtd. 26.12.2013 (EC transferred from NALCO to NALCO) Proposal No: IA/OR/CMIN/495414/2024	EC	2.0	523.036 (Area reduced from 729.48 Ha to 523.036 Ha)	To be accorded by the Ministry	

#### B. Status of FCs obtained for Utkal D& E block

S. No	Obtained Vide Letter No	Area (ha)	Stage-I /II	Validity
<b>A. Utkal D (total area - 143.42 Ha)</b>				
1.	S-99/2006/FC dated 20.10.2006	137.02	Stage-I clearance	Co-terminus with the Mining Lease period
2.	S-99/2006/FC dated 05.01.2017		Transfer of Stage-I clearance from M/s Orissa Mining Corporation to M/s National Aluminium Company Limited	
3.	S-99/2006/FC dated 02.09.2020		Stage II clearance	
4.	S-99/2006/FC dated 20.04.2020	6.5	Stage I clearance	
5.	S-99/2006/FC dated 06.01.2021		Stage II clearance	
<b>B. Utkal E (total area - 169.1779 Ha)</b>				
1.	S-07/2020-FC dated 12.03.2021	156.1779	Stage I clearance	Co-terminus with the Mining Lease period
2.	S-07/2020-FC dated 27.10.2022	169.1779	Stage II clearance	
3.	S-07/2020-FC dated 09.11.2022	156.1779	Corrigendum in Stage II Forest clearance	
4.	20.08.2024	13	Stage I clearance	

PP submitted that the total broken forest area is 312.6979 Ha and there is no violation of Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980.

#### C. Production details of Utkal D block

Proponent submitted that Utkal D Block became operational from 2023 - 2024 onwards. Details of the same are as follows:

YEAR	EC sanctioned Capacity (MTPA)	Actual production (MTPA)	Excess production beyond the EC sanctioned capacity
2022-2023	2.0 MTPA	Nil	
2023-2024	2.0 MTPA	0.9 MTPA	Nil
			Nil

#### D. Status of compliance to the existing EC conditions

The Status of compliance of earlier EC of Utkal D Coal Block was obtained from Regional Office, vide Letter No. 101-198/05/EPE dated 07.10.2024 in the name of M/s. National Aluminium Company Limited (NALCO). The Action taken

Report regarding the partially/non-complied condition was submitted to Regional officer MoEF&CC by NALCO/Coal Mines Division / 487/2024 dated 08.10.2024.  
 Ukhal D Coal Block - EC dated 29.01.2007

S. No	Non-compliance/ Partially compliance details	Observation of RO	Action Taken Report on Partially complied/ Non-complied condition
1.	Specific condition no. vii: Top soil shall be stacked properly with proper slope at earmarked site(s) and should not be kept active and shall be used for reclamation and development of greenbelt	One top soil dump has been observed. PP reported that "the top soil has been stacked with terracing method and proper slope and height is being maintained at earmarked site as per approved Mining Plan". PP submitted that grass seed has been sprayed on the top soil dump. Leguminous Grasses yet to be developed on the top soil dump.	The grass seeds have been sprayed on the top soil dump before monsoon season. Grasses are already started developing in patches at various locations of top soil dump.
2.	Garland drains (size, gradient and length) and sump capacity should be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity should also provide for adequate retention period to allow proper settling of silt material	During visit garland drain has been observed at the top soil dump. Garland drain has also been provided in part of the OB dump. The drain found to be full of silt in part which needs to be cleaned regularly. Garland drain along the coal dump not observed. PP reported garland drain width of 2.5 m with 60. I gradient and 2.3 km length. Capacity of sump reportedly designed for 24500 KL. It was also informed that the collected water is being utilized for sprinkling on haul road and green belt development.	Garland drains are already constructed around top soil and OB dump area. Periodic cleaning of garland drain are carried out for free water flow. Last cleaning was done before monsoon season. PP will measure periodic cleaning of garland drain. Undertaking for completion of ETP, garland drain and retention wall by 15 Nov 2024 has been submitted.
3.	Specific condition no. x: Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and siltation should be based on the rainfall data	During visit retaining wall at the toe of the OB dump has been observed. Retaining wall constructed in part of the dump not in all along.	Construction of retaining wall is currently under progress. Retaining wall of balance area will complete in another six months. Undertaking for completion of ETP, garland drain and retention wall by 15 Nov 2024 has been submitted.
4.	Specific condition no. xviii: ETP also be provided for workshop and CHP waste water	CHP has not been observed at the site. surface miner is being used. During visit an ETP has been observed. PP submitted that ETP is on trial run stage.	Construction of ETP is in final stage. Commissioning and trial run of ETP is currently under progress by the supplier. Undertaking for completion of ETP, garland drain and retention wall by 15 Nov 2024 has been submitted.
5.	General condition no. vii: Industrial waste water (workshop and waste water from mine) should be properly collected and treated so as to conform to the standard prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 as amended from time to time before	Runoff water from mine collected in mine sump. However, proper collection arrangement for vehicle washing water yet to be provided. Oil and grease trap yet to be installed. SMC-48 mine discharge water monitoring data furnished along with	Construction of ETP is in final stage. Commissioning and trial run of ETP is currently under progress by the supplier. Undertaking for completion of ETP, garland drain and

Utkal D Coal Block – EC dated 29.01.2007			
S. No	Non-compliance/ Partially compliance details	Observation of RO	Action Taken Report on Partially complied/ Non-complied condition
	discharge of workshop effluents	the submitted six monthly compliances. Data reported was within the norms of consent order.	retention wall by 15 Nov 2024 has been submitted.

The Status of compliance of earlier EC of Utkal E Coal Block was obtained from Regional Office, vide Letter No. 101-373.08/EPE dated 07.10.2024 in the name of M/s. National Aluminium Company Limited (NALCO). The Action taken report regarding the partially/non-complied condition was submitted to Regional officer MoEF&CC by NALCO/Coal Mines Division / 488/2024 dated 08.10.2024.

Utkal E Coal Block – EC dated 10.12.2009			
S. No	Non-compliance/ Partially compliance details	Observation of RO	Action Taken Report on Partially complied/ Non-complied condition
1.	Specific condition no. V: An integrated plan for Coal Transportation involving conveyor (for a total length of 5.8 km)-cum-rail thereafter to the main railway corridor shall be formulated in consultation with the neighbouring mines and the state Government keeping in mind the conservation of the local habitat and fauna such as Indian elephant using the habitat.	Mining activities have not yet started. Integrated Plan for Coal Transportation involving conveyor (for a total length of 5.8 km)-cum-rail thereafter to the main railway corridor has not been furnished.	Mining activities are yet to be started. The details of pre-mining survey on the Social-economic status of the local communities based on the UNHDR report will be submitted before commissioning of mines.
2.	Specific condition no. xxii: R&R for 417 PAF's from 2 villages Nandichhod (405) and Gopinathpur (12) and land outsees involving 311 PAFs from 2 villages Kosala (150) and Korada (161) shall be prepared and implemented within a specified time frame of Dec, 2020. R&R norms shall be not less than that of the National R&R Policy. R&R shall include annuities for the vulnerable population aged, homeless, differentially abled etc and also training programmes and skill development schemes for alternate livelihood for those not being given employment. A corpus fund shall be created for the general maintenance for the R&R policy. The status of R&R shall be regularly uploaded on the company's website.	PP submitted that the compensation packages offered per family is Rs. 35 lakhs and total outlays reported to be Rs. 7.1452 crore. However, the rehabilitation of 400 families yet to be completed.	Mining activities are yet to be started. Plan for coal transportation through railway siding will be implemented.
3.	Specific Condition No xlii: The project proponent shall undertake a pre-mining survey on the socio-economic status of the local communities based on the UNHDR and shall monitor the impact of CSR activities over the life of the project. Project specific CSR activities for the neighbouring villages being covered under CSR shall be provide capital costs for CSR activities and minimum Rs 1 crore annual revenue expenditure of Rs 5/tonne of coal whichever is	The details of pre-mining survey on the Socio-economic status of the local communities based on the UNHDR has not been furnished. Details of implementation of CSR activity has not been furnished. Details of improvement of road connectivity of the village	Mining is yet to be started. Out of 400 families, 229 are already being disbursed and remaining 171 PDF's R&R is under process at Kosala Village.

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E Coal Block – EC dated 10.12.2009		Observation of RO	Action Taken Report on Partially complied/ Non-complied condition
	Non-compliance/ Partially compliance details		
	higher (after adjusting for depreciation in value of Ruppe) towards various CSR activities undertaken over the life of the project. In addition, an amount of Rs 225 Lakh shall be used for improvement of road connectivity to villages the project site. The status of each of the activities for each of the villages shall be regularly uploaded at least twice in a year) on the company's website.	near the project has not been furnished.	
4.	General condition no. xii: The project authorities should advertise at least in two local newspaper widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance and a copy of the clearance letter is available with the state pollution control board and may also be seen at the website of the MoEFCC at <a href="http://envfor.nic.in">http://envfor.nic.in</a>	PP reported in the submitted monthly compliance "complied". Details of advertisement regarding Clearance has not been furnished	The EC letter was advertised in two local newspapers, i.e. The India Express and the Samaj on 21.06.2009. Copy of publication was sent to MoEF&CC vide NALCO letter dated 22.06.2009.

8. Reasons for amalgamation of Utkal D & E Block: It has been decided to combine Utkal – D and Utkal E Coal Mines for conserving of about 20 million tonnes of Coal getting locked up in the common barrier. Grant order for Mining Lease for Utkal D & E Combined has been issued by the State Govt vide letter dated 18.11.2023 over an area of 824.316 ha for the lease period up to 24.03.2051. Mining Plan and Mine Closure Plan for Combined Utkal D and Utkal E coal mines has been approved by Ministry of Coal on 15.05.2024.

