

MINUTES OF THE 48th MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE (SEAC), JHARKHAND HELD ON 14TH AND 15TH SEPTEMBER, 2017

The 48th meeting of State Level Expert Appraisal Committee (SEAC), Jharkhand was held on 14th and 15th September, 2017 under the Chairmanship of Sh. K.P. Bhawsinka in the Conference Room at SEAC, Ranchi.

1. Shri K.P. Bhawsinka - Chairman
2. Dr. B.K. Tewary - Member
3. Shri R. N. Singh - Member
4. Shri S.P. Shriwatava - Member
5. Dr. V.P. Sinha - Member
6. Dr. R.V. Singh - Member
7. Shri U.P. Singh - Member
8. Shri M.S. Bhagwat - Member
9. Shri Om Prakash, - Member Secretary

Various projects which were received by SEIAA after the previous SEAC meeting on 17th and 18th August, 2017 and forwarded to SEAC for their technical appraisal came up for discussions. Besides, those Projects which were appraised in SEAC's earlier meetings in which PP's were asked to provide additional information / clarifications were also considered for examination / scrutiny where the Project proponents had submitted replies. Accordingly, the Project proponents were asked to make technical presentation for the appraisal of their project before the committee.

The following salient observations / recommendation were made during the Presentation (Project-wise), as under:-

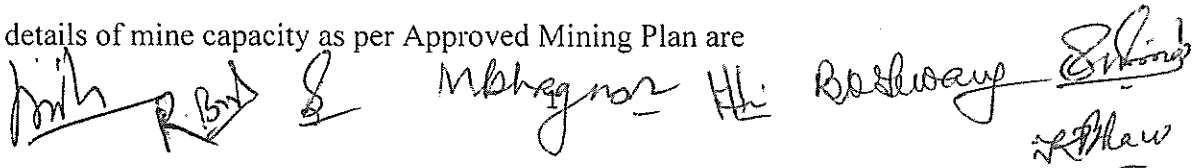
A. Projects considered for recommendation to SEIAA for consideration of grant of EC.

1. Golpur Stone Mine of M/s Grands Mining at Village : Golpur P.O. : Khaksa, Block & P.S. Pakuria, Dist. : Pakur. (12.68 Ha).

This is a Stone Mining Project for having an area of 12.68 Ha [Khata No. 56, Plot No. – 298]. The committee noted that as per Form I it is a proposal for renewal of lease for which PP is seeking EC. The validity of lease is from 06.10.2015 to 05.10.2025. It is under B2 Category of Project - as per MoEF & CC Notification dated 15.01.2016.

The project was reviewed with respect to proposed Mining Plan, Environmental protection measures proposed to be adopted, proposal for carrying out CSR activities for socio-economic development, development of green belt, due consideration of occupational health, etc. In view of the size of the mine, production rate and the mineral mined and the assurance given by PP that he will give due consideration to environment by maintaining haul roads and water sprinkling on same, carrying out CSR activities for socio-economic development, development of green belt, due consideration of occupational health of persons engaged in mining. The indicated project cost is Rs 23.11 Crore and a provision of Rs 9.21 Lakhs will be kept for Environment management.

The details of mine capacity as per Approved Mining Plan are

The block contains several handwritten signatures and initials. On the left, there is a large handwritten number '9'. In the center, there are signatures that appear to be 'R. B. S.' and 'M. Bhagwat'. To the right, there is a signature that looks like 'R. B. S.' and another one that is less legible, possibly 'R. B. S.' or similar. There are also some initials and marks scattered around the text.

Mineable Proved Reserve : 50,81,400 t

Year-wise Production as per Approved Mining Plan Report for five years is as follows

| | | |
|----------------------|---|-------------|
| 1 st Year | : | 5,75,910 t |
| 2 nd Year | : | 5,83,200 t |
| 3 rd Year | : | 8,91,810 t |
| 4 th Year | : | 10,33,965 t |
| 5 th Year | : | 8,66,295 t |

The daily production as per Form I is 3448 tonnes.

PP has submitted certificates from DMO (Letter No.- 378, Dated- 21.03.2015), DFO (Letter No.- 1363, Dated- 05.11.2014) and CO (Letter No.- 632, Dated- 06.07.2015).

The documents were examined and found to be satisfactory.

Based on the documents provided the Committee decided that the proposal for Golpur Stone Mine of M/s Grands Mining at Village : Golpur P.O. : Khaksa, Block & P.S. Pakuria, Dist. : Pakur. (12.68 Ha) be recommended for consideration of SEIAA subject to above mentioned observations for grant of EC. The various conditions for grant of EC are given at Annexure I.

2. Bekchuri Stone Mine of M/s Swastik Traders [Sri Sudip Kumar dey (Partner)] at Village- Bekchuri, P.O & P.S- Kayanchak & Taljhari, Dist.- Sahibganj, (6.89 Ha).

This is a Stone Mining Project for having an area of 6.89 Ha [Khata No. 03 & 07, Plot No. – 04 (P), 18 (P) & 08 (P)]. The committee noted that as per Form I it is a proposal for new lease for which PP is seeking EC. It is B2 Category of Project - as per MoEF & CC Notification dated 15.01.2016.

The project was reviewed with respect to proposed Mining Plan, Environmental protection measures proposed to be adopted, proposal for carrying out CSR activities for socio-economic development, development of green belt, due consideration of occupational health, etc. In view of the size of the mine, production rate and the mineral mined and the assurance given by PP that he will give due consideration to environment by maintaining haul roads and water sprinkling on same, carrying out CSR activities for socio-economic development, development of green belt, due consideration of occupational health of persons engaged in mining. The indicated project cost is Rs 40.20 Lakh and a provision of Rs 8.93 Lakhs will be kept for Environment management.

The details of mine capacity as per Approved Mining Plan are

Mineable Proved Reserve : 50,52,807 t

Year-wise Production as per Approved Mining Plan Report for five years is as follows

| | | |
|----------------------|---|------------|
| 1 st Year | : | 2,18,916 t |
| 2 nd Year | : | 2,10,195 t |
| 3 rd Year | : | 3,05,721 t |
| 4 th Year | : | 4,18,203 t |
| 5 th Year | : | 2,56,297 t |

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J.P.T.
V.L.
R.P. Shaw
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The daily production as per Form I is 1394 tonnes.

PP has submitted certificates from DMO (Letter No.- 2582, Dated- 03.10.2016), DFO (Letter No.- 1187, Dated- 16.06.2017) and CO (Letter No.- 31, Dated- 30.08.2016).

In the earlier presentation following discrepancies were identified and the committee advised to submit accordingly

1. In the Environment Management Plan all the turning point of the proposed site have been marked with latitude & longitude.
2. Revised land use pattern.

The documents related to the above mentioned discrepancies have been submitted. The documents were examined and found to be satisfactory.

Based on the documents provided the Committee decided that the proposal for Bekchuri Stone Mine of M/s Swastik Traders [Sri Sudip Kumar dey (Partner)] at Village- Bekchuri, P.O & P.S- Kayanchak & Taljhari, Dist.- Sahibganj, (6.89 Ha) be recommended for consideration of SEIAA subject to above mentioned observations for grant of EC. The various conditions for grant of EC are given at Annexure I.

