

Total	5700	30,00,000
-------	------	-----------

The indicated project cost is Rs 6.00 Lakh and a provision of Rs 1.43 Lakh has been indicated for Environment management.

The DFO, Wildlife Ranchi vide memo no. 995, dated 06.09.19 the National Park, Bio-Diversity, & Sanctuary is not within 10 km and ESZ is also not within 10 km from proposed project site.

The DFO, Ranchi Division vide letter no. 4797, dated 15.10.2019 certified that the distance of project location from Reserved Forest / Protected Forest is more than 250m.

DMO, Ranchi vide memo no. 1368, dated, 04.12.2017 certified that no other lease exists within 500 m radius from proposed project site.

The CO, Ormanjhi vide letter no. 445(ii), dated 18.08.2017 for statutory clearance & vide letter no. 496(ii), dated -16.09.2019 has mentioned the class of land is not recorded as Jangal Jhari in Khatiyani & Register -II.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for **Brick Soil Mining For M/s Mina Bricks, Proprietor: Sri Raj Kumar Gupta, at Mouza - Santi, Thana - Ormanjhi, Thana No. - 07, District - Ranchi, Jharkhand, over an area of 1.97 Acres (0.797 Ha.).** be ~~conditionally~~ (project site not mention in DSR) recommended for subject to submission of DSR from competent authority directly to SEIAA consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as Annexure - I

20. **Brick Soil Mining For M/s J.K.B. Bricks, Proprietor: Sri Sanjay Kumar Gupta, at Mouza - Dubliya, Thana -Pithoria, Thana no. 48 District - Ranchi, Jharkhand, over an area of 1.80 Acres (0.73 Ha.).**  
(Proposal No. : SIA/JH/MIN/45121/2019)

This is a Brick Earth Mining with an area of 0.73 Ha [Khata No.: 20, Plot no. 1007 & 1008]. The latitude and longitude of the project site is N23°27'48.58" to N23°27'52.30" and E85°22'32.05" to E85°22'36.73". The nearest railway station is Ramgarh Cantt at a distance of 12.10 km and the nearest airport is Ranchi at a distance of 17.23 km. Excavation will be carried out in barren land / waste land. Approx. 665 cum of top soil will be generated during the 5 years plan period @ 133 cum every year.

90% of geological reserve is considered mineable due to blockages in slopes / benches and other losses. A production plan of Sub Soil is 1140 cum / year has been envisaged for the brick earth which will be sufficient for manufacturing 6,00,000 numbers of bricks every year. Thus, a total of about 5700 cum quantity of brick earth Sub Soil will be excavated during the plan period of 5 years. This amounts to a broken surface area of 3500 sq.m or 0.86 acres in the five year plan period.

Year-wise Production of brick earth as per PFR for five years is as follows

*Handwritten signature*  
SIA/JH/S

*Handwritten signature* 105 BKT

*Handwritten signature*

*Handwritten signature*

*Handwritten signature*

Year	Quantity of Sub Soil (m <sup>3</sup> )	Nos of Bricks Proposed
1 <sup>st</sup> Year	1140	6,00,000
2 <sup>nd</sup> Year	1140	6,00,000
3 <sup>rd</sup> Year	1140	6,00,000
4 <sup>th</sup> Year	1140	6,00,000
5 <sup>th</sup> Year	1140	6,00,000
<b>Total</b>	<b>5700</b>	<b>30,00,000</b>

The indicated project cost is Rs 6.00 Lakh and a provision of Rs 1.37 Lakh has been indicated for Environment management.

The DFO, Wildlife Ranchi vide memo no. 992, dated 06.09.19 the National Park, Bio-Diversity, & Sanctuary is not within 10 km and ESZ is also not within 10 km from proposed project site.

The DFO, Ranchi Division vide letter no. 4795, dated 15.10.2019 certified that the distance of project location from Reserved Forest / Protected Forest is more than 250m.

DMO, Ranchi vide memo no. 1261, dated, 21-11-2017 certified that no other lease exists within 500 m radius from proposed project site.

The CO, Ormanjhi vide letter no. 447(ii), dated 18.08.2017 for statutory clearance & vide letter no. 493(ii), dated -16.09.2019 has mentioned the class of land is not recorded as Jangal Jhari in Khatiyar & Register -II.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the proposal for Brick Soil Mining For M/s J.K.B. Bricks, Proprietor: Sri Ram Das Sahu, at Mouza - Kurum, Thana -Ormanjhi, District - Ranchi, Jharkhand, over an area of 1.29 Acres (0.522 Ha.). ~~be conditionally (project site not mention in DSR)~~ recommended for subject to submission of DSR from competent authority directly to SEIAA consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as Annexure - I.

21. **Brick Soil Mining For M/s Roma Bricks, Proprietor: Abdul Kuddus Ansari., at Mouza - Chauhi, Thana - Pithoria, Thana No. - 36, District - Ranchi, Jharkhand, over an area of 2.90 Acres (1.174 Ha). (Proposal No. : SIA/JH/MIN/45110/2019)**

This is a Brick Earth Mining with an area of 1.174 Ha [Khata No. 01, Plot no. 459]. The latitude and longitude of the project site is N23°28'59.89" to N23°29'05.27" and E85°23'12.26" to E85°23'14.23". The nearest railway station is Ranchi at a distance of 15.89 km and the nearest airport is Ranchi at a distance of 19.68 km. Excavation will be carried out in field otherwise barren but suitable for agriculture purpose. Approx. 650 cum of top soil will be generated during the 5 years plan period @ 130 cum every year.

90% of geological reserve is considered mineable due to blockages in slopes / benches and other losses. A production plan of Sub Soil is 1140 cum / year has been envisaged for the brick earth which will be sufficient for manufacturing 6,00,000 numbers of bricks every year. Thus, a total of about 5700 cum quantity of brick earth Sub Soil will be excavated during the plan period of 5 years. This amounts to a broken surface area of 3550 sq.m or 0.877 acres in the five year plan period.

Year-wise Production of brick earth as per PFR for five years is as follows

Year	Quantity of Sub Soil (m <sup>3</sup> )	Nos of Bricks Proposed
1 <sup>st</sup> Year	1140	6,00,000
2 <sup>nd</sup> Year	1140	6,00,000
3 <sup>rd</sup> Year	1140	6,00,000
4 <sup>th</sup> Year	1140	6,00,000
5 <sup>th</sup> Year	1140	6,00,000
<b>Total</b>	<b>5700</b>	<b>30,00,000</b>

The indicated project cost is Rs 6.00 Lakh and a provision of Rs 1.89 Lakh has been indicated for Environment management.

The DFO, Wildlife Ranchi vide memo no. 996, dated 06.09.19 the National Park, Bio-Diversity, & Sanctuary is not within 10 km and ESZ is also not within 10 km from proposed project site.