9. Salient features of proposed amalgamation:

S. No	Description	Utkal- D	Utkal- E	D & E combined	Remarks	
A.	Total Lease Area	Govt Land	27.48	130.4103	157.8903	
		Private	130.28	223.4475	353.7275	
		Forest	143.52	169.1779	312.6979	
		Total	301.28	523.036	824.316	No Change
B.	Production Capacity (MTPA)	2.0	2.0	4.0	No Change	
C.	Details of Mining					
1.	Technology	Opencast Mining – Fully Mechanized	Opencast Mining – Fully Mechanized	Opencast Mining – Fully Mechanized	No Change	
2.	Reserves (Million Tonnes)	101.68	67.49	170.87	(+1.7)	
3.	Life of Project (Yrs)	52	36	44		
4.	OB Generation (Mm3)	200.52	205.96	382.853	(-) 23.627	
5.	Ultimate working depth	251 m bgl	227.5 m bgl	242 m bgl		
6.	Means of Transportation	Road/Rail	Conveyor covering a distance of 5.8 km to nearest railway siding and then transported by rail to existing project.	Road/Conveyor covering a distance of 5.8 km to nearest railway siding and then transported by MGR to the linked rail to existing project.		

			MGR to the linked project.		
D.	<b>Project requirements</b>				
1.	Water Requirement (KLD)	GW: 770 KLD	GW: 10 KLD	1450	
2.	Man Power requirement	Mine Pit: 760 KLD	Mine Pit: 690 KLD	878	(-237)
3.	Power requirement (MW)	540	575	7.0	(-0.4)
E.	<b>Post mine land use</b>				
1.	Total excavated Area	166.420	211.18	381.070	(+3.47)
2.	Area under Waste dump	106.570	252.84	305.990	(-53.42)
3.	Area under greenbelt and plantation	6.0	25.17	376.666	(+345.496)
F.	<b>Cost</b>				
1.	Project Cost (Rs. In Crore)	196.33	378.96	2478.82	(+1903.53)

### Environmental Site Settings:

10. The project area is covered under Survey of India Toposheet No. 73D/13 and is bounded by the geographical coordinates ranging from Latitude: 20°53'00" N to 21°12'00" N and longitudes 84°20'00" E to 85°23'00" E. Project fall/does not fall in the Critically Polluted Area (CPA)/ Severely Polluted Area (SPA), as per CEPI Assessment 2018.

**Forest Area:** The project involves total 312.6979 Ha of forest land the details of the approval already obtained as given below:

S. No	Obtained Vide Letter No	Area (ha)	Stage-I/II	Validity
<b>A. Utkal D (total area - 143.42 Ha)</b>				
1.	8-99/2006/FC dated 20.10.2006	137.02	Stage-I clearance	Co-terminus with the Mining Lease period
2.	8-99/2006/FC dated 05.01.2017		Transfer of Stage-I clearance from M/s. Orissa Mining Corporation to M/s. National Aluminium Company Limited	
3.	8-99/2006/FC dated 02.09.2020		Stage II clearance	
4.	8-99/2006/FC dated 20.04.2020	6.5	Stage I clearance	
5.	8-99/2006/FC dated 06.01.2021		Stage II clearance	
<b>B. Utkal E (total area - 169.1779 Ha)</b>				
1.	8-07/2020-FC dated 12.03.2021	156.1779	Stage I clearance	Co-terminus with the Mining Lease period
2.	8-07/2020-FC dated 27.10.2022	169.1779	Stage II clearance	
3.	8-07/2020-FC dated 09.11.2022	156.1779	Corrigendum in Stage II Forest clearance	
4.	20.08.2024	13	Stage I clearance	

**Protected Area:** The project is not located within 10 KM of any ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve/tiger corridor/elephant corridor etc. There is no violation of WLP, Act. Site-Specific Wildlife conservation plan has been prepared and approved for Utkal E mine with an amount of Rs. 543.92 Lakhs from Chief Wildlife Warden vide Memo No 10381 dated 26.10.2021 and for Utkal D mine with an amount of Rs 130 Lakhs from Chief Wildlife Warden for schedule I species (Sloth Bear (*Melurus Ursinus*), Barking Deer (*Muntiacus muntjak*), Mouse Deer (*Tragulus meminna*), Ratel (*Mellivora capensis*), Hare (*Lepus nigricollis*), Hyena (*Hyaena hyaena*), Jackal (*Canis aureus*), Langur (*Presbytis entellus*), Rhesus monkey (*Macaca radiata*), Mongoose (*Herpestes edwardi*), Common Myna (*Acridotheres tristis*), Black drongo (*Dicurus adsimilis*), Wood pecker (*Picoides maharashtra*), Red-necked parakeet (*Dinopium benghaensis*), Dove (*Streptopelia Chinensis*), Koel (*Eudymyscolopacea*), Barn Owl (*Buba buba*), Partridge (*Francolinus pondicerianus*), Quail (*Pardicula asiatica*), Yellow monitor lizard (*Varanus bengalensis*), Bino-cled cobra (*Naja naja naja*)).

11. Mine Lease details: PP submitted the following details of mine lease for both the blocks:

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S. No.	Govt. Order/Notification as the case maybe	Area (ha)
1	Nalco having two Coal Mines named Utkal D and E. It was earlier allotted to two different allottees. Central Government has decided to merge the Utkal D and E coal block and allot the mines together to M/s. National Aluminium Company Limited (NALCO) vide order no. F. No. 103/34/2015/NA dated 2 <sup>nd</sup> May 2016	824.316
2	Grant order for Mining Lease for Utkal D & E Combined has been issued from State Govt vide Letter No. 11615/SM/Bhubaneswar dated 18.11.2023 over an area of 824.316 ha for the lease period up to 24.03.2051	824.316

## 12. Method of Mining and Mine Plan:

- Mining Plan and Mine Closure Plan (Second Modification) for Utkal D and Utkal E coal mines with 4.5 million TPA targeted capacity of coal Production has been approved by Ministry of Coal vide letter No. ORAN/APP00291/2021 dated 15.05.2024. In this regard, PP informed that targeted capacity of coal production will be maintained at 4 MTPA.
- The total geographical reserves reported in the mine lease area of 824.316 Ha is 303.71 MTPA, out of which mineable reserves are 174.785 MTPA and extractable reserves are 170.876 MTPA. Percentage of extraction is 57.42%.
- There are total 20 seams, out of which working seams are 17.
- The method of mining to be adopted will be Fully Mechanized Opencast Mining Method. No underground mining is envisaged as submitted by the proponent.
- Stripping ratio is 1: 3.4.
- Life of mine is 44 years.
- Land use details:

### A. Pre-Mining

S. No.	Land Type	Particular	Area (Ha)
1.	Tenancy (Private)	Agricultural	351.819
		Township	11.998
		Barren	10.461
		Community /Other use	9.400
2.	Govt non-Forest	Agricultural	22.002
		Township	1.798
		Grazing	2.405
		Water Bodies	18.268
		Barren/Other use	83.468
3.	Forest	Reserve	312.698
Total			824.316

### B. Post Mining

S. No.	Particular	Total area (Ha)	Reclaimed Area (Ha)	Un-reclaimed area (Ha)
1.	Excavation /Quarry Area	381.070	381.070	-
a)	Backfilled Area	118.70	118.70	-
b)	Excavated Void	262.370	262.370	-
2.	External Dump	305.990	305.990	-
3.	Safety Zone	48.670	48.670	-
4.	Diversion/ below river/ nala/ Canal	27.390	-	27.390
5.	Settling Pond	1.0	1.0	-
6.	Road & Infrastructure Area	26.900	12.370	14.530
7.	Rationalization Area	11.656	11.656	-
8.	Garland Drains	0.680	0.680	-

		12.290	-	12.290
9.	Embankment	8.670	8.670	-
10.	Greenbelt	824.316	770.106	54.21 Ha
	Total			

viii. **Details of transportation:** The coal produced from the Utkal D & E block will be transported as given below:

- Coal is primarily planned to be evacuated from the south-eastern boundary of the block through conveyors from the Coal Stockyard through Coal Handling Plant and Rapid Loading Silo (of 4000 t capacity) through a series of conveyors of 2000 tonnes per hour rated capacity for loading of Coal into wagons at proposed Railway Siding platforms planned for Utkal group of blocks. Distance from block boundary to rail line is about 1.4 km. From there onwards through Coal Wagons through the Inner Rail corridor being developed by East Coast Rly. After development of rail corridor, coal from Mine site (Utkal D&E Coal block) will be transported to Utkal loading yard by Conveyor belt, thereafter it will be transported to NALCO CPP by railway only.

- As a Stopgap arrangement and till the commissioning of the Inner Rail Corridor, the Coal produced from the Mine shall be transported to Kerjanga Railway Siding by road over a distance of 19 km. Thereafter, the coal will be transported to the NALCO CPP by railway only. All the clearances / permissions has been obtained and work is going on in full swing. Work is being executed by M/s RITES. It is expected that the Kerejanga Rly siding will be commissioned by July 2025. After the commissioning of the Rly siding, 50% load on Road Transport will be decreased.

- Alternatively, Permission has been obtained by Collector Angul to transport the Coal through Road mode till the above two modes are operational. Distance of Mines pit head to CPP is 40 Kms.

- Transportation time : Night 10:00 PM to Morning 6 AM

ix. Coal produced from Utkal D & E will be used as raw material for Captive Power Plant of NALCO. The distance of the power plant from Utkal D & E Coal block is 40 Kms.

x. **Reclamation:** Afforestation shall be done covering an area of 376.666 ha at the end of mining. This will include 305.990 Ha of reclaimed external OB dump and 48.670 ha of greenbelt. Density of plantation is proposed to be 2000 trees per Ha. At Conceptual Stage, Greenbelt/Plantation will be covered over an area of 63.968 ha (Greenbelt: 8.670 ha, Safety Zone: 41.962 ha, Settling Pond 1.00 ha, Rationalization Area: 11.656 ha, Garland Drains: 0.680 ha).

13. **Details of ToR accorded and EIA/EMP report:** ToR has not been accorded for the instant proposal under consideration since it is an amalgamation proposal for existing EC's. However, PP has submitted the EIA/EMP report for the amalgamated D&E block as per the standard ToR available on Parivesh portal.