3. Bankuchia Stone Deposit of M/s K.K. Builders Pvt Ltd at Village- Bankuchia, Thana- Patamda, Dist.- East Singhbhum, (11.74 Ha) .

This is a Stone Mining Project for having an area of 11.74 Ha [Khata No. 409, Plot No.- 4163 (P)]. The committee noted that as per Form I it is a proposal for new lease for which PP is seeking EC. It is B2 Category of Project - as per MoEF& CC Notification dated 15.01.2016.

The project was reviewed with respect to proposed Mining Plan, Environmental protection measures proposed to be adopted, proposal for carrying out CSR activities for socio-economic development, development of green belt, due consideration of occupational health, etc. In view of the size of the mine, production rate and the mineral mined and the assurance given by PP that he will give due consideration to environment by maintaining haul roads and water sprinkling on same, carrying out CSR activities for socio-economic development, development of green belt, due consideration of occupational health of persons engaged in mining. The indicated project cost is Rs1.80Crore and a provision of Rs 4.20 Lakhs will be kept for Environment management.

The details of mine capacity as per Approved Mining Plan are

| | | |
|---------------------------|---|-------------|
| Mineable Proved Reserve | : | 78,38,749 t |
| Mineable Probable Reserve | : | 7,07,365 t |

Year-wise Production as per Approved Mining Plan Report for five years is as follows

| | | |
|----------------------|---|------------|
| 1 st Year | : | 8,54,717 t |
| 2 nd Year | : | 8,54,514 t |
| 3 rd Year | : | 8,54,421 t |
| 4 th Year | : | 8,54,755 t |
| 5 th Year | : | 8,54,581 t |

The daily production as per Form I is 2849 tonnes.

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PP has submitted certificates from DMO (Letter No.-496, Dated- 03.03.17), DFO (Letter No.- 3925, Dated- 19.11.15) and CO (Letter No.- 462, Dated- 04.05.15).

In the earlier presentation following discrepancies were identified and the committee advised to submit accordingly

“The information was examined and found that DFO letter needs clarification regarding whether the proposed lease boundary is beyond 250 meters from notified forest or not.”

The documents related to the above mentioned discrepancies have been submitted. The documents were examined and found to be satisfactory.

Based on the documents provided the Committee decided that the proposal for Bankuchia Stone Deposit of M/s K.K. Builders Pvt Ltd at Village- Bankuchia, Thana- Patamda, Dist.- East Singhbhum, (11.74 Ha) be recommended for consideration of SEIAA subject to above mentioned observations for grant of EC. The various conditions for grant of EC are given at Annexure I.

4. Sundare Stone Mine of M/s Narayan Stone Works (Shri Ram Saware Tiwari) at Village- Sundare, P.O. & P.S.- Mirzachouki, Dist.- Sahibganj, (6.41 Ha) .

This is a Stone Mining Project for having an area of 6.41 Ha [Khata No.- 25, Plot No.- 102 (P) & 103 (P), Khata No.- 09, Plot No.- 109 & 117, Khata No.- 27, Plot No.- 106, khata No.- 22, Plot No.- 114, Khata No.- 04, Plot No.- 108, Khata No.- 07, Plot No.- 107 (P)]. The committee noted that as per Form I it is a proposal for existing mine lease for which PP is seeking EC. The lease was valid w.e.f. 13.01.2011 for a period of 07 years.. Considering the fact that it is B2 Category of Project - as per EIA Notification dated 14.09.2006 the environmental impact assessment as well as Public Consultation is not required. The committee felt that TOR is not required, nor any formal EIA/EMP is to be prepared in the instant case. These prescribed exemptions (Based on SEIAA guidelines and decision taken vide MOEF Notification dated 14.09.2006 and decision taken by SEIAA in its 31st meeting held on 27.05.2015) are recommended by the Committee in the instant case.

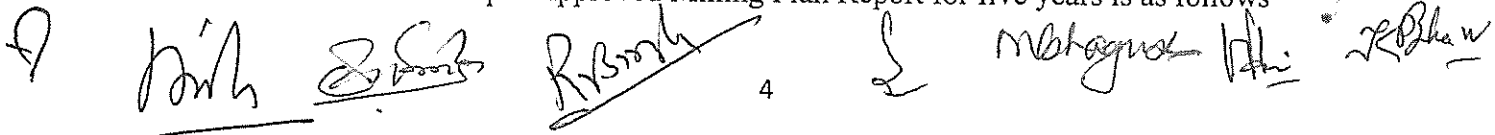
The project was reviewed with respect to proposed Mining Plan, Environmental protection measures proposed to be adopted, proposal for carrying out CSR activities for socio-economic development, development of green belt, due consideration of occupational health, etc. In view of the size of the mine, production rate and the mineral mined and the assurance given by PP that he will give due consideration to environment by maintaining haul roads and water sprinkling on same, carrying out CSR activities for socio-economic development, development of green belt, due consideration of occupational health of persons engaged in mining. The committee felt that the operation of the mine will have not have any major impact on the surroundings. The indicated project cost is Rs 19.50 Lakh and a provision of Rs 9.25 Lakhs will be kept for Environment management.

The details of mine capacity as per Approved Mining Plan are

Mineable Proved Reserve : 11,17,889 t

Mineable Probable Reserve : 7155 t

Year-wise Production as per Approved Mining Plan Report for five years is as follows

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| | | |
|----------------------|---|------------|
| 1 st Year | : | 1,12,590 t |
| 2 nd Year | : | 1,12,590 t |
| 3 rd Year | : | 1,12,520 t |
| 4 th Year | : | 1,12,504 t |
| 5 th Year | : | 1,12,506 t |

The daily production as per Form I is 375 tonne.

PP has submitted certificates from DMO (Letter No.- 600, Dated- 04.03.15), DFO (Letter No.- 109, Dated- 16.01.15) and CO (Letter No.- 404, Dated- 26.08.17).

In the earlier presentation following discrepancies were identified and the committee advised to submit accordingly

“Certificate from CO, Mandro regarding two contradictory statements & basis of measurement of state boundary distance.”

The documents related to the above mentioned discrepancies have been submitted. The documents were examined and found to be satisfactory.

Based on the documents provided the Committee decided that the proposal for Sundare Stone Mine of M/s Narayan Stone Works (Shri Ram Saware Tiwari) at Village- Sundare, P.O. & P.S.- Mirzachouki, Dist.- Sahibganj, (6.41 Ha) be recommended for consideration of SEIAA subject to above mentioned observations for grant of EC. The various conditions for grant of EC are given at Annexure I.

5. Lakrahi Stone Deposit of M/s MaaChedi Stone at Village Lakrahi Tehsil Naudiha Bazar (Chhattarpur) Dist.- Palamu, (10.93Ha).

This is a Stone Mining Project for having an area of 10.93 Ha [Khata No. 31, Plot No. – 214 (P) & 215 (P)]. The committee noted that as per Form I it is a proposal for new lease for which PP is seeking EC. It is B2 Category of Project - as per MoEF & CC Notification dated 15.01.2016.