The DFO, Ranchi Division vide letter no. 4621, dated 02.11.2017 certified that the distance of project location from Reserved Forest / Protected Forest is 2000 m.

DMO, Ranchi vide memo no. 1259, dated. 21.11.2017 certified that no other lease exists within 500 m radius from proposed project site.

The CO, Kanke vide letter no. 896(ii), dated 21.09.2019 has mentioned the class of land is not recorded as Jangal Jhari in Khatiyani & Register -II.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the proposal for **Brick Soil Mining For M/s Roma Bricks, Proprietor: Abdul Kuddus Ansari., at Mouza – Chauhi, Thana – Pithoria, Thana No. – 36, District – Ranchi, Jharkhand, over an area of 2.90 Acres (1.174 Ha).** be ~~conditionally (project site not mention in DSR)~~ recommended for subject to submission of ~~DSR from competent authority directly to SEIAA~~ consideration of SEIAA for grant of EC. <sup>cc</sup>  
The various conditions for grant of EC is enclosed as Annexure - I

22. Brick Soil Mining For M/s Nain Bricks, Proprietor: Md. Masud Ansari, at Mouza – Irba, Thana – Ormanjhi, Thana No. – 27, District – Ranchi, Jharkhand, over an area of 2.14 Acres (0.866 Ha). (Proposal No. : SIA/JH/MIN/45102/2019)

This is a Brick Earth Mining with an area of 0.866 Ha [Khata No. 44, 101, Plot no. 224, 225, 217, 218, 219, 220]. The latitude and longitude of the project site is N23°27'56.41" to N23°28'00.25" and E85°25'54.56" to E85°25'58.70". The nearest railway station is Tatisilwai at a distance of 10.73 km and the nearest airport is Ranchi at a distance of 20.0 km. Excavation will be carried out in field otherwise barren but suitable for agriculture purpose. Approx. 665 cum of top soil will be generated during the 5 years plan period @ 133 cum every year.

90% of geological reserve is considered mineable due to blockages in slopes / benches and other losses. A production plan of Sub Soil is 1140 cum / year has been envisaged for the brick earth which will be sufficient for manufacturing 6,00,000 numbers of bricks every year. Thus, a total of about 5700 cum quantity of brick earth Sub Soil will be excavated during the plan period of 5 years. This amounts to a broken surface area of 3560 sq.m or 0.88 acres in the five year plan period.

Year-wise Production of brick earth as per PFR for five years is as follows

Year	Quantity of Sub Soil (m <sup>3</sup> )	Nos of Bricks Proposed
1 <sup>st</sup> Year	1140	6,00,000
2 <sup>nd</sup> Year	1140	6,00,000
3 <sup>rd</sup> Year	1140	6,00,000
4 <sup>th</sup> Year	1140	6,00,000
5 <sup>th</sup> Year	1140	6,00,000
<b>Total</b>	<b>5700</b>	<b>30,00,000</b>

The indicated project cost is Rs 6.00 Lakh and a provision of Rs 2.00 Lakh has been indicated for Environment management.

The DFO, Wildlife Ranchi vide memo no. 1063, dated 24.09.19 the National Park, Bio-Diversity, & Sanctuary is not within 10 km and ESZ is also not within 10 km from proposed project site.

The DFO, Ranchi Division vide letter no. 4800, dated 15.10.2019 certified that the distance of project location from Reserved Forest / Protected Forest is more than 250m.

DMO, Ranchi vide memo no. 1366, dated, 04.12.2017 certified that no other lease exists within 500 m radius from proposed project site.

The CO, Ormanjhi vide letter no. 514(ii), dated 25.09.2017 for statutory clearance & vide letter no. 520(ii), dated -24.09.2019 has mentioned the class of land is not recorded as Jangal Jhari in Khatiyani & Register -II.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Brick Soil Mining For M/s Nain Bricks, Proprietor:

23/11/19  
Md. Masud Ansari, at Mouza – Irba, Thana – Ormanjhi, Thana No. – 27, District – Ranchi, Jharkhand, over an area of 2.14 Acres (0.866 Ha). be conditionally (project site not mention in DSR) recommended for subject to submission of DSR from competent authority directly to SEIAA consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I

23. Brick Soil Mining For M/s Guru Bricks, Proprietor: Arun Singh, at Mouza – Murum, Thana – Kanke, Thana No. – 50, District – Ranchi, Jharkhand, over an area of 1.54 Acres (0.62 Ha.)  
(Proposal No. : SIA/JH/MIN/43099/2019)

This is a Brick Earth Mining with an area of 0.62 Ha [Khata No. 58, Plot no. 784]. The latitude and longitude of the project site is N23°28'12.05" to N23°28'18.08" and E85°20'52.94" to E85°20'55.84". The nearest railway station is Ranchi at a distance of 13.60 km and the nearest airport is Ranchi at a distance of 17.36 km. Excavation will be carried out in barren land / waste land. Approx. 665 cum of top soil will be generated during the 5 years plan period @ 133 cum every year.

90% of geological reserve is considered mineable due to blockages in slopes / benches and other losses. A production plan of Sub Soil is 1140 cum / year has been envisaged for the brick earth which will be sufficient for manufacturing 6,00,000 numbers of bricks every year. Thus, a total of about 5700 cum quantity of brick earth Sub Soil will be excavated during the plan period of 5 years. This amounts to a broken surface area of 3100 sq.m or 0.766 acres in the five year plan period.

Year-wise Production of brick earth as per PFR for five years is as follows

Year	Quantity of Sub Soil (m <sup>3</sup> )	Nos of Bricks Proposed
1 <sup>st</sup> Year	1140	6,00,000
2 <sup>nd</sup> Year	1140	6,00,000
3 <sup>rd</sup> Year	1140	6,00,000
4 <sup>th</sup> Year	1140	6,00,000
5 <sup>th</sup> Year	1140	6,00,000
<b>Total</b>	<b>5700</b>	<b>30,00,000</b>

The indicated project cost is Rs 6.00 Lakh and a provision of Rs 1.98 Lakh has been indicated for Environment management.

The DFO, Wildlife Ranchi vide memo no. 1061, dated 24.09.19 the National Park, Bio-Diversity, & Sanctuary is not within 10 km and ESZ is also not within 10 km from proposed project site.

The DFO, Ranchi Division vide letter no. 4611, dated 02.11.2017 certified that the distance of project location from Reserved Forest/ Protected Forest is 2400 m.

2/11/19  
E/M/19

109

109

109

109

DMO, Ranchi vide memo no. 1262, dated, 21-11-2017 certified that no other lease exists within 500 m radius from proposed project site.

The CO, Kanke vide letter no. 873(ii), dated -21.09.2019 has mentioned the class of land is not recorded as Jangal Jhari in Khatiyani & Register -II.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for **Brick Soil Mining For M/s Guru Bricks, Proprietor: Arun Singh, at Mouza - Murum, Thana - Kanke, Thana No. - 50, District - Ranchi, Jharkhand, over an area of 1.54 Acres (0.62 Ha.)** be ~~conditionally (project site not mention in DSR)~~ recommended for ~~subject to submission of DSR from competent authority directly to SEIAA~~ consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as **Annexure - I**.