14. **Baseline Data:** The baseline data has been collected in the summer season from March 2024 to May 2024. Details of the same are as mentioned below:

S. No.	Parameter	Description
1	Period	Summer Season (March to May, 2024)
2.	AAQ parameters at 10 Locations (min and max)	PM10: 39.1 to 86.8 mg/m <sup>3</sup> PM2.5: 20.5 to 51.5 mg/m <sup>3</sup> SO <sub>2</sub> : 4.6 to 19.4 mg/m <sup>3</sup> NO <sub>2</sub> : 10.6 to 31.2 mg/m <sup>3</sup> CO: 0.54 to 0.98 mg/m <sup>3</sup>
3.	Incremental GLC Level	PM10 = 3.17 µg/m <sup>3</sup> SO <sub>2</sub> = 1.38 µg/m <sup>3</sup> Nox = 1.18 µg/m <sup>3</sup>
4.	Ground water quality at 9 Locations	pH: 6.12 to 8.41, Total Hardness: 103.9 to 178.2 mg/l, Chlorides: 49.1 to 419.7 mg/l, Fluoride: 0.48 to 0.85 mg/l. Heavy metals were analysed and not detected.
5.	Surface water quality at 8 Locations	pH: 7.5 to 7.54; DO: 6.6 to 7.1 mg/l and BOD: 3.8 to 15.6 mg/l. COD from 12 to 49 mg/l
6.	Noise levels Leq (Day and	49.2 to 59.8 dBA for the day time and 38.5 to 50.2 dBA for the Night time

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S. No.	Parameter	Description
	Night)	
7.	Soil quality at 9 locations	pH: 5.62 to 6.84 Organic Matter: 0.52% to 0.91% Nitrogen: 86.80 to 212.60 kg/ha Potassium: 239.40 kg/ha to 592.40 kg/ha Texture: Sandy loam
8.	Flora and Fauna	Site-Specific Wildlife conservation plan has been prepared and approved for Utkal E mine with an amount of Rs. 543.92 Lakhs for schedule I Species from Chief Wildlife Warden vide Memo No 10381 dated 26.10.2021. Site specific wildlife conservation plan has been prepared and approved for Utkal D mine with an amount of Rs 130 Lakhs for schedule I species from Chief Wildlife Warden.

15. **Details of water requirement:** Total water requirement is estimated as 1450 KLD, same will be sourced from Ground water as well as Mine Sump water. NOC for 1922 KLD dewatering and 10 KLD fresh water from CGWA for Utkal E vide NOC dated 14.06.2023 which will be Valid up to 13.06.2025. NOC for 3682 KLD dewatering and 770 KLD fresh water for Utkal D Coal block has been obtained from CGWA vide Noc No. CGWA/NOC/MIN/ORIG/2021/13398 dated 20.10.2021 which was valid till 19.10.2023. Application for renewal of ground water NOC for 3015.8 KLD (Domestic use 770 KLD + Dewatering /Mine Seepage 2245.8 KLD) has been submitted on 11.10.2024. Payment of water abstraction charges of Rs. 68, 13, 657/- has been submitted and also informed to CGWA vide letter dated 26.09.2024. The renewal of the NOC from the Central Ground Water Authority (CGWA) for the Utkal-D block is in its final stages.

Three seasonal streams are traversing the area proposed to be diverted are as follows:

- a) **Bedasara Nallah (Length 1600 m & Width 15 m)** - This nallah flows from SW to NE direction and passes through the North Western Portion of the Project Area. It is proposed to be diverted along the western boundary towards north side till it merges with the Singhada Jhor. This nala also shares the Gundeijeri diverted nala.
- b) **Gundeijeri Nallah (Length 4000 m & Width 15 m)** - This nallah flows from SW to NE and passes through the central portion of the Project Area. It is proposed to be diverted along northern boundary of the Durgapur Reserve Forest towards west direction till it meets the western boundary of Project Area after which it will be aligned along the western boundary towards north side till it merges with the Singhada Jhor.
- c) **Kathuamod Nallah (Length 4120 m & Width 20 m)** - This nallah flows roughly from SW to NE and passes through the South Eastern portion of the project area. This nala is under diversion first toward east along the southern boundary of the mine (along the northern boundary of Durgapur Reserve Forest) and then, after SE corner of mine, towards north along the eastern boundary upto the Singhada Jhor.
- d) NOC for diversion of above three nallahs has been obtained by the PP from Department of Water Resources, Government of Odisha, vide letter no. 26553/WR, dated 12.10.2022. Provisional permission for the diversion of the same has also been obtained vide letter dated 03.03.2023. Nallah diversion study has been carried out by Water Power Consultant, BBSR in April, 2023.

16. **Details of power requirement and diversion of Hi-tension Line:** Total 7.0 MW power requirement is there which is being/will be sourced from state grid.

17. **Public Hearing:** Public hearing for the Utkal D and Utkal E block was held on 24/1/2006 and 30/05/2008 respectively. Major issues raised during public hearing were about forest and details about fauna, clarification with regard to the presence of animals like elephant in the project site, employment details, Impact of the project in the forest area (Durgapur R.F), compensatory afforestation, Drinking water facility/water scarcity, Compensatory procedure and facilities in the rehabilitation colony, proper assessment of land, peripheral development, Environment Management. Public hearing action plan not implemented as only Utkal D mine is in operation since year 2023. However, Company has proposed an amount of Rs. 27.45 Crore to implement the issues raised during public hearing. The action plan for the same is as below:

S. No	Activities	Budget (Rs. In lakh)	Year wise budget (Rs. In lakh)		
			Year -1	Year -2	Year -3
A.	Skill Development Center				

S. No	Activities	Budget (Rs. In lakh)	Year wise budget (Rs. In lakh)		
			Year -1	Year -2	Year -3
1.	Skill Development Centre and Employment based training like Electrician, AC Mechanic, Plumber, tailoring, Driving training, Electric Motor Binding, motor welding in Village Nandichhod (Gopiballavpur), etc.	150	100	50	-
2.	Women empowerment programme for making them self-sustainable in field of dairy development, nurseries, Achar & Papad Making, vegetable farming, stitching, tailoring, grocery shops and others and marketing programme for their products	100	50	25	25
3.	Support groups for craft/ traditional development in villages of Dhobamalia, Kosala, Gopinathpur	20	-	10	10
	Sub total	270	150	85	35
<b>A. Infrastructure Development</b>					
1.	Kalyan Mandap at Village Nandichhod, Dhobamalia, Kosala, Gopinathpur, Korada	75	25	25	25
2.	Construction of concrete road at village Nandichhod and Kosala	80	40	20	20
4.	Construction of community hall at Dhobamalia, Korada, Gopinathpur and Korada	80	35	30	15
5.	5 nos Cold Drinking water facility project at village Nandichhod, Dhobamalia, Kosala, Gopinathpur, Korada	50	25	15	10
6.	Development of a new playground in Gopinathpur with facilities	120	60	30	30
7.	Construction of funeral pyre building and boundary wall of village Gopinathpur	30	10	10	10
8.	Construction of drain at Dhobamalia, Kosala, Gopinathpur	80	20	20	40
9.	Development of GOSALA in village Kosala and Gopinathpur	40	10	10	20
10.	Construction and renovation of cremation ground	40	20	20	-
11.	Construction of bathing ghat in ponds, beautification of pond, crematorium, sitting place, village entrance gate, etc.	95	40	40	15
12.	Installation of solar lights (street) in villages of Nandichhod, Dhobamalia, Kosala, Gopinathpur and Korada	100	30	30	40
	Sub total	790	315	250	225
<b>B. Education facility</b>					
1.	Construction of new rooms, Smart Classes with internet and Wi-fi facility and computer labs, separate modern toilet for girls, library with modern facilities and Arrangements of different sports facilities for children in Govt Upper Primary school of Villages Nandichhod, Dhobamalia, Kosala, Gopinathpur, Korada	300	100	100	100
2.	Arrangements of school bus for children in Villages of Nandichhod, Dhobamalia, Kosala, Gopinathpur, Korada	125	50	50	25
3.	Library set up with wi-fi facility in Villages Nandichhod and Kosala	100	30	40	30
	Sub total	525	180	190	155
<b>C. Animal Husbandry and Agriculture development</b>					
1.	Formation of Farmers Producer Organization & initiation of Farm Based enterprises on Dairy and other related business	200	100	50	50
2.	Distribution of good quality seeds to farmers, encouragement for organic farming, linkage of farmers to the source to get Organic materials and fertilizers	30	10	10	10
3.	Training for new modern technology of agriculture practices to villagers	30	10	10	10
4.	Vaccination to cattle Including De-worming	20	10	5	5
5.	5 no of Mobile Van for cattle in 5 no of villages of Nandichhod,	75	25	25	25

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S. No	Activities	Budget (Rs. In lakh)	Year wise budget (Rs. In lakh)		
			Year -1	Year -2	Year -3
	Dhobamalia, Kosala, Gopinathpur, Korada				
	Sub total				
D.	Health facility	355	155	100	100
1.	Health infrastructure development in Villages Nandichhod, Dhobamalin, Kosala, Gopinathpur, Korada	100	50	25	25
2.	Health camps in Village Villages Nandichhod, Dhobamalia, Kosala, Gopinathpur, Korada	50	20	20	10
3.	Operation of Medical Health Units (MHUs) at periphery villages of Nandichhod, Dhobamalia, Kosala, Gopinathpur, Korada	80	40	20	20
4.	Distribution of sanitary napkin vending machine in peripheral villages	100	25	25	50
	Sub total	330	135	90	105
D.	Water resource management and Sanitation				
1.	Pond and Naadi deepening and conservation (Pond in peripheral villages)	80	40	20	20
2.	Roof top RWH structures in Govt schools and Anganwadi center in peripheral Villages	30	10	10	10
3.	Village Sanitation work	50	20	15	15
4.	Household water supply to peripheral villages	50	20	20	10
5.	Bio Toilet (Community) in peripheral Villages	50	15	15	20
	Sub total	260	105	80	75
F.	Environment/Plantation in study area				
1.	plantation development in Nearby school, Govt building, along both side of the village road in peripheral Villages	150	50	50	50
2.	Waste management (Processing unit) in peripheral Villages	65	25	25	15
	Sub total	215	75	75	65
	Total	2745	1115	870	760

18. Details of Solid and Hazardous Waste: The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S. No	Type of Waste	Source	Quantity (TPA)	Mode of Treatment	Disposal
1.	Solid Waste (Domestic waste)	Residential	10		Garbage Composting
2.	Plastic Waste (Packing material)	Equipment/components/spare parts packing	0.5	-	Through registered agencies - By Road
4.	E-waste (IT equipment, electronic parts, cartridges of printer)	Office & Residential Quarters.	0.5	-	Through registered vendors -By Road
5.	Batteries Waste	From LMV and HEMV	5	-	Hand over to battery supplier or authorized recycling agency.
6.	Hazardous Waste (Sludge and filter contaminated with oil, Used or Spent Oil, Empty Barrels/container, Waste / Residue containing oil)	Workshop	248	-	By Registered Vehicle as OSPCB Guidelines
7.	C & D Waste (Houses, Shelter of Village Habitants)	Mine Site	10	-	Will be utilized in road levelling and construction work

19. Plantation: At Conceptual Stage, Greenbelt/Plantation will be covered over an area of 63.968 ha (Greenbelt: 8.670 ha,

Safety Zone: 41.962 ha, Settling Pond 1.00 ha, Rationalized Area: 11.656 ha, Garland Drains: 0.680 ha). Local and fruit bearing species are being/ will be planted in consultation with local forest officer and density of 2500 trees per Ha is proposed.