The project was reviewed with respect to proposed Mining Plan, Environmental protection measures proposed to be adopted, proposal for carrying out CSR activities for socio-economic development, development of green belt, due consideration of occupational health, etc. In view of the size of the mine, production rate and the mineral mined and the assurance given by PP that he will give due consideration to environment by maintaining haul roads and water sprinkling on same, carrying out CSR activities for socio-economic development, development of green belt, due consideration of occupational health of persons engaged in mining. The indicated project cost is Rs67.04Lakh and a provision of Rs 17.44 Lakhs will be kept for Environment management.

The details of mine capacity as per Approved Mining Plan are

| | | |
|---------------------------|---|------------|
| Mineable Proved Reserve | : | 12,26,476t |
| Mineable Probable Reserve | : | 14,40,068t |

Year-wise Production as per Approved Mining Plan Report for five years is as follows

| | | |
|----------------------|---|------------|
| 1 st Year | : | 2,66,654 t |
| 2 nd Year | : | 2,66,654 t |
| 3 rd Year | : | 2,66,654 t |

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4th Year : 2,66,654 t
5th Year : 2,66,654 t

The daily production as per Form I is 889 tonnes.

PP has submitted certificates from DMO (Letter No.-2322, Dated- 24.12.2016), DFO (Letter No.- 4693, Dated- 28.11.2016) and CO (Letter No.- 41, Dated- 05.10.2016).

In the earlier presentation following discrepancies were identified and the committee advised to submit accordingly

“The project proponent was asked to submit a certificate from the CO that there is no jangle jhari in the project area.”

The documents related to the above mentioned discrepancies have been submitted. The documents were examined and found to be satisfactory.

Based on the documents provided the Committee decided that the proposal for Lakrahi Stone Deposit of M/s MaaChedi Stone at Village Lakrahi Tehsil Naudiha Bazar (Chhattarpur) Dist.- Palamu, (10.93Ha) be recommended for consideration of SEIAA subject to above mentioned observations for grant of EC. The various conditions for grant of EC are given at Annexure I.

Proposals related Sand Mine

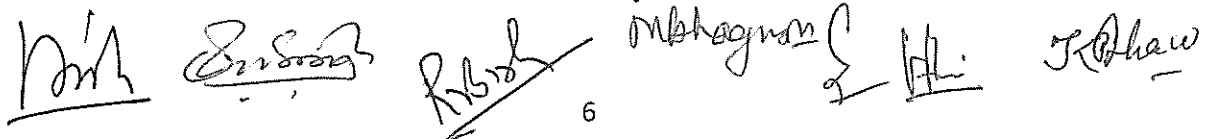
6. Futberiya Sand Mine Project on Ajay River of M/s Sparkal World Pvt Ltd at Village- Futberiya, P.O. & P.S.- Nala, Dist.- Jamtara, (18.83 Ha).

This is a Sand Mining Project for having an area of 18.83 Ha [Khata No. 49, 28 & 45, Plot No.- 1538, 833 & 1193]. The committee noted that as per Form I it is a proposal for grant of mine lease after auction vide DMO's allotment letter no.- 404, dated- 26.05.2015 for which PP is seeking EC. It is B2 Category of Project - as per MoEF& CC Notification dated 15.01.2016.

The project was reviewed with respect to proposed Mining Plan, Environmental protection measures proposed to be adopted, proposal for carrying out CSR activities for socio-economic development, development of green belt, due consideration of occupational health, etc. In view of the size of the mine, production rate and the mineral mined and the assurance given by PP that he will give due consideration to environment by maintaining haul roads and water sprinkling on same, carrying out CSR activities for socio-economic development, development of green belt, due consideration of occupational health of persons engaged in mining. The indicated project cost is Rs 53.97 Lakhs and a provision of Rs 6.33Lakh has been indicated for Environment management.

The proposed estimated mineable reserve is 74,927 cum and annual production capacity as per Form I has been indicated as 69,377 cum per annum.

PP has submitted certificates from CO (Letter No.- 307, dated- 27/03/2017), DFO (Letter No.- 1044, dated- 22/07/2017) and DMO (Letter No.- 446, dated- 02/06/2017). PP has submitted Affidavit that there is no intake well, breeding ground and bridge within 500 m from mine lease. The data was examined and found to be satisfactory.


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In the earlier presentation following discrepancies were identified and the committee advised to submit accordingly

1. In the Environment Management Plan all the turning point of the proposed site have been marked with latitude & longitude.
2. Revised land use pattern.

The documents related to the above mentioned discrepancies have been submitted. The documents were examined and found to be satisfactory.

Based on the documents provided the Committee decided that the proposal for Futberiya Sand Mine Project on Ajay River of M/s Sparkal World Pvt Ltd at Village- Futberiya, P.O. & P.S.- Nala, Dist.- Jamtara, (18.83 Ha) be recommended for consideration of SEIAA subject to above mentioned observations for grant of EC. The various conditions for grant of EC are given at Annexure II.

7. Madalo Sand Mine Project on Ajay River of M/s Rajmahal Traders [Shri Ram Kumar Singh (Partner)] at Village- Madalo, P.O - Madalo, P.S - Nala, Dist. - Jamtara (23.48 Ha).

This is a Sand Mining Project for having an area of 23.48 Ha [Khata No- 86, Plot No.- 1, 773 & 2756]. The committee noted that as per Form I it is a proposal for grant of mine lease after auction vide DMO's allotment letter no.- 397, dated- 26.05.2015 for which PP is seeking EC. It is B2 Category of Project - as per MoEF & CC Notification dated 15.01.2016.

The project was reviewed with respect to proposed Mining Plan, Environmental protection measures proposed to be adopted, proposal for carrying out CSR activities for socio-economic development, development of green belt, due consideration of occupational health, etc. In view of the size of the mine, production rate and the mineral mined and the assurance given by PP that he will give due consideration to environment by maintaining haul roads and water sprinkling on same, carrying out CSR activities for socio-economic development, development of green belt, due consideration of occupational health of persons engaged in mining. The indicated project cost is Rs 69.85 Lakhs and a provision of Rs 11.81 Lakh has been indicated for Environment management.

The proposed estimated mineable reserve is 5,35,192 cum and annual production capacity as per Form I has been indicated as 4,81,673 cum per annum.

PP has submitted certificates from CO (Letter No.- 305, dated- 31/03/2017), DFO (Letter No.- 1045, dated- 22/07/2017) and DMO (Letter No.- 444, dated- 02/06/2017). PP has submitted Affidavit that there is no intake well, breeding ground and bridge within 500 m from mine lease.

In the earlier presentation following discrepancies were identified and the committee advised to submit accordingly

1. In the Environment Management Plan all the turning point of the proposed site have been marked with latitude & longitude.
2. Revised land use pattern.

The documents related to the above mentioned discrepancies have been submitted. The documents were examined and found to be satisfactory.

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Based on the documents provided the Committee decided that the proposal for Madalo Sand Mine Project on Ajay River of M/s Rajmahal Traders [Shri Ram Kumar Singh (Partner)] at Village- Madalo, P.O - Madalo, P.S - Nala, Dist. - Jamtara (23.48 Ha) be recommended for consideration of SEIAA subject to above mentioned observations for grant of EC. The various conditions for grant of EC are given at Annexure II.