24. **Brick Soil Mining For M/s Hind Bricks, Proprietor: Syed Emamul Huque, at Mouza - Haldama, Thana - Pithoria, Thana No. - 43, District - Ranchi, Jharkhand, over an area of 2.49 Acres (1.008 Ha.) (Proposal No. : SIA/JH/MIN/45104/2019)**

This is a Brick Earth Mining with an area of 1.008 Ha [Khata No.: 32, Plot no. 560]. The latitude and longitude of the project site is N23°27'52.96" to N23°27'57.45" and E85°25'28.73" to E85°25'37.37". The nearest railway station is Tatisilwai at a distance of 10.6 km and the nearest airport is Ranchi at a distance of 19.50 km. Excavation will be carried out in field / waste land. Approx. 665 cum of top soil will be generated during the 5 years plan period @ 133 cum every year.

90% of geological reserve is considered mineable due to blockages in slopes / benches and other losses. A production plan of Sub Soil is 1140 cum / year has been envisaged for the brick earth which will be sufficient for manufacturing 6,00,000 numbers of bricks every year. Thus, a total of about 5700 cum quantity of brick earth Sub Soil will be excavated during the plan period of 5 years. This amounts to a broken surface area of 3530 sq.m or 0.872 acres in the five year plan period.

Year-wise Production of brick earth as per PFR for five years is as follows

Year	Quantity of Sub Soil (m <sup>3</sup> )	Nos of Bricks Proposed
1 <sup>st</sup> Year	1140	6,00,000
2 <sup>nd</sup> Year	1140	6,00,000
3 <sup>rd</sup> Year	1140	6,00,000
4 <sup>th</sup> Year	1140	6,00,000
5 <sup>th</sup> Year	1140	6,00,000
<b>Total</b>	<b>5700</b>	<b>30,00,000</b>

The indicated project cost is Rs 6.00 Lakh and a provision of Rs 2.13 Lakh has been indicated for Environment management.

The DFO, Wildlife Ranchi vide memo no. 983, dated 06.09.19 the National Park, Bio-Diversity, & Sanctuary is not within 10 km and ESZ is also not within 10 km from proposed project site.

The DFO, Ranchi Division vide letter no. 4590, dated 02.11.2017 certified that the distance of project location from Reserved Forest / Protected Forest is 900 m.

DMO, Ranchi vide memo no. 1264, dated, 21-11-2017 certified that no other lease exists within 500 m radius from proposed project site.

The CO, Kanke vide letter no. 863(ii), dated -21.09.2019 has mentioned the class of land is not recorded as Jangal Jhari in Khatiyani & Register -II.

Gramsabha held on 26.08.2017

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the proposal for Brick Soil Mining For M/s Hind Bricks, Proprietor: Syed Emamul Huque, at Mouza - Haldama, Thana - Pithoria, Thana No. - 43, District - Ranchi, Jharkhand, over an area of 2.49 Acres (1.008 Ha.) be conditionally (project site not mention in DSR) recommended for subject to submission of DSR from competent authority directly to SEIAA consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as Annexure - I.

25. Brick Soil Mining For M/s Azad Bricks (A.B.C.), Proprietor: Abdul Rub Ansari, at Mouza - Oyna, Thana - Pithoria, Thana No. - 46, District - Ranchi, Jharkhand, over an area of 1.34 Acres (0.542 Ha.)

(Proposal No. : SIA/JH/MIN/45083/2019)

This is a Brick Earth Mining with an area of 0.542 Ha [Khata No. 109, Plot no. 663 & 664]. The latitude and longitude of the project site is N23°27'15.40" to N23°27'19.05" and E85°24'50.70" to E85°24'53.07". The nearest railway station is Tatisilwai at a distance of 9.72 km and the nearest airport is Ranchi at a distance of 17.95 km. Excavation will be carried out in barren land / waste land. Approx. 650 cum of top soil will be generated during the 5 years plan period @ 130 cum every year. 90% of geological reserve is considered mineable due to blockages in slopes / benches and other losses. A production plan of Sub Soil is 1104 cum / year has been envisaged for the brick earth which will be sufficient for manufacturing 5.81.053 numbers of bricks every year. Thus, a total of about 5520 cum quantity of brick earth Sub Soil will be excavated during the plan period of 5 years. This amounts to a broken surface area of 3280 sq.m or 0.811 acres in the five year plan period.

Year-wise Production of brick earth as per PFR for five years is as follows

Year	Quantity of Sub Soil (m <sup>3</sup> )	Nos of Bricks Proposed
1 <sup>st</sup> Year	1104	581053
2 <sup>nd</sup> Year	1104	581053
3 <sup>rd</sup> Year	1104	581053

*[Handwritten signature]*  
2/11/19

*[Handwritten signature]* 111 B&T

*[Handwritten signature]*

4 <sup>th</sup> Year	1104	581053
5 <sup>th</sup> Year	1104	581053
<b>Total</b>	<b>5520</b>	<b>2905265</b>

The indicated project cost is Rs 6.00 Lakh and a provision of Rs 1.29 Lakh has been indicated for Environment management.

The DFO, Wildlife Ranchi vide memo no. 1059, dated 24.09.19 the National Park, Bio-Diversity, & Sanctuary is not within 10 km and ESZ is also not within 10 km from proposed project site.

The DFO, Ranchi Division vide letter no. 4625, dated 02.11.2017 certified that the distance of project location from Reserved Forest / Protected Forest is 2100 m.

DMO, Ranchi vide memo no. 1277, dated, 21-11-2017 certified that no other lease exists within 500 m radius from proposed project site.

The CO, Kanke vide letter no. 877(ii), dated -21.09.2019 has mentioned the class of land is not recorded as Jangal Jhari in Khatiyon & Register -II.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the proposal for **Brick Soil Mining For M/s Azad Bricks (A.B.C.), Proprietor: Abdul Rub Ansari, at Mouza - Oyna, Thana - Pithoria, Thana No. - 46, District - Ranchi, Jharkhand, over an area of 1.34 Acres (0.542 Ha.)** be ~~conditionally (project site not mention in DSR) recommended for subject to submission of DSR from competent authority directly to SEIAA~~ consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as **Annexure - I.**

26. **Brick Soil Mining For M/s JRB Bricks (Unit - II), Proprietor: Sri Johnson Runda, at Mouza - Dubliya, Thana - Pithoria, Thana No. - 48, District - Ranchi, Jharkhand, over an area of 1.82 Acres (0.737 Ha.). (Proposal No. : SIA/JH/MIN/45081/2019)**

This is a Brick Earth Mining with an area of 0.737 Ha [Khata No. 89, Plot no. 1273]. The latitude and longitude of the project site is N23°27'26.63" to N23°27'30.27" and E85°22'25.38" to E85°22'28.90". The nearest railway station is Ranchi at a distance of 12.61 km and the nearest airport is Ranchi at a distance of 16.44 km. Excavation will be carried out in field otherwise barren but suitable for agriculture purpose. Approx. 665 cum of top soil will be generated during the 5 years plan period @ 133 cum every year.