20. **R&R Issues:** R&R for 417 PAF's from 2 villages Nandichhod (405) and Gopinathpur (12) and land outsees involving 311 PAFs from 2 villages Kosala (150) and Korada (161) is proposed. Compensation package offered per family is Rs. 35 lakhs and total outlay reported to be Rs. 7.1452 crore. However, the rehabilitation of 400 no families yet to be completed.

21. **Project Cost:** Total capital cost of the project is 2478.82 Crores and the capital cost for EMP is Rs. 231.16 crores. Recurring cost for EMP is Rs. 102.22 crores.

## 22. Environment Management plan

- Wet drilling with sharp drill bits will be carried out along with dust collection system.
- Drilling & blasting is limited to overburden only.
- Coal excavation are/will be carried out by Surface Miner process including water sprinkling arrangements at cutting & over discharge belt.
- Controlled blasting is being/will be carried out by use of NONEL so the impacts of noise generated due to blasting is momentary only.
- Explosives charge per hole and per delay will be maintained as per DGMS guidelines.
- Blast study has been done by National Institute of Rock Mechanics (Under the Ministry of Mines, Govt of India) in May, 2024 to find the impact of blasting, noise and vibration:
- After amalgamation of EC for Utkal D & E coal block, domestic wastewater generation will be 240 KLD which will be treated in STP of 250 KLD.
- After amalgamation of EC for Utkal D & E coal block, wastewater from the HEMM washing/ workshop will be treated in ETP of 10 KLD.
- Permanent water sprinklers have been installed along main haul roads.
- Use of wetting agents will be used to reduce water consumption

## 23. EMP cost:

S. No	Particular	Capital cost(Rs. Crores)	Recurring Cost(Rs.Crores)
<b>A. Mitigative Measures</b>			
1.	Water Tanker (28 KL) & Permanent water sprinkling arrangements for main haulage road	90.5	61.87
2.	Greenbelt Development , Maintenance and Plantation , Manpower, Supervision	12.00	1.0
3.	Nala Diversion etc	17.71	1.0
4.	Maintenance and Watering of Plantation	0	5.0
5.	Check Dam, Garland Drain, Retaining Wall Barbed wire fencing ,etc.	3.0	1.0
6.	Env. Lab Construction, Establishment Equipment , Manpower cost	10.23	0
7.	Wind Barriers etc	5.0	1.00
8.	Water Mist arrangement fog Cannon , Sprinkler	5.0	0.25
9.	Statutory Fee (Air ,Water Consent Forest Clearance etc)	35.0	20.0
10.	Installation of belt curtains	4.20	0.5
11.	Stone Pitching of Garland Drain, Road Construction, Road Sweepers, Manpower etc	12.62	0.5
12.	Construction of Retaining Wall at dump (2.5m (H) x 1.5m (W))	1.50	0.5
13.	Bio Digester Installation at Mine Office	2.4	0.3
14.	STP. ETP Equipment, Installation , Manpower cost	4.5	

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B. Monitoring			
1.	AAQ Station ,Equipment's & Installation Spares , Maintenance	12.25	5.0
2.	Drilling of Piezometer in & around ML area & Monitoring	4.0	1.5
3.	Ground Water Quality. Level , Digital Study report,	1.0	0.20
4.	Workshop Waste Water Quality Analysis (monthly) as well as maintenance of oil-water separators	2.0	0.30
5.	Blast Vibration Monitoring Equipment- Micromate,EIA study	3.75	1.5
6.	Work Place Noise Monitoring	2.0	0.50
7.	Providing Safety kits (Soes, Ear muffs/plus etc)	2.5	0.30
	<b>Grand Total</b>	<b>231.16</b>	<b>102.22</b>

#### 24. Justification for considering the proposal under para 7(ii) of EIA, 2006

- No change in Mining lease area (301.28 + 523.036 = 824.316) after amalgamation of Mining lease.
- No increase in production capacity (4.0 MTPA) after amalgamation of Mining Lease.
- No change in the mining technology after amalgamation of Mining Lease.
- No increase in waste generation after amalgamation of Mining Lease.
- Grant order for the amalgamation of the Mining Lease have been obtained from State Government, Odisha on 18.11.2023
- Mining Plan and Mine Closure Plan for combined Utkal D and Utkal E coal mines has been approved by MoC 15.05.2024.

25. **Undertaking/ Affidavit:** PP has submitted an undertaking that the information provided in Form I in PARIVESH, to Ministry/ EAC members and PPT presentation during the EAC meeting have no deviation in respect of proposal for EC for modification in existing ECs of Utkal D Coal Block and Utkal E Coal Block by amalgamating the Utkal E & D blocks. There are no data entry errors in the information uploaded in PARIVESH system and supporting documents uploaded on PARIVESH portal are correct and duly authenticated by the Authorized Signatory. In case any deviation is found in any of the documents, the authorized shall be held responsible and furthermore, the above said project shall be rejected.

26. **Legal Issues/ Violation:** PP reported that there is no legal issue/violation wr.t i) Environment (Protection) Act, ii) Air(P&CP) Act, Water (P&CP). Act, Van (Sanrakshan Evam Samvardhan) Adhiniyam 1980, Wildlife Protection Act 1972, MMDR Act, Factories Act. Further, there is no court case on the project.

27. **Written Submissions:** Written submission made by PP are summarized as below:

S. No.	Points	Written submissions made
1.	Geo-tagged photographs of greenbelt and plantation	PP submitted the geo-tagged photographs of greenbelt and plantation.
2.	Plan for utilization of water post mining	PP submitted the following: <ul style="list-style-type: none"> <li>• At conceptual stage; out of total excavated area, 172.630 ha area will be converted into water reservoir.</li> <li>• In Utkal E, Seepage water will be 2246 KLD and in Utkal D, it will be 1932 KLD.</li> <li>• Total requirement for the mining project is 1450 KLD which will be fulfilled from Mine seepage.</li> <li>• Excess water available in mine pit will be given to nearby villagers, if required.</li> <li>• Post mine, water reservoir will also be used as water pond and for pisciculture purpose.</li> </ul>
3.	Con-current plantation plan	PP submitted the following:

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S. No.	Points	Written submissions made																																			
		<p>At Conceptual Stage, Greenbelt/Plantation will be covered over an area of 63.968 ha (Greenbelt: 8.670 ha, Safety Zone: 41.962 ha, Settling Pond 1.00 ha, Rationalization Area: 11.656 ha, Garland Drains: 0.680 ha).</p> <p>In addition to this, an area of 305.990 ha of waste dump and 6.708 ha safety zone to be covered with plantation which will be developed as forest land.</p> <table border="1" data-bbox="644 298 1431 703"> <thead> <tr> <th data-bbox="644 298 785 336">Year</th> <th colspan="3" data-bbox="785 298 1282 336">Area</th> <th data-bbox="1282 298 1431 336">No. of Plants</th> </tr> <tr> <td data-bbox="644 336 785 475"></td> <th data-bbox="785 336 921 475">Waste Dump</th> <th data-bbox="921 336 1042 475">Safety Zone</th> <th data-bbox="1042 336 1282 475">Others (rationalization area, garland drains, settling ponds etc)</th> <td data-bbox="1282 336 1431 475"></td> </tr> </thead> <tbody> <tr> <td data-bbox="644 475 785 513">1<sup>st</sup> Year</td> <td data-bbox="785 475 921 513">-</td> <td data-bbox="921 475 1042 513">20</td> <td data-bbox="1042 475 1282 513">-</td> <td data-bbox="1282 475 1431 513">50,000</td> </tr> <tr> <td data-bbox="644 513 785 550">2<sup>nd</sup> Year</td> <td data-bbox="785 513 921 550">-</td> <td data-bbox="921 513 1042 550">20</td> <td data-bbox="1042 513 1282 550">-</td> <td data-bbox="1282 513 1431 550">50,000</td> </tr> <tr> <td data-bbox="644 550 785 588">3<sup>rd</sup> Year</td> <td data-bbox="785 550 921 588">-</td> <td data-bbox="921 550 1042 588">17.34</td> <td data-bbox="1042 550 1282 588">-</td> <td data-bbox="1282 550 1431 588">43,350</td> </tr> <tr> <td data-bbox="644 588 785 665">4<sup>th</sup> Year onwards</td> <td data-bbox="785 588 921 665">305.990</td> <td data-bbox="921 588 1042 665"></td> <td data-bbox="1042 588 1282 665">13.336</td> <td data-bbox="1282 588 1431 665">7,98,315</td> </tr> <tr> <td data-bbox="644 665 785 703">Total</td> <td data-bbox="785 665 921 703">305.990</td> <td data-bbox="921 665 1042 703">57.34</td> <td data-bbox="1042 665 1282 703">13.336</td> <td data-bbox="1282 665 1431 703">9,41,665</td> </tr> </tbody> </table> <p>Species proposed to be planted are Neem, Shisham, Arjun, Karanja, Sisso, Mango, Jamun, Jack Fruit, Ghambhari etc.</p> <p>Budget: Rs 14.29 crore has been earmarked for greenbelt and plantation (Rs 12 Crore under EMP and Rs. 2.29 crore under Mine Closure Plan)</p> <p>Plant Species: Local species like Neem, Shisham, Arjun, Karanja, Sisso, Mango, Jamun, Jack fruit (Panasha), Ghambhari etc.</p>	Year	Area			No. of Plants		Waste Dump	Safety Zone	Others (rationalization area, garland drains, settling ponds etc)		1 <sup>st</sup> Year	-	20	-	50,000	2 <sup>nd</sup> Year	-	20	-	50,000	3 <sup>rd</sup> Year	-	17.34	-	43,350	4 <sup>th</sup> Year onwards	305.990		13.336	7,98,315	Total	305.990	57.34	13.336	9,41,665
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4.	Undertaking for not doing mining without Nala diversion study in Utkal E Coal Block	Mining in Utkal Coal E block will be started after completion of Nala diversion study covering the impact on biodiversity within 6 months and submission of same to RO, Bhubaneshwar, MoEFCC and MoEFCC, New Delhi. Undertaking for the same is submitted.																																			
5.	Air Control Measures to be submitted	<p>Wet drilling with sharp drill bits is being carried out along with dust collection system.</p> <p>Regular Water Sprinkling will be done by 8 nos of 28 KL Capacity Water Spray Tunker in round the clock</p> <p>Use of permanent water sprinkler in Mine approach road to control fugitive emission.</p> <p>Use of fixed water sprinkler (Rain gun) beside coal stock yards to control airborne fugitive dust</p> <p>Plantation will be done on both sides of coal transportation roads</p> <p>Coal will be transported with tarpaulin covered vehicles.</p> <p>Coal transportation roads will be asphalted/concreated.</p> <p>If feasible, Pollution Control Equipment's such as Bag Filters/Fabric filters will be installed in Coal Conveying Belts.</p> <p>Drilling &amp; blasting is limited to overburden only.</p> <p>Coal excavation are/will be carried out by Surface Miner fitted with water sprinkling arrangements.</p> <p>Controlled Blasting is being/will be carried out with optimal quantity of explosives and with technically established blast design.</p> <p>All loading and transfer points are being provided with water sprinklers &amp; dust suppression system.</p> <p>Regular maintenance of HEMMs &amp; transportation vehicles are being/will be carried out.</p> <p>Truck mounted water sprinklers for road dust suppression.</p> <p>Use of truck mounted Mist Cannon for fugitive dust control.</p> <p>Installation of 10 m height wind barrier along coal stock yard for fugitive</p>																																			