8. Murma Graphite Mine Project of Sri Krishna Kumar Poddar at Village – Murma, P.S.- Satbarwa, Dist. - Palamau (4.93 ha).

The file has been transferred from MOEF & CC to SEIAA, Jharkhand. ToR was granted by MoEF & CC on 13.07.2016. The extract of proposal from MOEF & CC is given as below:

“The proposal of expansion of Murma Graphite Mine from 29245 TPA – 55870 TPA (ROM) in the mining lease of 4.93 ha. The mine lease is located at Plot No. 46, Village Murma, Thana – Satbarwa, district- Palamau, Jharkhand. The latitude 23°54’46.433” N to 23°54’53.397” N and longitude 84°17’3.730” E to 84°17’20.524” E with maximum contour of 321 mRL and minimum contour of 291 mRL marks the lease area. The area falls in the Survey of India Topo-sheet no. 73 A/5, 73 A/1.

Project Proponent reported that the lease area of 4.93 ha is Government Non-forest land. Originally lease area of 12.94 acres/5.240 ha in Mouza- Murma, thana-Satbarwa, District- Palamau, State- Jharkhand was sanctioned to Sri Krishna Kumar Poddar for a period of 15 years i.e. from 05.03.1990 to 04.03.2005. Thereafter, the renewal of mining lease was granted to the lessee over an area of only 4.93 ha for a period of 15 years from 05,03.2005 to 04,03.2020. Now, as per Rule 8 A (3) of MMDR (Amendment) Act 2015 lease period is valid up to 04,03.2040. Project Proponent reported that the Ministry, vide S.O 2601 (E) dated 7th October, 2014 had made prior environmental clearance for all major mineral even for less than 5 ha area. Now the project proponent has planned to expand the production capacity from this mine. Presently Project Proponent is carrying out mining operation at the lower capacity of maximum 29,245 TPA. For expanding the production to 55,870 TPA, it has become essential to obtain environmental clearance under the provisions of the EIA Notification, 2006. The mine lease area is less than 5 ha hence the proposed project is under category “B” but since there is no Committee in Jharkhand, hence the present proposal has been submitted to the Ministry for consideration.

The Method adopted will be other than fully mechanized open cast mining. The topography of the area represents a rolling ground with continuous small hillocks and valleys in between. The nearest settlement is Satbarwa, which is about 2.69 km NW from the lease area. Malay Dam is situated 0.32 Km NW from the lease area. Betla National Park is located 5.20 km SSW from the lease area. Nearest notified protected forested is Betla reserve forest 5.20 km SSW and Nawadih protected forest at 6.80 km NW from the lease area. Geological reserve is estimated at 620547 T while mineable reserve is 475294 T. the life of mines about 10 years. During the 1st year of the plan period over burden and waste will be dumped in the dumping yard located near the south eastern side of the lease area. From 2nd year OB and waste will be backfilled in the north western exhausted part of the quarry. Parapet wall as well as garland drain will be made at the toe of the waste dump to prevent wash off from the dump. The run off mine will be dispatched to the beneficiation plant of Chotanagpur Graphite Industries in which proponent is also a director. The project cost is about Rs. 250 Lakhs. It is reported by the project proponent that there is no court case / litigation pending against the project.”

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The project authorities along with their consultant M/s Perfect Enviro Solutions Pvt Ltd, New Delhi gave a detailed presentation on the EIA / EMP Report.

The Member Secretary, SEAC requested Member Secretary, Jharkhand State Pollution Control Board as to whether this project is a case violation or not since the CTO issued was valid till Dec, 2014 & unit produced the ore beyond Dec, 2014. SEAC members opined that the said discrepancies are within the preview & jurisdiction of Jharkhand State Pollution Control Board.

Based on the documents provided the Committee decided that the proposal for Murma Graphite Mine Project of Sri Krishna Kumar Poddar at Village – Murma, P.S.-Satbarwa, Dist. - Palamau (4.93 ha) be recommended for consideration of SEIAA subject to above mentioned observations for grant of EC. The various conditions for grant of EC are given at Annexure III.

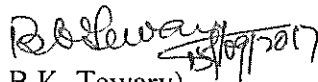
B. Projects for which SEAC has sought clarifications from PP.


1. **Proposed 25,200 TPA Crude Coal Tar Distillation unit of M/s Vedang Hydrocarbon Pvt Ltd at Bokaro Industrial Area Development Authority (BIADA), Village- Gorabail, Tehsil-Chas, Dist.- Bokaro.**

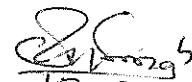
Dr. Ran Vijay Singh and Sri S.P. Shrivastava, Member, SEAC visited the site. Consultant is absent. The proponent present could not explain the issues raised.

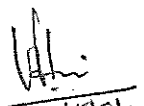
As such it was deferred to next meeting.

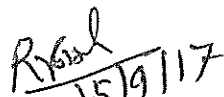
The meeting concluded with thanks to all present.