90% of geological reserve is considered mineable due to blockages in slopes / benches and other losses. A production plan of Sub Soil is 1140 cum / year has been envisaged for the brick earth which will be sufficient for manufacturing 6,00,000 numbers of bricks every year. Thus, a total of about 5700 cum quantity of brick earth Sub Soil will be excavated during the plan period of 5 years. This amounts to a broken surface area of 3510 sq.m or 0.67 acres in the five year plan period

Year-wise Production of brick earth as per PFR for five years is as follows



Year	Quantity of Sub Soil (m <sup>3</sup> )	Nos of Bricks Proposed
1 <sup>st</sup> Year	1140	6,00,000
2 <sup>nd</sup> Year	1140	6,00,000
3 <sup>rd</sup> Year	1140	6,00,000
4 <sup>th</sup> Year	1140	6,00,000
5 <sup>th</sup> Year	1140	6,00,000
<b>Total</b>	<b>5700</b>	<b>30,00,000</b>

The indicated project cost is Rs 6.00 Lakh and a provision of Rs 1.46 Lakh has been indicated for Environment management.

The DFO, Wildlife Ranchi vide memo no. 990, dated 06.09.19 the National Park, Bio-Diversity, & Sanctuary is not within 10 km and ESZ is also not within 10 km from proposed project site.

The DFO, Ranchi Division vide letter no. 4619, dated 02.11.2017 certified that the distance of project location from Reserved Forest / Protected Forest is 4400 m.

DMO, Ranchi vide memo no. 1266, dated, 21.11.2017 certified that no other lease exists within 500 m radius from proposed project site.

The CO, Kanke vide letter no. 871(ii), dated 21.09.2019 has mentioned the class of land is not recorded as Jangal Jhari in Khatiyar & Register –II.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the proposal for **Brick Soil Mining For M/s JRB Bricks (Unit – II),** **Proprietor: Sri Johnson Runda, at Mouza – Dubliya, Thana – Pithoria, Thana No. – 48, District – Ranchi, Jharkhand, over an area of 1.82 Acres (0.737 Ha.)** be **conditionally** ~~(project site not mention in DSR) recommended for subject to submission of DSR from competent authority directly to SEIAA~~ consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as **Annexure - I.**

27. **Brick Soil Mining For M/s Johar Bricks, Proprietor: Mahmad Ansari, at Mouza – Lem, Thana – Sadar, Thana No. – 162, District – Ranchi, Jharkhand, over an area of 2.38 Acres (0.963 Ha.). (Proposal No. : SIA/JH/MIN/45073/2019)**

This is a Brick Earth Mining with an area of 0.963 Ha [Khata No. 22 & 10, Plot no. 789.793,790 & 791.792]. The latitude and longitude of the project site is N23°25'55.58" to N23°25'59.56" and E85°22'40.28" to E85°22'46.12". The nearest railway station is Namkum at a distance of 9.06 km and the nearest airport is Ranchi at a distance of 14.08 km. Excavation will be carried out in field otherwise barren but suitable for agriculture purpose. Approx. 665 cum of top soil will be generated during the 5 years plan period @ 133 cum every year.

*BLT*  
*W*  
 8/10/19

*BLT*

*BLT*

90% of geological reserve is considered mineable due to blockages in slopes / benches and other losses. A production plan of Sub Soil is 1140 cum / year has been envisaged for the brick earth which will be sufficient for manufacturing 6,00,000 numbers of bricks every year. Thus, a total of about 5700 cum quantity of brick earth Sub Soil will be excavated during the plan period of 5 years. This amounts to a broken surface area of 3560 sq.m or 0.88 acres in the five year plan period.

Year-wise Production of brick earth as per PFR for five years is as follows

Year	Quantity of Sub Soil (m <sup>3</sup> )	Nos of Bricks Proposed
1 <sup>st</sup> Year	1140	6,00,000
2 <sup>nd</sup> Year	1140	6,00,000
3 <sup>rd</sup> Year	1140	6,00,000
4 <sup>th</sup> Year	1140	6,00,000
5 <sup>th</sup> Year	1140	6,00,000
<b>Total</b>	<b>5700</b>	<b>30,00,000</b>

The indicated project cost is Rs 6.00 Lakh and a provision of Rs 1.91 Lakh has been indicated for Environment management.

The DFO, Wildlife Ranchi vide memo no. 986, dated 06.09.19 the National Park, Bio-Diversity, & Sanctuary is not within 10 km and ESZ is also not within 10 km from proposed project site.

The DFO, Ranchi Division vide letter no. 4813, dated 15.10.2019 certified that the distance of project location from Reserved Forest / Protected Forest is more than 250m.

DMO, Ranchi vide memo no. 1468, dated, 19.12.2017 certified that no other lease is exists within 500 m radius from proposed project site.

LOI of DMO letter no. 1468 date 01.10.19

The CO, Bargain vide letter no. 951(ii), dated 06.09.2017 for statutory clearance & vide letter no. 74(ii), dated 01.10.2019 has mentioned the class of land is not recorded as Jangal Jhari in Khatiyar & Register -II.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for **Brick Soil Mining For M/s Johar Bricks, Proprietor: Mahmud Ansari, at Mouza – Lem, Thana – Sadar, Thana No. – 162, District – Ranchi, Jharkhand, over an area of 2.38 Acres (0.963 Ha.).** be ~~conditionally (project site not mention in DSR) recommended~~ for subject to submission of DSR from competent authority directly to SEIAA consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as **Annexure - I.**

28. Brick Soil Mining For M/s Karan Bricks, Proprietor: Sri Dharmbir Singh, at Mouza – Chari, Thana – Pithoria, Thana No. – 42, District – Ranchi, Jharkhand, over an area of 1.77 Acres (0.716 Ha.). (Proposal No. : SIA/JH/MIN/45031/2019)

This is a Brick Earth Mining with an area of 0.716 Ha [Khata No. 19, Plot no. 165]. The latitude and longitude of the project site is N23°28'27.60" to N23°28'31.29" and E85°24'40.70" to E85°24'45.66". The nearest railway station is Ranchi at a distance of 11.94 km and the nearest airport is Ranchi at a distance of 19.78 km. Excavation will be carried out in field otherwise barren but suitable for agriculture purpose. Approx. 665 cum of top soil will be generated during the 5 years plan period @ 133 cum every year.