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		<p>dust control</p> <p>Development of green belt/plantation is being/will be carried out.</p> <p>Ambient Air Quality is being/will be monitored regularly and maintained in prescribed norms.</p> <p><b>Proposed water spraying at Coal Stock Yard</b></p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Particulars</th> <th>Existing</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td colspan="4"><b>Coal Stock Yard</b></td> </tr> <tr> <td>1</td> <td>Length of Yard</td> <td>250 Mtrs</td> <td>250 Mtrs</td> </tr> <tr> <td>2</td> <td>Breadth of Yard</td> <td>90 Mtrs</td> <td>90 Mtrs</td> </tr> <tr> <td>3</td> <td>Proposed No. of Nozzles</td> <td>20 Nos</td> <td>20 Nos</td> </tr> <tr> <td colspan="4"><b>Details of Nozzle</b></td> </tr> <tr> <td>1</td> <td>Working Pressure</td> <td>20-50 kg/ cm<sup>3</sup></td> <td>20-50 kg/ cm<sup>3</sup></td> </tr> <tr> <td>2</td> <td>Coverage Radius</td> <td>20-40 Mtr</td> <td>20-40 Mtr</td> </tr> <tr> <td>3</td> <td>Water consumption per minute for full circle</td> <td>324 LPM</td> <td>324 LPM</td> </tr> <tr> <td>4</td> <td>Trajectory Angle</td> <td>24 deg</td> <td>24 deg</td> </tr> <tr> <td>5</td> <td>Inlet</td> <td>6.0 Inch</td> <td>6.0 Inch</td> </tr> <tr> <td>6</td> <td>Water consumption from 20 nos nozzles and operational time 2.0 hr/ day</td> <td>324 Ltrs 778 m<sup>3</sup></td> <td>324 Ltrs 778 m<sup>3</sup></td> </tr> <tr> <td colspan="4"><b>Proposed water spraying at Haul Road</b></td> </tr> <tr> <th>S. No.</th> <th>Particulars</th> <th>Existing</th> <th>Proposed</th> </tr> <tr> <td colspan="4"><b>Details of Haul Road</b></td> </tr> <tr> <td>1</td> <td>Length of Road</td> <td>5000 Mtr</td> <td>10000 Mtr</td> </tr> <tr> <td>2</td> <td>Width of Road</td> <td>30 Mtr</td> <td>30 Mtr</td> </tr> <tr> <td>3</td> <td>Proposed no. of Nozzles</td> <td>-</td> <td>100 Nos</td> </tr> <tr> <td colspan="4"><b>Details of Nozzle</b></td> </tr> <tr> <td>1</td> <td>Working Pressure</td> <td>-</td> <td>5.0 kg/ C<sup>2</sup></td> </tr> <tr> <td>2</td> <td>Coverage Radius</td> <td>-</td> <td>10.20 sq mtr</td> </tr> <tr> <td>3</td> <td>Water consumption per minute for full circle</td> <td>-</td> <td>76.50 LPM</td> </tr> <tr> <td>4</td> <td>Trajectory Angle</td> <td>-</td> <td>12 degree</td> </tr> <tr> <td>5</td> <td>Inlet</td> <td>-</td> <td>1.5 Inch</td> </tr> <tr> <td>6</td> <td>Part Circle Mechanism</td> <td>-</td> <td>918000 Ltr.</td> </tr> <tr> <td>7</td> <td>Total Water consumption for 20 nozzles and operational time 3 hr/ day (by 28 KL, 09 nos tanker)</td> <td>760 m<sup>3</sup></td> <td>918 m<sup>3</sup></td> </tr> </tbody> </table>	S. No.	Particulars	Existing	Proposed	<b>Coal Stock Yard</b>				1	Length of Yard	250 Mtrs	250 Mtrs	2	Breadth of Yard	90 Mtrs	90 Mtrs	3	Proposed No. of Nozzles	20 Nos	20 Nos	<b>Details of Nozzle</b>				1	Working Pressure	20-50 kg/ cm <sup>3</sup>	20-50 kg/ cm <sup>3</sup>	2	Coverage Radius	20-40 Mtr	20-40 Mtr	3	Water consumption per minute for full circle	324 LPM	324 LPM	4	Trajectory Angle	24 deg	24 deg	5	Inlet	6.0 Inch	6.0 Inch	6	Water consumption from 20 nos nozzles and operational time 2.0 hr/ day	324 Ltrs 778 m <sup>3</sup>	324 Ltrs 778 m <sup>3</sup>	<b>Proposed water spraying at Haul Road</b>				S. No.	Particulars	Existing	Proposed	<b>Details of Haul Road</b>				1	Length of Road	5000 Mtr	10000 Mtr	2	Width of Road	30 Mtr	30 Mtr	3	Proposed no. of Nozzles	-	100 Nos	<b>Details of Nozzle</b>				1	Working Pressure	-	5.0 kg/ C <sup>2</sup>	2	Coverage Radius	-	10.20 sq mtr	3	Water consumption per minute for full circle	-	76.50 LPM	4	Trajectory Angle	-	12 degree	5	Inlet	-	1.5 Inch	6	Part Circle Mechanism	-	918000 Ltr.	7	Total Water consumption for 20 nozzles and operational time 3 hr/ day (by 28 KL, 09 nos tanker)	760 m <sup>3</sup>	918 m <sup>3</sup>
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6.	Surrender letter of 2.33 Ha of Durgapur Reserved Forest	<p>PP submitted that, since with the amalgamation of both Utkal-D &amp; Utkal-E Coal Blocks, separate Coal Evacuation Route for Utkal-E Coal mine which were earlier envisaged in the Mining Plan of Utkal-E Coal Mine was no more required. Hence after reassessment, NALCO has decided to exclude the 2.33 hectares of Durgapur Reserve Forest land from the forest diversion proposal. Chronology with supporting for surrender of 2.33 ha of Durgapur Reserved Forest is given below:</p> <p>Letter was submitted to APPCF on 28.07.2014 for excluding this 2.33 ha of forest land. Copy of same is submitted.</p>																																																																																																								

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Written submissions made

S. No.	Points	Written submissions made
		<p>Accordingly the matter was referred by State Govt to MoI, GoI vide letter dated 03.10.2019. the letter is submitted.</p> <p>MoC, GoI vide letter no. 103/34/2015/NA dated 15.01.2021 have conveyed the previous approval for the grant of ML U/S S(1) the MMDI Act 1957 over the reduced area of 523.73. Letter is submitted.</p> <p>Confirmation for the reduction for the ML area from 526.06 ha to 523.136 ha after reduction of 2.33 ha of Durgapor Reserved Forest was received in form of Lease deed agreement between GoO and NALCO vide dated 20.01.2023. Copy of same is submitted.</p> <p>Undertaking for no use of 2.33 Ha of forest land has been submitted.</p>
7.	Transportation details w.r.t. timeline for railway siding	<p>PP submitted the following:</p> <ul style="list-style-type: none"> <li>Coal is primarily planned to be evacuated from the south-eastern boundary of the block through conveyors from the Coal Stockyard through Coal Handling Plant and Rapid Loading Silo (of 4000 t capacity) through a series of conveyors of 2000 tonnes per hour rated capacity for loading of Coal into wagons at proposed Railway Siding platforms planned for Utkal group of blocks.</li> <li>Distance from block boundary to rail line is about 1.4 km. From there onwards, coal will be transported via coal wagons through the Inner Rail corridor (MCRL) being developed by East Coast Rly.</li> <li>As a stopgap arrangement and till the commissioning of the Inner Rail Corridor (MCRL), the Coal produced from the Mine shall be transported through San-Kerejanga Railway Siding, being developed by NALCO.</li> <li>Land development work is under progress at San-Kerejanga Railway Siding.</li> <li>Work is being executed by M/s RITES.</li> <li>It is expected that the Kerejanga Rly siding will be commissioned by July 2025. After the commissioning of the Rly siding, 50% load on Road Transport will be decreased.</li> <li>Alternatively, permission has been obtained from Collector Angul to transport the Coal through Road mode till the above two modes are operational. Distance of Mines pit head to CPP is 40 Kms.</li> <li>Transportation time: Night 10:00 PM to Morning 6:00 AM</li> <li>NALCO has also paid Rs 18 Crores for strengthening of SH-63 which is used for coal transportation.</li> <li>Transportation route map is submitted.</li> </ul>
8.	Undertaking for completion of partially complied conditions (retaining wall and garland drain) till 15 <sup>th</sup> November.	Undertaking for completion of work as per partially complied condition is submitted.
9.	Details of sustainable development w.r.t linking with skill development programmes	<p>PP submitted the following:</p> <p>Skill Development Training Courses such as Tailoring, Weaving, ITI training, Maintenance Kit will be given to selected Persons/Students of nearby villagers as per their qualification. We will tie-up with Govt. approved training Institution and its expenses funding will be done by proponent under CSR guidelines.</p> <p>NALCO in collaboration with IISSSC would facilitate the enhancing of the competency level of its workforce against the set industry standards. Memorandum of Understanding (MoU) has been signed on 26th Aug 2024 between IISSSC and NALCO to enable both entities to contribute towards the Skill India mission as well as sustain growth in their areas.</p> <p>Indian Iron and Steel Sector Skill Council (IISSSC) was constituted as mandated by GOI in the National Skill Development Policy 2009 in order to</p>