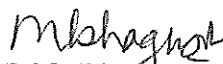

(Dr. B.K. Tewary)
Member

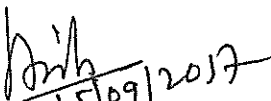

(S.P. Srivastav) 15-09-17
Member



(Dr. R. N. Singh) 15-09-17
Member



(Dr. V.P. Sinha) 15/9/17
Member


(Dr. R. V. Singh) 15/9/17
Member


(M.S. Bhagyvat)
Member

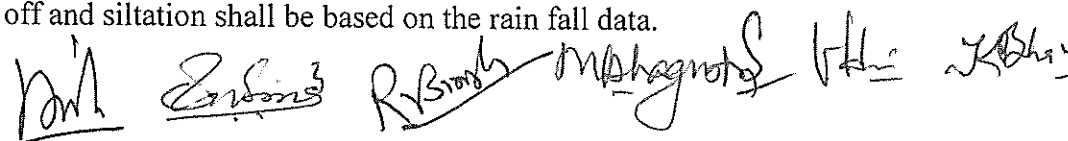

(U.P. Singh) 15/09/2017
Member


(Om Prakash)
Member Secretary

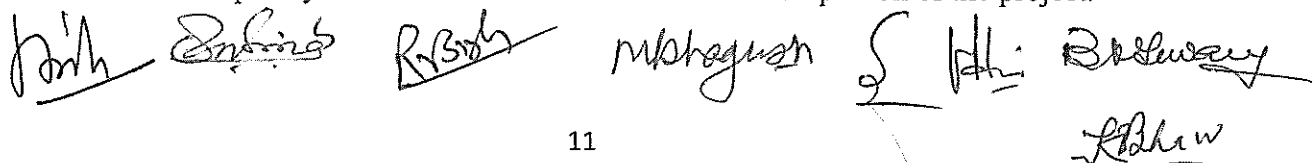

(K.P. Bhawsinka)
Chairman

A. Specific Conditions

1. The environmental clearance is subject to period of lease of the mine by the Department of Mines, Government of Jharkhand to PP and all other Statutory Conditions as imposed by various agencies / District Authorities are complied with.
2. No mining shall be undertaken in the forest area without obtaining requisite prior forestry clearance.
3. Environmental clearance is subject to final order of the Hon'ble Supreme Court of India / National Green Tribunal / MOEF Guidelines applicable to Minor Minerals.
4. Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project (in case any endangered fauna occurs / is found in the Project area). No damage is to be done to the fauna in general and endangered species in particular, if found in ML area (as mentioned in various schedules). In such case they should be given protection, capture alive with the help of the subject expert and transfer them or handing over them to the concerned authorities. Conservation Plan, if applicable has to be adhered to.
5. The mining operations shall be restricted to ground above water table and it should not intersect the groundwater table. In case of working below the ground water table, prior approval of the Ground Water Directorate, Government of Jharkhand / Central Ground Water Board shall be obtained. Benches height and slope shall be maintained as per approved Mining Plan. The Mining Plan has to be got approved by concerned authorities as per IBM or equivalent agencies. Safety measures shall be adopted in line with DGMS Guidelines.
6. PP shall maintain minimum distance from Reserved / Protected Forests as stipulated in applicable guidelines.
7. The project proponent shall ensure that no natural watercourse and / or water resources shall be obstructed / diverted due to any mining operations. Adequate measures shall be taken for conservation and protection of the first order and the second order streams, if any emanating / passing through the mine lease area during the course of mining operation.
8. The top soil, if any shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used by spreading on the land reclamation and plantation.
9. There shall be no external dump(s). Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Jharkhand State Pollution Control Board, Ranchi and its nearest Regional Office on six monthly basis.
10. Catch drains and siltation ponds of approved size to contain silt & water and its location shall be constructed around the mine working, sub-grade and mineral dump(s) to prevent run off of water and flow of sediments directly into the nearby agricultural fields, and other water bodies. The water so collected should be utilized for watering the haul roads, green belt development etc. A periodical report shall be sent. The drains shall be regularly desilted particularly after the monsoon and maintained properly.
11. Dimension of the retaining wall at the toe of the OB benches within the mine to check run-off and siltation shall be based on the rain fall data.

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12. Greenbelt of approved width shall be developed all along the length of mine lease area and haul roads. The Project proponent shall do adequate no at least 50 bamboo gabion plantation each year and maintain it for the life of the mine along the transport road and vacant space, preferably along the periphery of mining lease. Fast growing and local species will be planted.
13. Effective safeguard measures such as regular water sprinkling shall be carried out in the identified critical areas prone to air pollution and having high levels of particulate matter such as loading and unloading point and transfer points. Extensive water sprinkling as per approved plan shall be carried out on haul roads which should be made pucca as per approved specification of Govt. of Jharkhand with suitable water drainage arrangements. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
14. The project proponent shall implement approved conservation measures to augment ground water resources in the area in consultation with the Ground Water Directorate, Government of Jharkhand / Central Ground Water Board.
15. The project proponent shall if required, obtain necessary prior permission/NOC from the competent authorities for drawl of requisite quantity of water required from the source for the project.
16. Suitable rainwater harvesting measures shall be planned and implemented in consultation with the Ground Water Directorate, Government of Jharkhand / Central Ground Water Board.
17. Vehicular emissions shall be kept under control by regular repairing of transport road and regular air quality monitoring. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded. No transportation of stone / sand outside the mine lease area shall be carried out after the sunset.
18. No blasting shall be carried out after sunset. Blasting operation shall be carried out only during daytime. Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.
19. Drilling shall either be operated with the dust extractors or equipped with water injection system.
20. Effective safeguard measures shall be taken to control fugitive emissions so as to ensure that RPM (PM10 and PM 2.5) levels are within prescribed limits.
21. Pre-placement medical examination and periodical medical examination of the workers engaged in the project conducted by a Registered Medical Officer shall be carried out and records maintained.
22. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna.
23. Provision shall be made for the housing of construction labour at a suitable place away from the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets / septic tanks, safe drinking water, medical health care, etc. The housing may be in the form of temporary structures to be removed after the completion of the project.



24. Proper Safety measures as per statutory requirement shall be implemented around the mined out Pit prior to closure of site.
25. A final mine closure Plan along with corpus fund duly approved by Competent Authority shall be submitted to the Jharkhand State Pollution Control Board, Ranchi and to concerned DMO in advance of final mine closure for approval.
26. The project proponent shall obtain Consent to establish and Consent to Operate from the Jharkhand State Pollution Control Board, Ranchi and effectively implement all the conditions stipulated therein.
27. The Project Proponent shall submit six monthly report on the expenditure incurred on environmental management plan submitted by them.
28. Since blasting and mining on Hillock / Rock out crop may also be carried out, suitable scheme for access / ramp to the highest elevation with gradient shall be submitted for approval from competent authorities.
29. Approved devices for dust suppression shall be installed.

B. General conditions

1. No change in mining technology and scope of working should be made without prior approval of the Statutory authorities / Department of Mines, Government of Jharkhand / Jharkhand State Pollution Control Board, Ranchi during the EC period.
2. No change in the calendar plan including excavation, quantum of mineral and waste should be made.
3. The Project proponent shall make all internal roads pucca as per approved specification of Govt. of Jharkhand and shall maintain a good housekeeping by regular cleaning and wetting of the haul roads and the premises.
4. The Project proponent shall maintain register for production and dispatch and submit return to the Board.
5. The Project proponent shall not cut trees / carry out tree felling in leased out area without the permission of competent authority.
6. Measures should be taken for control of noise levels below prescribed norms in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.
7. Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards Oil and grease trap should be installed before discharge of workshop effluents.
8. Personnel working in dusty areas should be provided with protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed. Detailed report shall be sent to Pollution Control Board periodically.
9. Dispensary facilities for First Aid shall be provided at site.
10. A separate environmental management / monitoring cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.

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11. The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Jharkhand State Pollution Control Board, Ranchi. PP shall carry out CSR activities as per Government Guidelines (%of Profit / turnover) or at least Rs 1 per ton whichever is higher.
12. The Jharkhand State Pollution Control Board, Ranchi directly or through its Regional Office, shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) by furnishing the requisite data / information / monitoring reports.
13. The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the SEIAA / JSPCB and to its concerned Regional Office.
14. The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to Jharkhand State Pollution Control Board and its concerned Regional Office The criteria pollutant levels namely ; SPM ,RSPM,SO₂ ,NO_x (ambient levels) or critical sectoral parameters , indicated for the project shall be monitored and displayed at a convenient location near the project shall be monitored and displayed at a convenient location near the main gate of the company in the company in the public domain.
15. A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, ZilaParisad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the project proponent.
16. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the Jharkhand State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986,as amended subsequently ,shall also be put on the website of the company along the status of compliance of EC conditions and shall also to the concerned Regional Office of JSPCB by e-mail.
17. All statutory clearances shall be obtained before start of mining operations.