90% of geological reserve is considered mineable due to blockages in slopes / benches and other losses. A production plan of Sub Soil is 1140 cum / year has been envisaged for the brick earth which will be sufficient for manufacturing 6,00,000 numbers of bricks every year. Thus, a total of about 5700 cum quantity of brick earth Sub Soil will be excavated during the plan period of 5 years. This amounts to a broken surface area of 3560 sq.m or 0.88 acres in the five year plan period.

Year-wise Production of brick earth as per PFR for five years is as follows

Year	Quantity of Sub Soil (m <sup>3</sup> )	Nos of Bricks Proposed
1 <sup>st</sup> Year	1140	6,00,000
2 <sup>nd</sup> Year	1140	6,00,000
3 <sup>rd</sup> Year	1140	6,00,000
4 <sup>th</sup> Year	1140	6,00,000
5 <sup>th</sup> Year	1140	6,00,000
<b>Total</b>	<b>5700</b>	<b>30,00,000</b>

The indicated project cost is Rs 6.00 Lakh and a provision of Rs 1.43 Lakh has been indicated for Environment management.

The DFO, Wildlife Ranchi vide memo no. 1026, dated 16.09.19 the National Park, Bio-Diversity, & Sanctuary is not within 10 km and ESZ is also not within 10 km from proposed project site.

The DFO, Ranchi Division vide letter no. 4815, dated 15.10.2019 certified that the distance of project location from Reserved Forest / Protected Forest is more than 250m.

DMO, Ranchi vide memo no. 1267, dated, 21.11.2017 certified that no other lease exists within 500 m radius from proposed project site.

LOI from DMO no. 1141 dated 20.10.2017

The CO, Kanke vide letter no. 870(ii), dated 21.09.2019 has mentioned the class of land is not recorded as Jangal Hari in Khatiyani & Register -II.

*[Signature]*  
8/11/19

*[Signature]*

*[Signature]*

*[Signature]*

*[Signature]*

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for **Brick Soil Mining For M/s Karan Bricks, Proprietor: Sri Dharmbir Singh, at Mouza – Chari, Thana – Pithoria, Thana No. – 42, District – Ranchi, Jharkhand, over an area of 1.77 Acres (0.716 Ha.)** be ~~conditionally~~ (project site not mention in DSR) recommended for subject to submission of DSR from competent authority directly to SEIAA consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as **Annexure - I**.

29. **Brick Soil Mining For M/s Fine Bricks, Proprietor: Mumtaz Ansari, at Mouza – Ulatu, P.S. – Pithoria, Thana No. – 37, District – Ranchi, Jharkhand, over an area of 2.06 Acres (0.83 Ha.)**  
(Proposal No. : SIA/JH/MIN/43951/2019)

This is a Brick Earth Mining with an area of 0.83 Ha [Khata No.: 04, Plot no. 573]. The latitude and longitude of the project site is N23°28'45.24" to N23°28'48.60" and E85°23'06.92" to E85°23'17.12". The nearest railway station is Tatisilwai at a distance of 13.10 km and the nearest airport is Ranchi at a distance of 19.20 km. Excavation will be carried out in barren land / waste land. Approx. 665 cum of top soil will be generated during the 5 years plan period @ 133 cum every year.

90% of geological reserve is considered mineable due to blockages in slopes / benches and other losses. A production plan of Sub Soil is 1140 cum / year has been envisaged for the brick earth which will be sufficient for manufacturing 6,00,000 numbers of bricks every year. Thus, a total of about 5700 cum quantity of brick earth Sub Soil will be excavated during the plan period of 5 years. This amounts to a broken surface area of 3663 sq.m or 0.914 acres in the five year plan period.

Year-wise Production of brick earth as per PFR for five years is as follows

Year	Quantity of Sub Soil (m <sup>3</sup> )	Nos of Bricks Proposed
1 <sup>st</sup> Year	1140	6,00,000
2 <sup>nd</sup> Year	1140	6,00,000
3 <sup>rd</sup> Year	1140	6,00,000
4 <sup>th</sup> Year	1140	6,00,000
5 <sup>th</sup> Year	1140	6,00,000
<b>Total</b>	<b>5700</b>	<b>30,00,000</b>

The indicated project cost is Rs 6.00 Lakh and a provision of Rs 2.02 Lakh has been indicated for Environment management.

The DFO, Wildlife Ranchi vide memo no. 1022, dated 16.09.19 the National Park, Bio-Diversity, & Sanctuary is not within 10 km and ESZ is also not within 10 km from proposed project site.

The DFO, Ranchi Division vide letter no. 4616, dated 02.11.2017 certified that the distance of project location from Reserved Forest / Protected Forest is 2600 m.

DMO, Ranchi vide memo no. 1270, dated. 21-11-2017 certified that no other lease is exists within 500 m radius from proposed project site.

LOI from DMO no. 746 dated 05.08.17

The CO, Kanke vide letter no. 875(ii), dated -21.09.2019 has mentioned the class of land is not recorded as Jangal Jhari in Khatiyani & Register -II.

Gram sabha was held on 26.09.19.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for **Brick Soil Mining For M/s Fine Bricks, Proprietor: Mumtaz Ansari, at Mouza - Ulatu, P.S. - Pithoria, Thana No. - 37, District - Ranchi, Jharkhand, over an area of 2.06 Acres (0.83 Ha.)** be ~~conditionally~~ <sup>un</sup> (project site not mention in DSR) recommended for subject to submission of DSR from competent authority directly to SEIAA consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as Annexure - I.

30. **Brick Soil Mining For M/s Amma Bricks, Proprietor: Ayaj Khan, at Mouza - Ulatu, P.O.- Kumhariya, P.S.- Pithoriya, District - Ranchi, Jharkhand, over an area of 1.28 Acres (0.517 Ha.) (Proposal No. : SIA/JH/MIN/43940/2019)**

This proposal is for a new Brick Earth Mining with an area of 0.517 Ha [Khata No. 94, Plot no. 760, 761]. The latitude and longitude of the project site is N23°29'17.03" to N23°29'20.04" and E85°23'31.04" to E85°23'35.00". The nearest railway station is Tatisilwai at a distance of 13.83 km and the nearest airport is Ranchi at a distance of 20.24 km. Excavation will be carried out in barren land / waste land. Approx. 665 cum of top soil will be generated during the 5 years plan period @ 133 cum every year.

90% of geological reserve is considered mineable due to blockages in slopes / benches and other losses. A production plan of 1140 cum / year has been envisaged for the brick earth which will be sufficient for manufacturing 6,00,000 bricks every year. Thus, a total of about 5700 cum quantity of brick earth will be excavated during the plan period of 5 years. This amounts to a broken surface area of 3470 sq.m or 0.860 acres in the five year plan period.