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S. No.	Points	Written submissions made
		bridge the skill gap by complementing the vocational educational system through conducting research, improving the delivery mechanism, assuring quality etc. to identify skill development needs, maintain skill inventory, planning and execution of training of trainers through development of IT enabled Labour Management Information System (LMIS). The job for undertaking these skill certification programmes will be done by Biju Pattnaik National Skill Institute.
10.	As per the plan, OB dumping is shown on the forestland. Alternate plan for handling of waste to avoid dumping in forest land need to be submitted.	Requirement of the forest land for the External OB Dump has been re-examined & PP submitted the following:
11.	Details and documents of PH already conducted for both the blocks earlier along with the action plan for issues raised	Details have been submitted and the same is furnished at point no D of para 17.4.4.
12	Safety precautions proposed for merging the safety zone of the mines.	

#### Observations and deliberations of the EAC:

28. The Committee noted the following:

- i. The instant proposal is for modification of existing Environment Clearances (ECs) of Utkal D Coal Block (Area 301.28 ha with Granted production capacity 2.0 MTPA) and Utkal E Coal Block (ML Area 523.036 ha with Granted production capacity 2.0 MTPA) by amalgamating the D & E block with total coal production capacity of 4 MTPA and total lease area of 824.316 ha by M/s. National Aluminium Company Limited (NALCO) located at Village: Nandichhod (Gopiballavpur), Gopinathpur Jungle, Kosala, Kundajhari Jungle, Korada, Rajjharan, Similisahi, Tehsil: Chhendipada District: Angul, Odisha.
- ii. Terms of Reference for the instant proposal was not granted, as it is being applied under Para 7 (ii) of EIA Notification, 2006. EAC noted that as per EIA 2006, proposal under para 7(ii) shall be considered by the concerned EAC who will decide on the due diligence necessary including preparation of Environment Impact Assessment and public consultations and the application shall be appraised accordingly for grant of environmental clearance. In the instant proposal under consideration, PP is amalgamating the existing two ECs with no increase in lease area and targeted production capacity. EIA/EMP report based on the standard ToR along with the certified compliance report has been submitted by the proponent. Public hearing for the Utkal D and Utkal E block was held on 24/1/2006 and 30/05/2008 respectively.
- iii. The project area is covered under Survey of India Topo Sheet No 73D/13 and is bounded by the geographical coordinates ranging from 20o53'00" N to 21o12'00" N and longitudes 84o20'00" E to 85o23'00" E. Project fall/does not fall in the Critically Polluted Area (CPA)/ Severely Polluted Area (SPA), as per CEPI Assessment 2018.
- iv. The project involves 312.6979 Ha (Utkal - D: 143.42 Ha & Utkal - E: 169.1779 Ha) of forestland. For which PP has accorded stage - II forest clearance on 299.6979 Ha (Utkal - D: 143.42 Ha & Utkal - E: 156.1779 Ha) of forestland and stage - I forest clearance on 13 Ha of forestland. 13 Ha of forestland forms part of Utkal - E coal block and is not broken up. It is to be noted that, as per the EC dated 10.12.2009, Utkal - E involved 171.51 Ha of forestland, out of which 2.33 Ha or land was part of Durgapur Reserved Forest. NALCO applied to State Govt regarding deletion of 2.33 ha Durgapur Reserved Forest land. The same was approved by MoC, GOI. In view of this, the forest land was revised to 169.18 Ha. Further, PP submitted that 2.33 Ha of forestland will not be used for any purpose neither by Utkal D coal block nor by Utkal E coal block and submitted an undertaking in this behalf to the EAC.
- v. The project is not located within 10 KM of any ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve/tiger corridor/elephant corridor etc. There is no violation of WLP, Act. Site-Specific Wildlife Conservation Plan has been prepared and approved for Utkal E mine with an amount of Rs. 543.92 Lakhs and for Utkal D

mine with an amount of Rs 130 Lakhs from Chief Wildlife Warden for schedule I species.

vi. MoEF&CC accorded Environment Clearance to M/s. National Aluminium Company Limited (NALCO) under the provisions of EIA Notification, 2006 for their Utkal-E Coal Block (2 Million TPA over 729.48 Ha) vide letter no. IA-J-11015/31/2007-IA-II-(M) dated 10.12.2007. Subsequently, MoEF&CC issued corrigendum to M/s. NALCO on 26.12.2013 stating that date of grant of EC shall be read as 10.12.2009 instead of 10.12.2007. The Hon'ble Supreme Court vide its judgement dated 25.08.2014 read with the order dated 24.09.2014 in P (CRL) No 120/2012 has cancelled the allocation of 204 coal blocks and issued directions with regard to allocation of such coal blocks. Further, as per Ministry of Coal notification - The Coal Mines (Special Provisions) Ordinance 2014, the above coal block got cancelled. Thereafter, Ministry of Coal vide allotment order dated 02.05.2016 allotted the Utkal-E Coal Block to NALCO under Coal Mines (Special Provisions) Act, 2015. Mine lease deed was signed between NALCO and Government of Odisha on 20.01.2023. As per the said mine lease deed, the lease area was reduced to 523.036 Ha from 729.48 Ha. Further, the area of 203.42 Ha outside ML area for infrastructure was not re-allocated to NALCO by the State Government.

vii. Proposal for transfer of Utkal-E was placed as an additional agenda in 15th EAC Meeting held on 18th - 19th September 2024, as the proposal involved change in area. The Committee after due consideration recommended the proposal for transfer of EC with reduced area of 523.036 Ha.

viii. Earlier EC for Utkal-D was granted for the 2.0 MTPA production in favour of M/s. Orissa Mining Corporation Ltd. Utkal-D Coal block was allocated to NALCO on 02.05.2016 by the Ministry of Coal (MoC), GOI as per Coal Mines (Special Provision) Act, 2015. After grant of lease in favor of M/s. NALCO, EC was also transferred from M/s. Odisha Mining Corporation Ltd to M/s. NALCO.

ix. It has been decided to combine Utkal D and Utkal E Coal Mines for conserving of about 20 million tonnes of Coal getting locked up in the common barrier. Grant order for Mining Lease for Utkal D & E Combined has been issued by the State Govt vide letter dated 18.11.2023 over an area of 824.316 Ha for the lease period up to 24.03.2051.

x. Mining Plan and Mine Closure Plan (Second Modification) for Utkal D and Utkal E coal mines with 4.5 million TPA targeted capacity of coal Production has been approved by Ministry of Coal vide letter No. ORAN/APP00291/2021 dated 15.05.2024.

xi. The total geographical reserves reported in the mine lease area of 824.316 Ha is 303.71 MTPA, out of which mineable reserves are 174.785 MTPA and extractable reserves are 170.876 MTPA. Percentage of extraction is 57.42%.

xii. 20 seams with thickness ranging from 0.05 m to 34.52 m are workable. Grade of coal is G 11 to G 15, stripping ratio is 1: 2.2627 while gradient is 1 in 9.2. Life of mine as per the approved Mine Plan is 44 years.

xiii. The Committee deliberated on the Certified Compliance Report of both the mines and deliberated on the partially - complied/ non- complied conditions of the same. However, Utkal - E is yet to be operationalised, Utkal - D is already under operation. Regarding the incomplete construction of ETP, garland drain and retaining wall, PP submitted an undertaking that the same shall be completed by 15th November 2024. The committee satisfied with the action taken report of the proponent.

xiv. Committee deliberated on the plantation activities been carried out by the PP till date. PP presented the photos of plantation carried out till date. Area proposed for plantation is 63.968 Ha. The Committee is of the opinion that plantation needs to be improved and the area of plantation should be increased. For which PP submitted that an area of 305.990 Ha of waste dump and 6.708 Ha of safety zone will also be covered with plantation, which will be developed as forest land. The budget allocated for the same is Rs. 14.29 crore (Rs. 12 crore under EMP and Rs. 2.29 crore under Mine Closure Plan).