C. Other points

1. The Authority reserves the right to add any new condition or modify the above conditions or to revoke the clearance if conditions stipulated above are not implemented to the satisfaction of Authority or for that matter for any other Administrative reason.
2. The Environmental Clearance accorded will be valid for the period of lease of the mine, till the PP does not increase production rate and alter lease area during the validity of Environmental Clearance.
3. In case of any deviation or alteration in the project proposed from those submitted to SEIAA, Jharkhand for clearance, a fresh reference should be made to SEIAA to assess the adequacy of the conditions imposed and to incorporate any new conditions if required.
4. The above stipulations would be enforced among others under 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

Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991, along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/ High Court of Jharkhand and any other Court of Law relating to the subject matter.

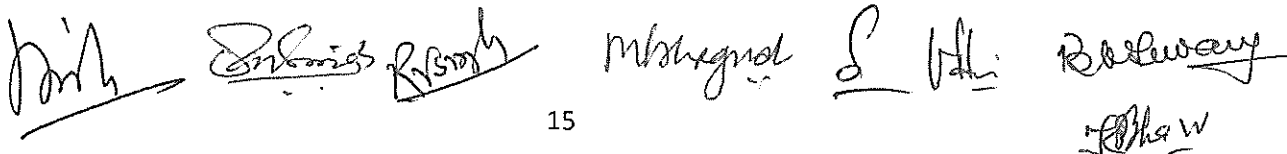
5. Any Appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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A. Specific Conditions

1. The Environmental clearance is subject to grant of Mining Lease and will be co-terminus with the mining lease period.
2. The mining work will be open-cast and exclusively manual. No mechanical work or drilling / blasting should be involved at any stage.
3. The project proponent shall ensure that wherever deployment of labour attracts the Mines Act, the provision thereof shall be strictly followed. Also PP shall ensure that stipulations mentioned in MoEF OM No.- J-13012/12/2013-IA-II(I), dated- 24th December, 2013 and SEIAA, Jharkhand guideline dated 07.05.2013 are adhered to.
4. For the green belt development in the mining area / transport road sides / other land area saplings available in the forest nursery / private nursery should also be considered for the mentioned purpose instead of the Trees / Plants mentioned in the PFR / Presentation copies of the proposed mine.
5. No sand mining activities will be carried out in upstream or downstream within 500 m of railways, road, bridge, water intake, wires & notified aquarium or breeding places.
6. Project Proponent shall appoint a Monitoring Committee to monitor the replenishment study, traffic management, levels of production, River Bank erosion and maintenance of Road etc and shall submit report to SEIAA, JSPCB and DMO after every monsoon i.e. by end of November (30th) of that year. Also after receding of flood / water (after monsoon) a study has to be conducted in mining lease area and list of flora & fauna is to be prepared and submit report to SEIAA, JSPCB and DMO.
7. Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project (in case any fauna occurs / is found in the Project area).
8. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna.
9. The project proponent shall prepare the plan of mining in conformity with the mine lease conditions and the Rules prescribed in this regard clearly showing the no work zone in the mine lease i.e. the distance from the bank of river to be left un-worked (Non mining area), distance from the bridges etc. It shall be ensured that no mining shall be carried out during the monsoon season. Due consideration will be given to points raised in Supreme Court judgement and SEIAA guidelines.
10. The project proponent shall undertake adequate safeguard measures during extraction of river bed material and ensure that due to this activity the hydro-geological regime of the surrounding area shall not be affected.
11. The project proponent will provide protective respiratory devices to workers working in dusty areas and they shall also be provided with adequate training and information on safety and health aspects. Periodical medical examination of the workers engaged in the project

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shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.


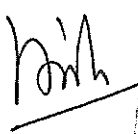
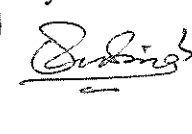
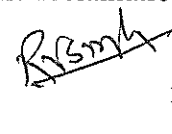
12. Solid waste material viz., gutkhapouchs, plastic bags, glasses etc. to be generated during project activity will be separately stored in bins and managed as per Solid Waste Management rules.
13. Natural /customary paths used by villagers should not be obstructed at any time by the activities proposed under the project. Transportation of sand is to be carried out with consent of Villagers and Trucks are to be covered with Tarpaulin.
14. Local flora may be planted in the Core Zone of the Mining Lease area.
15. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
16. Environmental clearance is subject to final order of the Hon'ble Supreme Court of India / MOEF Guidelines applicable to Minor Minerals.
17. PP shall maintain minimum distance from Reserved / Protected Forests as stipulated in applicable guidelines.
18. There shall be no external dump(s). Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Jharkhand State Pollution Control Board, Ranchi and its nearest Regional Office on six monthly basis.
19. The project proponent should implement suitable conservation measures to augment ground water resources in the area in consultation with the Ground Water Directorate, Government of Jharkhand / Central Ground Water Board.
20. Effective safeguard measures should be taken to control fugitive emissions so as to ensure that RSPM (PM10 and PM 2.5) levels are within prescribed limits.
21. Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained.
22. Proper safety measures as per statutory requirement are to be implemented around the mined out Pit prior to closure of site.
23. A final mine closure Plan along with corpus fund duly approved by Competent Authority shall be submitted to the Jharkhand State Pollution Control Board, Ranchi and to concerned DMO in advance of final mine closure for approval.
24. The project proponent shall obtain Consent to establish and Consent to Operate from the Jharkhand State Pollution Control Board, Ranchi and effectively implement all the conditions stipulated therein
25. At least 1.5 meter from the river bed sand should be kept intact and mining can be done above this cushion of sand considering the geological condition of Chhotanagpur plateau.

B. General conditions:

As per the latest guidelines of MoEF & CC regarding Sustainable Sand Mining Management Guidelines 2016 -

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1. EC is subject to having valid lease and all statutory clearance as applicable.
2. Monitoring Committee including Local Panchayat to check on traffic due to transportation and submit an annual report on the same.
3. To maintain safety and stability of Riverbanks i.e. 3 meter or 10% of the width of the River whichever is more will be left intact as no mining zone.
4. Ultimate working depth shall be up to 3.0 m from Riverbed level and not less than one meter from the water level of the River channel whichever is reached earlier.
5. The directions given by the Hon'ble Supreme Court of India vide order dated 27.02.2012 in Deepak Kumar case [SLP(C) Nos.19628-19629 of 2009] and order dated 05.08.2013 of the Hon'ble National Green Tribunal in application No.171/2013 may be strictly followed.
6. All the provisions made and restrictions imposed as covered in the Minor Mineral Rule, shall be complied with, particularly regarding Environment Management Practices and its fund management and Payment of compensation to the land owners.
7. District level Survey Report should be prepared and area suitable for mining and area prohibited for mining be identified.
8. No River sand mining be allowed in rainy season.
9. To submit annual replenishment report certified by an authorized agency. In case the replenishment is lower than the approved rate of production, then the mining activity/ production levels shall be decreased / stopped accordingly till the replenishment is completed.
10. In River flood plain mining a buffer of 3 meter to be left from the River bank for mining.
11. In mining from agricultural field a buffer of 3 meter to be left from the adjacent field.
12. Mining shall be done in layers of 1 meter depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers.
13. No stream should be diverted for the purpose of sand mining. No natural water course and/ or water resources are obstructed due to mining operations.
14. No blasting shall be resorted to in River mining and without permission at any other place.
15. Depending upon the location, thickness of sand, deposition, agricultural land/Riverbed, the method of mining may be manual, semi-mechanized or mechanized; however, manual method of mining shall be preferred over any other method.
16. Mining should be done only in area / stretch identified in the District Level Survey Report suitable for mining and so certified by the Sub- Divisional Level Committee after site visit.
17. Mining should begin only after pucca pillar marking the boundary of lease area is erected at the cost of the lease holder after certification by the mining official and its geo coordinates are made available to the District Level Committee.
18. The top soil in case of surface land mining shall be stored temporarily in an earmarked site and concurrently used for land reclamation.