Year-wise Production of brick earth as per PFR for five years is as follows

Year	Quantity of Sub Soil (m <sup>3</sup> )	Nos of Bricks Proposed
1 <sup>st</sup> Year	1140	600000
2 <sup>nd</sup> Year	1140	600000
3 <sup>rd</sup> Year	1140	600000
4 <sup>th</sup> Year	1140	600000

12/31/19

*[Handwritten signature]*

117

*[Handwritten signature]*

*[Handwritten signature]*

5 <sup>th</sup> Year	1140	600000
<b>Total</b>	<b>5700</b>	<b>3000000</b>

The indicated project cost is Rs 6.00 Lakh and a provision of Rs 1.26 Lakh has been indicated for Environment management.

The DFO, Wildlife Ranchi vide memo no. 997, dated 06.09.19 the National Park, Bio-Diversity, & Sanctuary is not within 10 km and ESZ is also not within 10 km from proposed project site.

The DFO, Ranchi Division vide letter no. 4811, dated 15.10.2019 certified that the distance of project location from Reserved Forest / Protected Forest is more than 250m.

DMO, Ranchi vide memo no. 1258, dated, 21-11-2017 certified that no other lease is existing within 500 m radius from proposed project site.

The CO, Kanke vide letter no. 865(ii), dated -21.09.2019 has mentioned that the class of land is not recorded as Jangal Jhari in Khatiyar & Register -II.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for **Brick Soil Mining For M/s Amma Bricks, Proprietor: Ayaj Khan, at Mouza - Ulatu, P.O.- Kumhariya, P.S.- Pithoriya, District - Ranchi, Jharkhand, over an area of 1.28 Acres (0.517 Ha.)** be ~~conditionally (project site not mention in DSP) recommended for subject to submission of DSP from competent authority directly to SEIAA~~ consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as **Annexure - I**.

31. **Brick Soil Mining For M/s Puja Bricks, Proprietor: Sri Anil Kumar Keshri, at Mouza - Pithoriya, P.S. - Pithoriya, Thana No. - 09, District - Ranchi, Jharkhand, over an area of 2.35 Acres (0.951 Ha.). (Proposal No. : SIA/JH/MIN/44645/2019)**

This is a Brick Earth Mining with an area of 0.915 Ha [Khata No.: 135, 281, 282, 259, Plot no. 403, 404, 405, 406, 407, 408, 409]. The latitude and longitude of the project site is N23°31'13.06" to N23°31'18.10" and E85°17'33.75" to E85°17'37.08". The nearest railway station is Bhurkunda at a distance of 15.09 km and the nearest airport is Ranchi at a distance of 22.84 km. Excavation will be carried out in field otherwise barren but suitable for agriculture purpose. Approx. 650 cum of top soil will be generated during the 5 years plan period @ 130 cum every year.

90% of geological reserve is considered mineable due to blockages in slopes / benches and other losses. A production plan of Sub Soil is 1140 cum / year has been envisaged for the brick earth which will be sufficient for manufacturing 6,00,000 numbers of bricks every year. Thus, a total of about 5700 cum quantity of brick earth Sub Soil will be excavated during the plan period of 5 years. This amounts to a broken surface area of 3250 sq.m or 0.803 acres in the five year plan period.

Year-wise Production of brick earth as per PFR for five years is as follows

Year	Quantity of Sub Soil (m <sup>3</sup> )	Nos of Bricks Proposed
1 <sup>st</sup> Year	1140	6,00,000
2 <sup>nd</sup> Year	1140	6,00,000
3 <sup>rd</sup> Year	1140	6,00,000
4 <sup>th</sup> Year	1140	6,00,000
5 <sup>th</sup> Year	1140	6,00,000
<b>Total</b>	<b>5700</b>	<b>30,00,000</b>

The indicated project cost is Rs 6.00 Lakh and a provision of Rs 2.04 Lakh has been indicated for Environment management.

The DFO, Wildlife Ranchi vide memo no. 1064, dated 24.09.19 the National Park, Bio-Diversity, & Sanctuary is not within 10 km and ESZ is also not within 10 km from proposed project site.

The DFO, Ranchi Division vide letter no. 4798, dated 17.11.2017 certified that the distance of project location from Reserved Forest / Protected Forest is 325m.

DMO, Ranchi vide memo no. 1480, dated, 20.12.2017 certified that no other lease exists within 500 m radius from proposed project site.

The CO, Kanke vide letter no. 868(ii), dated -21.09.2019 has mentioned the class of land is not recorded as Jangal Jhari in Khatiyari & Register -II.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the proposal for Brick Soil Mining For M/s Puja Bricks, Proprietor: Sri Anil Kumar Keshri, at Mouza - Pithoriya, P.S. - Pithoriya, Thana No. - 09, District - Ranchi, Jharkhand, over an area of 2.35 Acres (0.951 Ha.). be ~~conditionally~~ (project site not mention in DSR) recommended for subject to submission of DSR from competent authority directly to SEIAA consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as Annexure - I

32. Kurkutta Stone Deposit of M/s Bhole Shankar Stone Works (Partner: Subhash Kumar Verma & Others), Mauza- Kurkutta, Thana- Giddi, District- Hazaribagh, Jharkhand. (0.49 Ha). (Proposal No. : SIA/JH /MIN/45227/2019)

This is a Stone Mining Project with an area of 0.49 Ha [Khata no- 35, Plot No. 198 & 199]. The latitude and longitude of the project site is 23°42'30.79"N to 23°42'27.83"N and Longitude 85°20'45.62"E to 85°20'49.28"E. The nearest railway station is Patraru Railway station, approx. 6.5 km toward SW direction and nearest airport is Ranchi Airport, approx. 43.5 km in South Direction. Total water requirement is 4.5 KLD. Water will be taken from nearby village.

The details of mine capacity as per Approved Mining Plan are

YB31  
11/10

11/10

Mineable Reserve : 175707.63 Tonnes

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

Year	Production of stone (Tonnes)
1 <sup>st</sup>	17,344.53
2 <sup>nd</sup>	17,344.53
3 <sup>rd</sup>	17,344.53
4 <sup>th</sup>	17,344.53
5 <sup>th</sup>	17,344.53
<b>Total</b>	<b>86,722.65</b>

The daily production is 57.81 tonne.

The indicated project cost is Rs 12 Lakh and a provision of Rs 5.0 Lakh has been indicated for Environment management.

DFO, wildlife, Hazaribag vide letter no. 1675, dated 06.09.19 certified that the National Park, Bio-Diversity, Sanctuary & ESZ is not within 10 km from proposed project site.

DFO, Ramgarh vide letter no. 1965, dated 03.08.2018 certified that the National Park, Bio-Diversity, Sanctuary & ESZ is not within 10 km from proposed project site.

The CO, Dadi (Hazaribag) vide letter no. 633, dated 28.07.18 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S Khatiyani & Register II.

DMO, Hazaribag vide memo no. 977/M, dated 10.10.2019 certified that total mining in the area is less than 5 ha in the radius of 500 m.