PP submitted the following concurrent plan for plantation with native species:

Year	Area (Ha)			No. of Plants
	Waste Dump	Safety Zone	Others (rationalization area, garland drains, settling ponds etc)	
1 <sup>st</sup> Year	-	20	-	50,000

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Year	Waste Dump	Safety Zone	Others (rationalization area, garland drains, settling ponds etc)	No. of Plants
2 <sup>nd</sup> Year	-	20	-	50,000
3 <sup>rd</sup> Year	-	17.34	-	43,350
4 <sup>th</sup> Year onwards	305.990	-	13.336	7,98,315
Total	305.990	57.34	13.336	9,41,665

Species proposed to be planted are Neem, Shisham, Arjun, Karanja, Sisso, Mango, Jamun, Jack Fruit, Ghambhari etc.

xv. Committee deliberated on the method of mining proposed for operations as in the approved Mine Plan and Mine Closure Plan. It is stated that, in 9th, 10th and 11th year, underground mining will be done. The PP submitted that no underground mining is proposed for the instant proposal and High wall mining along with opencast mechanized method of mining will only be used.

xvi. The Committee observed that the dumping of OB is being done on the forest land. Committee took a view of it through DSS KML. While deliberation, PP submitted that this aspect has been taken into cognizance while according the Forest Clearance and it was observed that the entire area is coal bearing and no land for dumping is available and the dumping is being done in degraded forest area. PP further submitted that for the first 9 years external dumping is proposed and from 10th year onwards simultaneous dumping is planned in both external and internal dump. After final mine closure, 355.394 million cum OB out of the total 385.11 million cum OB is planned to be backfilled and after re-handling OB from external dump area it is planned the area will reach up to its original level.

xvii. The Committee deliberated on the post mining void area. PP submitted that the total excavation area will be 381.070 Ha out of which 118.70 Ha, will be backfilled and rehabilitated by the agriculture and remaining 262.370 Ha will be reclaimed as 89.470 Ha to be rehabilitated by agriculture and 172.630 Ha as under water reservoir. The Committee is of the opinion that post mining void area to be used as water reservoir must be reduced.

xviii. Committee deliberated on the Nallah diversion proposed by the PP in order to start the mining operations of Utkal – E Block. Committee is of the view that no mining activity in Utkal – E should be started till the nallah diversion study covering the impact on biodiversity including aquatic flora and fauna is completed and submitted to concerned RO and MoEF&CC Delhi. The PP submitted an undertaking in this regard that the study in this regard as suggested will be completed within 6 months and will be submitted to RO Bhubaneswar, MoEFCC and MoEFCC New Delhi.

xix. Committee deliberated on the EMP proposed by the PP and is of the opinion that cost of EMP needs to be enhanced taking into consideration the skill development programme. PP submitted that in collaboration with Indian Iron and Steel Sector Skill Council (IISSSC) would facilitate the enhancing of the competency level of the workforce against the set industry standards. MoU for the same has been signed between both the entities to contribute towards the Skill India Mission as well as sustain the growth in their areas. At the same time skill development training courses will be given to the selected persons/ students of nearby villagers as per their qualifications.

xx. Committee deliberated on the plan for utilization of water post mining. PP submitted that at the conceptual stage, out of total excavated area, 172.630 Ha area will be converted into water reservoir. Mine seepage water from Utkal – E and Utkal – D will be 2246 KLD and 1932 KLD respectively. PP submitted that the total water requirement for the mining project is 1450 KLD which will be fulfilled from Mine Seepage and the excess water available in the mine pit will be given to the nearby villagers, if required. PP further submitted that, post mining water reservoir will also be used as water pond and for pisciculture purpose.

xxi. Committee deliberated on the air pollution control measures proposed by the PP. PP submitted the following measures in this regard:

- Wet drilling with sharp drill bits is being carried out along with dust collection system.
- Regular Water Sprinkling will be done by 8 nos of 28 KL. Capacity Water Spray Tanker in round the clock.
- Use of permanent water sprinkler in Mine approach road to control fugitive emission.
- Use of fixed water sprinkler (Rain gun) beside coal stock yards to control airborne fugitive dust.
- Plantation will be done on both sides of coal transportation roads.

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- Coal will be transported with tarpaulin covered vehicles.
  - Coal transportation roads will be asphalted/concreted.
  - If feasible, Pollution Control Equipment's such as Bag Filters/Fabric filters will be installed in Coal Conveying Belts.
  - Drilling & blasting is limited to overburden only.
  - Coal excavation are/will be carried out by Surface Miner fitted with water sprinkling arrangements.
  - Controlled Blasting is being/will be carried out with optimal quantity of explosives and with technically established blast design.
  - All loading and transfer points are being provided with water sprinklers & dust suppression system.
  - Regular maintenance of HEMMs & transportation vehicles are being/will be carried out.
  - Truck mounted water sprinklers for road dust suppression.
  - Use of truck mounted Mist Cannon for fugitive dust control.
  - Installation of 10 m height wind barrier along coal stock yard for fugitive dust control| Development of green belt plantation is being/will be carried out.
  - Ambient Air Quality is being/will be monitored regularly and maintained in prescribed norms.
- Along with this PP also submitted the proposed water spraying at Coal Stock Yard and proposed water spraying at Coal Stock Yard.

xxii. Committee also deliberated on the transportation proposed from both the blocks. PP submitted that coal is primarily planned to be evacuated from south-eastern boundary of the block through conveyors from coal stock yard to CHP and to Rapid Loading Silo through a series of conveyors of 2000 tonnes per hour rated capacity for loading coal into wagons at proposed railway siding platforms planned for Utkal group of blocks. PP will use the railway siding of Inner Rail Corridor (MCRL) being developed by East Coast Railway, which is at the distance of 1.4 km from the block boundary. As a stopgap arrangement till the Inner Rail Corridor is commissioned, the coal will be transported through San-Kerejanga Railway Siding, which is being developed by NALCO only, which is expected to be completed by July 2025. However, till the above two modes operational, the coal is proposed to be transported through road and distance from mine pit head to CHP is 40 km. Coal is only proposed to be transported through road at night from 10 PM to 6 AM. Committee is of the opinion that the 2.33 Ha of forest land which was earlier part of Utkal - E block should not be used for any purpose, including transportation as assured by the PP.

xxiii. The Committee noted that the EIA/EMP report is in compliance of the standard ToR for the project, reflecting the present environmental status and the projected scenario for all the environmental components.

xxiv. The committee deliberated on the written submission and found it satisfactory.

xxv. EAC considered the instant proposal under para 7(ii) of EIA, 2006 for grant of EC and opined that no fresh public hearing is required due to the following:

- Proposal involves amalgamation of two existing valid ECs with no change in Mining lease area (301.28 + 523.036 = 824.316).
- No increase in production capacity (4.0 MTPA) after amalgamation of Mining Lease.
- No change in the mining technology after amalgamation of Mining Lease.
- No increase in waste generation after amalgamation of Mining Lease.
- Public hearing for the Utkal D and Utkal E block was held on 24/1/2006 and 30/05/2008 respectively
- Grant order for the amalgamation of the Mining Lease have been obtained from State Government, Odisha on 18.11.2023
- Mining Plan and Mine Closure Plan for combined Utkal D and Utkal E coal mines has been approved by MoC 15.05.2024.

#### Recommendations of the Committee

29. Based on the discussions held and the documents submitted, the EAC recommended the proposal for Environment Clearance of Utkal D Coal Block (ML Area 301.28 ha with Granted production capacity 2.0 MTPA) and Utkal E Coal Block (ML Area 523.036 ha with Granted production capacity 2.0 MTPA) by amalgamating the D & E block with total coal production capacity of 4 MTPA and total lease area of 824.316 ha by M/s. National Aluminium Company Limited (NALCO) located at Village: Nandichhod (Gopiballavpur), Gopinathpur Jungle, Kosala, Kundajhari Jungle, Korada, Rajjharan, Similisahi, Tehsil: Chhendipada District: Angul, Odisha under the provisions of para 7(ii) of EIA Notification, 2006 (as amended), subject to the compliance of the following specific conditions in addition to the general/Standard EC

conditions (Annexure-1).

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30. The MoEF&CC has examined the proposal in accordance with the provisions contained in the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and based on the recommendations of the EAC hereby accords Environmental Clearance to M/s. National Aluminium Company Limited (NALCO) for Utkal D Coal Block (ML Area 301.28 ha with Granted production capacity 2.0 MTPA) and Utkal E Coal Block (ML Area 523.036 ha with Granted production capacity 2.0 MTPA) by amalgamating the D & E block with total coal production capacity of 4 MTPA and total lease area of 824.316 ha, located at Village: Nandichhod (Gopiballavpur), Gopinathpur Jungle, Kosala, Kundajhari Jungle, Korada, Rajjharan, Similisaahi, Tehsil: Chhendipada District: Angul, Odisha subject to compliance of the additional Specific Environmental safeguard Conditions in addition to the standard EC conditions (Annexure-I).

31. The proponent shall obtain all necessary clearances/approvals that may be required before the start of the project. The Ministry or any other competent authority may stipulate any further condition for environmental protection. The Ministry or any other competent authority may stipulate any further condition for environmental protection.

32. The Environmental Clearance to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.

33. The PP is under obligation to implement commitments made in the Environment Management Plan, which forms part of this EC.

34. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

#### 35. General Instructions:

(i) The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC website where it is displayed.

(ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn must display the same for 30 days from the date of receipt.

(iii) The project proponent shall have a well laid down environmental policy duly approved by the Board of Directors (in case of Company) or competent authority, duly prescribing standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions.

(iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the project proponent (during construction phase) and authorized entity mandated with compliance of conditions (during operational phase) shall be prepared. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Six monthly progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.

(v) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

(vi) The Regional Office of this MoEF&CC shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

(vii) Validity of EC is as per the provision of EIA Notification, 2006 and its subsequent amendment.

36. This issue with an approval of the Competent Authority

Yours faithfully,

(Sundar Ramanathan)  
Scientist 'E'/Additional Director  
Tel: 011- 20819378  
Email: r.sundar@nic.in

Copy To

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. The Deputy Director General of Forests, Regional office (EZ), Ministry of Environment & Forests, A-31, Chandrasekharapur, Bhubaneswar- 751023 (Odisha).
3. The Secretary, Department of Environment & Forests, Government of Orissa, Secretariat, Bhubaneswar (Odisha).
4. The Member Secretary, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
5. The Chairman, Orissa State Pollution Control Board, Parivesh Bhawan, A/118, Nilkanthanagar, Unit VIII, Bhubaneswar - 751012 (Odisha).
6. District Collector, Jharsuguda, Government of Odisha.
7. PARIVESH Portal

Annexure I

**Specific EC Conditions for (Mining Of Minerals)**

**1. Specific Conditions:**

S. No	EC Conditions
1.1	No mining operations shall be undertaken in Forest land, until Stage – II forestry clearance for 13 Ha has been obtained under the provisions of Van (Sanrakshan Evam Samvardhan) Adhiniyam, Act 1980.
1.2	Mining in Utkal E block may be started after grant of EC in a way that the nallah is diverted only after completion of Nallah diversion study covering the impact on biodiversity by the proponent and PP shall ensure the submission of same to RO, Bhubaneswar, and MoEFCC, New Delhi. Compliance to the recommendation of the study report shall be submitted to the concerned Regional Office along with the six monthly compliance report and also be uploaded on the web portal of the company.
1.3	Project proponent shall complete the commissioning of ETP, construction of garland drain and retention wall in Utkal D block by 15 Nov 2024. Compliance status in this regard shall be submitted to the concerned Regional Office along with the six monthly compliance report and also be uploaded on the web portal of the company.
1.4	Pre-mining survey on the Social-economic status of the local communities based on the UNHDR report shall be submitted to the concerned Regional Office of the Ministry before commissioning of mines. Compliance status in this regard shall be submitted to the concerned Regional Office along with the six monthly compliance report and also be uploaded on the web portal of the company.