19. The EC holder shall keep a correct account of quantity of mineral mined out, dispatched from the mine, mode of transport, registration number of vehicle, person in-charge of vehicle and mine plan. This should be produced before officers of Central Government and State for inspection.
20. For each mining lease site the access should be controlled in a way that vehicles carrying mineral from that area are tracked and accounted for.
21. The State / District Level Environment Committee should use technology like Bar Coding, Information and Communications Technology (ICT), Web based and ICT enabled services, mobile SMS App etc. to account for weight of mineral being taken out of the lease area and the number of trucks moving out with the mineral.
22. There should be regular monitoring of the mining activities in the State to ensure effective compliance of stipulated EC conditions and of the provisions under the Minor Mineral Concessions Rules framed by the State Government.
23. Noise arising out of mining and processing shall be abated and controlled at source to keep within permissible limit.
24. Restricted working hours Sand mining operation has to be carried out between sun rise to sun set.
25. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly.
26. Air Pollution due to dust, exhaust emission or fumes during mining and processing phase should be controlled and kept in permissible limits specified under environmental laws.
27. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Wheel washing facility should be installed and used.
28. The mining operations are to be done in a systematic manner so that the operations shall create a major visual impact on the site.
29. Restoration of flora affected by mining should be done immediately. Twice the number of trees destroyed by mining to be planted preferably of indigenous species. Each EC holder should plant and maintain for lease period at least 50 gabion plantation in area near lease and road connecting lease area.
30. No mining lease shall be granted in the forest area without forest clearance in accordance with the provisions of the Forest Conservation Act, 1980 and the rules made thereunder.
31. Protection of turtle and bird habitats shall be ensured.
32. No felling of tree near quarry shall be allowed. For mining lease within 10 km of the National Park / Sanctuary or in Eco-Sensitive Zone of the Protected Area, recommendation of Standing Committee of National Board of Wild Life (NBWL) have to be obtained as per the Hon'ble Supreme Court order in I.A. No. 460 of 2004.
33. Spring sources should not be affected due to mining activities. Necessary Protection measures are to be incorporated.

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34. Removal, stacking and utilization of top soil in mining are should be ensured. Where top soil cannot be used concurrently, it shall be stored separately for future use keeping in view that the bacterial organism should not die and should be spread nearby area.
35. The EC should stipulate conditions for adequate steps to check soil erosion and control debris flow etc. by constructing engineering structures.
36. Use of oversize material to control erosion and movement of sediments.
37. No overhangs shall be allowed to be formed due to mining and mining shall not be allowed in area where subsidence of rocks is likely to occur due to steep angle of slope.
38. No extraction of sand in land slide prone areas shall be carried out.
39. Controlled clearance of riparian vegetation to be undertaken
40. Site clearance and tidiness is very much needed to have less visual impact of mining.
41. Dumping of waste shall be done in earmarked places as approved in Mining Plan.
42. Rubbish burial shall not be done in the Rivers.
43. The EC holder shall take all possible precautions for the protection of environment and control of pollution.
44. Effluent discharge should be kept to the minimum and it should meet the standards prescribed.
45. Mining activities shall not be done for mine lease where mining can cause danger to site of flood protection works, places of cultural, religious, historical, and archaeological importance.
46. Vehicles used for transportation of sand are to be permitted only with of fitness and PUC Certificates.
47. Junction at take-off point of approach road with main road be properly developed with proper width and geometry required for safe movement of traffic by concession holder at his own cost.
48. Project Proponent shall ensure that the road may not be damaged due to transportation of the mineral; and transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and density.
49. No stacking allowed on road side along National Highways.
50. The Project Proponent shall undertake phased restoration, reclamation and rehabilitation of land affected by mining and completes this work before abandonment of mine.
51. Site specific plan with eco-restoration should be in place and implemented.
52. Health and safety of workers should be taken care of.
53. The Project Proponent shall make arrangement for drinking water, first aid facility (along with species specific anti-venom provisioning) in case of emergency for the workers.
54. The Project Proponent shall report monitoring data on replenishment, traffic management, levels of production, River Bank erosion and maintenance of Road etc.

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55. Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and records maintained: also, Occupational health check ups for workers having some ailments like BP, diabetes, habitual smokers, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. Recommendations of National Institute for labour for ensuring good occupational environmental for mine workers would also be adopted.

C. Other points

1. The Authority reserves the right to add any new condition or modify the above conditions or to revoke the clearance if conditions stipulated above are not implemented to the satisfaction of Authority or for that matter for any other Administrative reason.
2. The Environmental Clearance accorded shall be valid for the period of lease of the mine, the PP does not increase production rate and alter lease area during the validity of Environmental Clearance.
3. In case of any deviation or alteration in the project proposed from those submitted to SEIAA, Jharkhand for clearance, a fresh reference should be made to SEIAA to assess the adequacy of the conditions imposed and to incorporate any new conditions if required.
4. The above stipulations would be enforced among others under the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/ High Court of Jharkhand and any other Court of Law relating to the subject matter.
5. 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.

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A. Specific Conditions

1. The Environmental Clearance is subject to renewal of mining lease as per rule 24A of mineral concession Rule 1960 and all other Statutory Conditions as imposed by various agencies / District Authorities are complied with.
2. At the time of obtaining Consent to establish/ Consent to Operate, PP should submit site map duly signed by PP and DMO to JSPCB & SEIAA.
3. At the time of obtaining consent to operate, PP will erect boundary pillars to demarcate boundary of lease. GPS reading, backward – forward bearing & pillar to pillar distance is to written on each pillar. Pillar wise list will be submitted to SEIAA and JSPCB before issue of Consent to Establish/ Consent to Operate.
4. All the conditions stipulated by the State Pollution Control Board in their NOC shall be effectively implemented.
5. Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna.
6. Necessary permission from the Forest Department for transportation of mineral through the forest road shall be revalidated before restarting mining operation.
7. The mining operations shall be restricted to above ground water table and it should not intersect groundwater table. In case of working below the ground water table, prior approval of the Ground Water Directorate, Government of Jharkhand / Central Ground Water Board shall be obtained. Benches height and slope shall be maintained as per approved Mining Plan.
8. The project proponent shall ensure that no natural watercourse shall be obstructed due to any mining operations. Adequate measures shall be taken for conservation and protection of the first order and the second order streams, if any emanating/passing through the mine lease area during the course of mining operation.
9. Top soil should be stacked with proper slope at earmarked site(s) only with adequate measures and should be used for reclamation and rehabilitation of mined out areas.
10. The entire waste generated shall be backfilled and there shall be no external over burden dump left at the end of the mine life. The entire backfilled area shall be reclaimed by plantation. The back filling should be carried out in such a manner that it is restored to the normal ground level. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to Jharkhand State Pollution Control Board, Ranchi and its nearest Regional Office on six monthly basis.
11. Catch drains and siltation ponds of appropriate size should be constructed for the working pit, temporary OB dumps, if any and mineral dumps to arrest flow of silt and sediment. The water so collected should be utilized for watering the mine area, roads, green

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belt development etc. The drains should be regularly desilted, particularly after monsoon, and maintained properly.