*PP was not present & hence deferred for next meetings.*  
Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the proposal for Kurkutta Stone Deposit of M/s Bhole Shankar Stone Works (Partner: Subhash Kumar Verma & Others), Mauza- Kurkutta, Thana- Giddi, District- Hazaribagh, Jharkhand. (0.49 Ha). be recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure - II.

**33. Sulidanga Stone Mine of M/S NJP Stone Works at Village- Sulidanga, P.O + P.S- Hiranpur, Dist-Pakur Jharkhand. (2.53 Ha)**

This is a Stone Mining Project with an area of 2.53 Ha [Plot No. -73P, 74, 75, 76/P, 80/303]. The latitude and longitude of the project site is 24°41'42.61"N To 24°41'36.44"N and 87°45'14.60"E To 87°45'6.91"E. The nearest railway station is Tilbhita Railway Station 9.25 Km East and nearest airport is Birsa Munda Airport, Ranchi, 292 km SW. Total water requirement is 6.55 KLD (Dust Suppression : 3.77 KLD, Afforestation / Green belt : 0.80 KLD, Drinking / Domestic : 1.98 KLD). The drinking & domestic water need will be fulfilled by taking water from nearby village tube well. As soon as mine void is formed water for green belt and dust suppression will be met from water accumulated in



mine void. For the purpose of dust suppression & afforestation water of nearby ponds and rain water harvesting will be used.

The details of mine capacity as per Approved Mining Plan are

Mineable Reserve = 779625 cum

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

1 <sup>st</sup> Year	:	194400 MT
2 <sup>nd</sup> Year	:	185700.6 MT
3 <sup>rd</sup> Year	:	194302.8 MT
4 <sup>th</sup> Year	:	195129 MT
5 <sup>th</sup> Year	:	194594.4 MT

The daily production as per Form-I is 650 max. TPD.

The indicated project cost is Rs 32.83Lakh, a provision of Rs 7.30 Lakh has been indicated for Environment management and CER is Rs. 3.61 Lakh.

DFO, Wildlife Hazaribagh vide letter no. 1446, dated 26.07.19 certified that there is no Wildlife Sanctuary, Bio-Diversity & Sanctuary located within 10km from project site and, proposed project is not situated in any ESZ.

The DFO, Pakur Division vide letter no. 808, dated 18.07.19 certified that the distance of notified forest is 1020 m from proposed project site and no National Park located within 10km from project site.

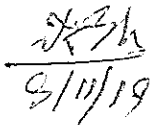
The CO, Hiranpurvide letter no. 369/R, dated 20.07.19 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S Khatiyon & Register II.


DMO, Pakurvide memo no. 1776, dated 14.10.19 certified that altogether total mining in the area is 6.25 Acre (2.53Ha) in the radius of 500 m.


The project site is mentioned in District Survey Report (DSR) of Pakur District.


Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for **Sulidanga Stone Mine of M/S NJP Stone Works at Village- Sulidanga, P.O + P.S-Hiranpur, Dist-Pakur Jharkhand. (2.53 Ha)** . be recommended for grant of EC. The various conditions for grant of EC is enclosed as **Annexure - II**.


The meeting concluded with thanks to all present.


  
3/11/19











B.K. Tewary  
(Dr. B.K. Tewary) 07/11/2019  
Member

Y.K. Singh  
(Y.K. Singh)  
Member

V.P. Sinha  
(Dr. V.P. Sinha)  
Member

M.S. Bhagwat  
(M.S. Bhagwat)  
Member

Om Prakash  
(Om Prakash)  
Member Secretary

R.N. Singh  
(Dr. R.N. Singh)  
Member

S.P. Srivastava  
(S.P. Srivastava) 11/19  
Member

(R.V. Singh)  
Member

U.P. Singh  
(U.P. Singh) 07/11/2019  
Member

K.P. Bhawsinka  
(K.P. Bhawsinka) 8.11.19  
Chairman

This copy of the minutes, as per by MS, SEAR  
duly signed by all members at this  
time is now being signed keeping in view the  
last date of present SEAR ending its  
term today.

The amount mentioned against  
ecological damage is only a  
provision figure, as mentioned  
in RER project under serial no. 5 of  
first day.

As has been communicated earlier  
to SEIAA, it was difficult for  
me to sign on cut, erroneous  
from the meeting & this forced  
crisis & presented facts details next  
early in MS, SEAR & members endorsing  
the minutes 11/19

K.P. Bhawsinka  
(Chairman, SEAR)  
8.11.19

## Annexure VIII

The TORs prescribed for undertaking detailed EIA study are as follows:

### A. Standard Conditions :

1. Examine baseline environmental quality along with projected incremental load due to the project.
2. Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio economic and health.
3. Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area. Any obstruction of the same by the project.
4. Submit the details of the trees to be felled for the project.
5. Submit the present land use and permission required for any conversion such as forest, agriculture etc.
6. Submit Roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of E (P) Act.
7. Ground water classification as per the Central Ground Water Authority.
8. Examine the details of Source of water, water requirement, use of treated waste water and prepare a water balance chart.
9. Rain water harvesting proposals should be made with due safeguards for ground water quality Maximize recycling of water and utilization of rain water. Examine details.
10. Examine soil characteristics and depth of ground water table for rainwater harvesting.
11. Examine details of solid waste generation treatment and its disposal.
12. Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption. Energy conservation and energy efficiency.
13. DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment. Examine and submit details.
14. Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities for the region should be analysed with measures for preventing traffic congestion and providing faster trouble free system to reach different destinations in the city.
15. A detailed traffic and transportation study should be made for existing and projected gatherings in different time & period.
16. Examine the details of transport of materials for construction which should include source and availability.

*JGM*

17. Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
18. Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.
19. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
20. The cost of the Project (capital cost and recurring cost) the damage cost of already opened land as well as the cost towards implementation of EMP should be clearly spelt out.
21. Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "<http://moef.nic.in/Manual/Townships>".

**B. Specific Conditions :**

1. The State Govt. / SPCB to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986.
2. Examine the nala / river flowing on northern side of both the sites and management plan to maintain the flow of ecology of the system.
3. The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the SEAC and finalized by the regulatory authority.
4. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the SEAC and approval of the regulatory authority.
5. Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.
6. Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
7. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.
8. Funds allocation for Corporate Environment Responsibility (CER) shall be made as per Ministry's O.M. No. 22-65/ 2017-IA.III dated May, 2018 for various activities therein. The details of fund allocation and activities for CER shall be incorporated in EIA/EMP report.
9. The prescribed TORs would be valid for a period of three years for submission of the EIA / EMP reports, as per the O.M. No. J-11015/109/2013-IA.II(M) , dated 12.01.2017.