S. No	EC Conditions
1.5	No underground mining is permitted as committed.
1.6	Project proponent shall ensure that operationalization of Kerjanga Railway Siding by July, 2025 to reduce the coal transportation by road (19 km distance).
1.7	PP shall carry out concurrent plantation in 376.666 Ha (305.990 Ha of waste dump; 57.34 Ha of safety zone and 13.336 Ha other area). The green belt and plantation plan submitted in the EIA/EMP shall be implemented in a time-bound manner. A survival rate of at least 80% shall be maintained by carrying out gap plantation in case of mortality. Native species should be planted. The budget earmarked for the plantation shall be kept in a separate account. PP should annually submit the audited statement of expenditure along with proof of activities viz. photographs (before & after with geolocation date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC and on PARIVESH Portal as the case may be for the activities carried out during previous year.
1.8	The plantations done by the PP need to be adequately densified and audited by a third party preferably a forestry institution of MoEFCC (e.g. ICFRE) to assess their efficacy.
1.9	The budget proposed to address the issues raised during PH is Rs. 27.45 crores for 3 years. Compliance status in this regard shall be submitted to the concerned Regional Office along with the six monthly compliance report and also be uploaded on the web portal of the company.
1.10	PP shall provide regular health monitoring services and health services free of cost to people living in 10 km radius.
1.11	PP shall implement the protective measures proposed in EMP in a time-bound manner. The budget earmarked for the same is Rs 231.16 crores (Capital) and Rs 102.22 crores (recurring) and should be kept in separate accounts and audited annually. The implementation status along with the amount spent with documentary proof shall be submitted to the concerned Regional Office for the activities carried out during the previous year.
1.12	PP shall implement the recommendation of the Wildlife Conservation Plan and also during mining ensure to protect the wildlife. Necessary training/awareness program shall be conducted for the same from time to time.
1.13	PP shall strengthen in house environment management unit.
1.14	PP shall ensure that No OB dumping is done outside the mine lease area.
1.15	PP shall submit an action plan for using and developing Renewable Energy for its consumption in its utilities/machinery/equipment instead of using electricity from Grid/generated from Thermal Power Plants. PP shall install solar power generation units. Compliance status in this regard shall be submitted to the concerned Regional Office along with the six monthly compliance report and also be uploaded on the web portal of the company.
1.16	PP shall minimize mine voids in the post mining phase so that maximum area postmining is under green belt or agriculture/ grazing land.

S. No	LC Conditions
1.17	PP shall obtain a 5-star rating in terms of Environment Compliance from the Ministry of Coal as per the rating system implemented by the Ministry of Coal.
1.18	PP shall ensure that all types of plastic waste generated from the mines shall be stored separately in isolated areas and disposed of strictly adhering to the Plastic Waste Management Rules 2016. In pursuant to the Ministry's OM dated 18/07/2022, PP shall also create awareness among the people working in the project area as well as in its surrounding area on the ban on Single Use Plastic(SUP) in order to ensure compliance of the Ministry's Notification published by the Ministry on 12/08/2021. A report along with the photographs of the measures taken shall also be included in the six monthly compliance reports being submitted by PP.
1.19	NoC from Central Ground Water Authority (CGWA)/ concerned local authority, as the case may be, shall be obtained before drawing the groundwater for the project activities, state pollution control board/pollution control committees shall not issue the consent to operate (CTO) under Air (prevention and control of Pollution) Act and Water (Air (prevention and control of Pollution) Act till the project proponent shall obtain such permission.
1.20	PP shall expedite the process of settlements and provide compensation to project affected families.
1.21	PP shall review the outcome of the skill development programs whether it is providing any benefit or not, and whether it helps the community in getting job/livelihood opportunities. PP shall align the activities as per the present-day needs. A report in this regard shall be submitted to the concerned RO within 6 months.
1.22	PP shall install water meters at all intake points and take specific measures for reduction in water consumption and generation of alternative source of water through rainwater harvesting measures. Water audit needs to be done every year by a reputed institute for further reduction of water consumption and PP shall implement its recommendations and submit a report to RO annually.
1.23	Project proponent shall follow all necessary precautions to be adopted as suggested in approved Mining Plan of Utkal D&E Coal Mine while mining in common safety zone area.
1.24	Four numbers of Continuous Ambient Air Quality monitoring system shall be set up to monitor common criteria pollutants from the flue gases such as PM10, PM2.5, SO2, NOX within the lease area in consultation with OSPCB. The monitoring of other locations (at least three locations outside the lease area covering upwind and downwind directions at an angle of 120° each) shall be carried out manually.
1.25	PP shall ensure that diesel operated vehicles will be switched over to E-Vehicles in a time bound manner, replace the passenger vehicles to E-vehicle in phased manner. Further, for local movement of officials Contract of Vehicles deployment shall be awarded to Project affected people and all efforts for adopting heavy E-vehicles like Bulkers for ash transportation for short distance subject to availability of such E-vehicle and adequate charging infrastructure in the surrounding area shall be provided. PP shall submit the action taken report to concerned RO with amount spent, photographs (before & after), number of e-vehicles deployed etc. in six monthly compliance report.
1.26	Digital processing of the entire lease shall be through remote sensing techniques should be done regularly once in 3 years for monitoring land use pattern and report submitted to MOEF and its Regional Office at Bhubaneswar.

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S. No	EC Conditions
1.27	R&R shall be not less than the norms prescribed in National R&R Policy 2007/State R&R Policy/NALCO Policy whichever is higher.
1.28	PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. The action in this regard shall be submitted concerned RO in six monthly report.
1.29	Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the MoEF&CC.

## Standard EC Conditions for (Mining of minerals)

## 1. Statutory Compliance

S. No	EC Conditions
1.1	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
1.2	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
1.3	The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area).
1.4	The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
1.5	The project proponent shall obtain the necessary permission from the Central Ground Water Authority
1.6	Solid/hazardous waste generated in the mines needs to addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.

## 2. Air Quality Monitoring And Mitigation Measure

S. No	EC Conditions
2.1	Continuous ambient air quality monitoring stations as prescribed in the statute be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM10, PM2.5, SO2 and NOx. Location of the stations shall be decided based on themeteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.
2.2	The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.
2.3	Transportation of coal, to the extent, if permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun/ Fog cannon etc shall be carried out in critical areas prone to air pollution (with higher values of PM10/PM2.5) such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.
2.4	The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.
2.5	Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.
2.6	Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.
2.7	Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.

### 3. Water Quality Monitoring And Mitigation Measures

S. No	EC Conditions
3.1	The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board.
3.2	The monitoring data shall be uploaded on the company's website and displayed at the project site at

S. No	EC Conditions
	a suitable location. The circular No.J-20012/1/2006-IA.11 (M) dated 27th May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
3.3	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.
3.4	Monitoring of water quality upstream and downstream of river including ponds, lakes, tanks shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.
3.5	Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.
3.6	Catch and/or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies.
3.7	Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).
3.8	Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP /STP needs to be provided.
3.9	The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.
3.10	The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/Gol Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.

S. No	EC Conditions
3.11	The project proponent shall take all precautionary measures to ensure riverine/riparian ecosystem in and around the coal mine up to a distance of 5 km. A riverine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

#### 4. Noise And Vibration Monitoring And Prevention

S. No	EC Conditions
4.1	Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.
4.2	Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.
4.3	The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.

#### 5. Mining Plan

S. No	EC Conditions
5.1	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.
5.2	Mining shall be carried out as per the approved mining plan (including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).
5.3	No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980.
5.4	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.

#### 6. Land Reclamation

S. No	EC Conditions
6.1	Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFC) from time to time shall be submitted to MOEFCC/Regional Office (RO).

S. No	EC Conditions
6.2	The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.
6.3	The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the "during mining"/"post mining" land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.
6.4	Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.
6.5	Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.
6.6	The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

#### 7. Green Belt

S. No	EC Conditions
7.1	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.
7.2	Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area as soon as possible. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads. And Plantation should also be carried out in nearby area with consent of forest department and gram panchayat within 10 km radius with its proper maintenance

#### 8. Public Hearing And Human Health Issues

S. No	EC Conditions
8.1	Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & its RO on six-monthly basis.
8.2	The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.
8.3	Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
8.4	Implementation of the time bound action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the time bound action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.
8.5	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-JA.II (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

### 9. Corporate Environment Responsibility

S. No	EC Conditions
9.1	The project proponent shall comply with the provisions contained in this Ministry's OM dated 30/09/2020, as applicable, regarding Corporate Environment Responsibility.
9.2	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholder's/stake holders.
9.3	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
9.4	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

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S. No	Conditions
9.5	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

## 10. Miscellaneous

S. No	EC Conditions
10.1	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
10.2	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
10.3	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
10.4	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
10.5	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
10.6	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.11 (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.
10.7	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
10.8	The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
10.9	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
10.10	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
10.11	No further expansion or modifications in the plant shall be carried out without prior approval of the

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S. No	Conditions
	Ministry of Environment, Forests and Climate Change.
10.12	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
10.13	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
10.14	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
10.15	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
10.16	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.



*True copy attached  
to Behara  
Akr*

Validity unknown

Digitally Signed by S. Anand Ramanathan  
Member Secretary, MoEFCC (EC)

Date: 07/12/2024