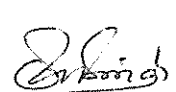
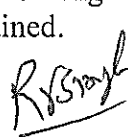
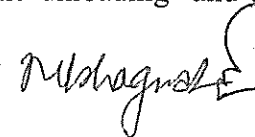

12. Garland drain of appropriate size, gradient and length shall be constructed for both mine pit and temporary dumps and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and desilted at regular intervals.
13. Dimension of the retaining wall at the toe of temporary dumps and OB benches within the mine to check run-off and siltation should be based on the rain fall data.
14. Plantation shall be raised in the 7.5m wide green belt in the safety zone around the mining lease by planting the native species around ML area, backfilled and reclaimed area, around water body, roads etc. in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha.
15. Regular water sprinkling should be carried out in critical areas prone to air pollution and having high levels of SPM and RSPM such as haul road, loading and unloading point and transfer points. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
16. The project authority should implement suitable conservation measures to augment ground water resources in the area in consultation with the Ground Water Directorate, Government of Jharkhand / Central Ground Water Board/ Authority.
17. Regular monitoring of ground water level and quality should be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring should be carried out four times in a year i.e. January, April-May, August, November and the data thus collected may be sent regularly to Jharkhand State Pollution Control Board, Ranchi and its nearest Regional Office / Ground Water Directorate, Government of Jharkhand / Central Ground Water Board / Authority.
18. The project authorities should obtain prior approval of the competent authority for drawl of water required for the project.
19. Suitable rainwater harvesting measures shall be planned and implemented in consultation with the Ground Water Directorate, Government of Jharkhand / Central Ground Water Board / Authority.
20. Vehicular emissions should be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The vehicles should be covered with a tarpaulin and shall not be overloaded.
21. Blasting operation should be carried out only during the daytime. Controlled blasting should be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.
22. Drills shall either be operated with dust extractors or equipped with water injection system.

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23. Effective safeguard measures should be taken to control fugitive emissions so as to ensure that RSPM (PM10 and PM 2.5) levels are within prescribed limits.
24. Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained.
25. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, septic tanks, safe drinking water, medical health care, etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
26. Proper safety measures as per statutory requirement are to be implemented around the mined out Pit prior to closure of site.
27. A final mine closure Plan along with corpus fund duly approved by Competent Authority shall be submitted to the Jharkhand State Pollution Control Board, Ranchi and to concerned DMO in advance of final mine closure for approval.
28. Consent to operate should be obtained from JSPCB before starting production from the mine.

B. General conditions

1. No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment and Forests.
2. No change in the calendar plan including excavation, quantum of mineral bauxite and waste should be made.
3. The Project proponent shall maintain register for production and dispatch and submit return to the Board.
4. The Project proponent shall not cut trees / carry out tree felling in leased out area without the permission of competent authority.
5. Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for SPM / RSPM (PM10 and PM 2.5) levels, SO₂ & NO_x monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.
6. The Project proponent shall make all internal roads pucca and shall maintain a good housekeeping by regular cleaning and wetting of the haul roads and the premises. Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.



7. Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.
8. Industrial wastewater (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422(E) dated 19th May 1993 and 31st December 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of effluents from workshop.
9. Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.
10. Occupational health surveillance programme of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed. Dispensary facilities for First Aid shall be provided at site.
11. A separate environmental management cell with suitable qualified personnel should be set up under the control of a senior Executive, who will report directly to the Head of the organization.
12. The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purposes. Year-wise expenditure should be reported to the Ministry and its Regional Office located at Bhubaneswar.
13. The Jharkhand State Pollution Control Board, Ranchi directly or through its Regional Office, shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer(s) by furnishing the requisite data / information / monitoring reports.
14. The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the Jharkhand State Pollution Control Board, Ranchi and to its concerned Regional Office.
15. The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to Jharkhand State Pollution Control Board and its concerned Regional Office. The criteria pollutant levels namely; SPM, RSPM, SO₂, NO_x (ambient levels) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the project shall be monitored and displayed at a convenient location near the main gate of the company in the company in the public domain.
16. A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the project proponent. JSPCB should display a copy of the clearance letter at the Regional

Handwritten signatures and initials:
Nish, Subin, RBS, 24

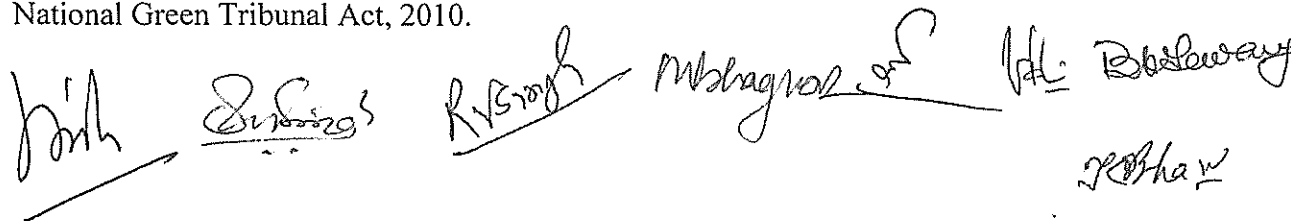
Handwritten signatures and initials:
Mbhaguar, H.L., J.P. Bhawan

Office, District Industry Centre and DC's, Circle Officer's Office for 30 days. The project authorities should also advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the Jharkhand State Pollution Control Board

17. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the Jharkhand State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along the status of compliance of EC conditions and shall also to the concerned Regional Office of JSPCB by e-mail.
18. All statutory clearances shall be obtained before start of mining operations.

C. Other points

1. The Authority reserves the right to add any new condition or modify the above conditions or to revoke the clearance if conditions stipulated above are not implemented to the satisfaction of Authority or for that matter for any other Administrative reason.
2. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
3. The Environmental Clearance accorded shall be valid for the period of renewal of lease (generally 20 years) / life of mine or for 30 years whichever is less. The PP shall not increase production rate and alter lease area during the validity of Environmental Clearance.
4. In case of any deviation or alteration in the project proposed from those submitted to SEIAA, Jharkhand for clearance, a fresh reference should be made to SEIAA to assess the adequacy of the conditions imposed and to incorporate any new conditions if required.
5. The above stipulations would be enforced among others under the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/ High Court of Jharkhand and any other Court of Law relating to the subject matter.
6. 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.

②  The block contains several handwritten signatures and initials. From left to right: a circled '2', a signature that appears to be 'Jinh', a signature that appears to be 'Suresh', a signature that appears to be 'RVS', a signature that appears to be 'Mishra', a signature that appears to be 'H.C. Bhowmik', and a signature that appears to be 'Rohini'.