123 / A

Annexure - I

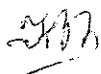
**A. Specific Conditions**


- i. The environmental clearance is subject to grant / renewal of mining permit by the Department of Mines, Government of Jharkhand to PP Latest Minor Mineral Concession Rules of Govt. of Jharkhand and all other Statutory Conditions as imposed by various agencies / District Authorities are complied with.
- ii. No mining shall be undertaken in the forest area without obtaining requisite prior forestry clearance. Minimum distance shall be maintained from Reserved / Protected Forest as stipulated in SEIAA Guidelines.
- iii. Environmental clearance is subject to final order of the Hon`ble Supreme Court of India / MOEF Guidelines applicable to Minor Minerals / Brick Earth Mining.
- iv. 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). No damage is to be done to fauna if found in ML area (as mentioned in various schedules). In case found they should be given protection, collected alive with the help of the expert and transferred them or handing over them to the concerned authorities.
- v. The activity associated with borrowing / excavation of ' brick earth' and 'ordinary earth' for purpose of brick manufacturing, construction of roads, embankments etc. shall not involve blasting.
- vi. The borrowing / excavation activity shall be restricted to a maximum depth of 2 m below general ground level at the site. However – excavation shall not intercept with ground water level at site.
- vii. The borrowing / excavation activity shall not alter the natural drainage pattern of the area.
- viii. The borrowing / excavated pit shall be restored by the project proponent for useful purpose (s).
- ix. Appropriate fencing all around the borrowed / excavated pit shall be made to prevent any mishap.
- x. Measures shall be taken to prevent dust emission by covering of borrowed / excavated earth during transportation.
- xi. Safeguards shall be adopted against health risks on account of breeding of vectors in the water bodies created due to borrowing / excavation of earth.
- xii. Workers / labours shall be provided with facilities for drinking water and sanitation.
- xiii. A considerable space from mine pit shall be left from the boundary of adjoining field, having, minimum width of 5M.
- xiv. A minimum distance of 15 m from any civil structure shall be kept from the periphery of any excavation area.
- xv. The project proponent shall ensure that no natural watercourse and / or water resources shall be obstructed due to any mining operations. Adequate measures shall be taken for


*[Handwritten signatures and initials]*

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.

- xvi. 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 for land reclamation and plantation.
- xvii. Greenbelt shall be developed all along the mine lease area and haul roads. The Project proponent shall do tree plantation in at least 33% of the space, preferably along the periphery and in vacant space. Fast growing and local species will be planted. In case land is not available within the lease area or it is not possible to plant trees due to nature of land then PP will do necessary afforestation at other places / land.
- xviii. Effective safeguard measures such as regular water sprinkling shall be carried out in 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 shall be carried out on haul roads which should be made pucca 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.
- xix. The project proponent should implement suitable conservation measures to augment ground water resources in the area as per guidelines of Ground Water Directorate, Government of Jharkhand / Central Ground Water Board.
- xx. The project proponent shall if required, obtain necessary prior permission/NOC of the competent authorities for drawl of requisite quantity of water required for the project.
- xxi. Suitable rainwater harvesting scheme shall be planned and implemented as per guidelines of Ground Water Directorate, Government of Jharkhand / Central Ground Water Board.
- xxii. Vehicular emissions shall 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 mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded. No transportation of ore outside the mine lease area shall be carried out after the sunset.
- xxiii. 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.
- xxiv. Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained.
- xxv. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna.
- xxvi. Provision shall be made for the housing of 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.
- xxvii. Proper safety measures as per statutory requirement are to be implemented around the mined out Pit prior to closure of site.









BIT

- xxviii. A final mine closure scheme plan of mine pit shall be submitted to concerned DMO in advance of final mine closure for approval.
- xxix. The excavated earth – by such Brick mining pit owner – shall be supplied only to owners of manufacturing of bricks –having “Consent to Operate” under the provision of section 25 and 26 of The water (prevention and control of pollution) Act, 1974 and under section 21 of The Air (prevention and control of pollution) Act, 1981.
- xxx. All haul roads connection to mining pit head to concerned Brick kilns – shall have muram / Brick paved road to avoid fugitive emission during transportation activities. In addition to this there shall be tree plantation in both side along the haul road.
- xxxi. Prime agricultural land shall not be used for earth mining – until and unless – permission of conversion of land has been obtained by component authority.

#### **B. General conditions**

- i. No change in mining methodology 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.
- ii. No change in the calendar plan including excavation, quantum of mineral and waste should be made.
- iii. The Project proponent shall make internal roads pucca and shall maintain a good housekeeping by regular cleaning and wetting of the haul roads and the premises.
- iv. The Project proponent shall maintain register for production and dispatch and submit return to the Board.
- v. The Project proponent shall not cut trees / carry out tree felling in leased out area without the permission of competent authority.
- vi. 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.
- vii. 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.
- viii. Dispensary facilities for First Aid shall be provided at site.
- ix. 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).
- x. The Jharkhand State Pollution Control Board, Ranchi directly or through its Regional Office, shall monitor compliance of the stipulated conditions. The project authorities should

*SKH*  
9/11/19

*W*

*[Signature]*

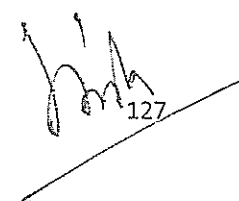
*[Signature]* BKT

extend full cooperation to the officer (s) by furnishing the requisite data / information / monitoring reports.

- xi. 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 its concerned Regional Office and to SEIAA.
- xii. 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,SO<sub>2</sub> ,NOx (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.
- xiii. 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.
- xiv. The environmental statement for each financial year ending 31<sup>st</sup> 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.
- xv. All statutory clearances shall be obtained before start of mining operations.



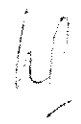
**C. Other points**

- i. 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.
- ii. 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.
- iii. 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.
- iv. 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.





- v. 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.

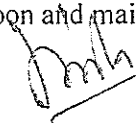
 Donk   
9/11/19  BGT

Annexure -II

**A. Specific Conditions**

- i. 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.
- ii. No mining shall be undertaken in the forest area without obtaining requisite prior forestry clearance.
- iii. Environmental clearance is subject to final order of the Hon'ble Supreme Court of India / National Green Tribunal / MOEF Guidelines applicable to Minor Minerals.
- iv. 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.
- v. 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.
- vi. PP shall maintain minimum distance from Reserved / Protected Forests as stipulated in applicable guidelines.
- vii. 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.
- viii. 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.
- ix. 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.
- x. 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.

 129



- xi. 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.
- xii. 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.
- xiii. 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.
- xiv. 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.
- xv. 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.
- xvi. Suitable rainwater harvesting measures shall be planned and implemented in consultation with the Ground Water Directorate, Government of Jharkhand / Central Ground Water Board.
- xvii. 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.
- xviii. 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.
- xix. Drilling shall either be operated with the dust extractors or equipped with water injection system.
- xx. 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.
- xxi. 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.

*[Handwritten signature]*

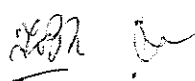
BLT

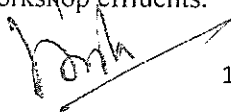
*[Handwritten signature]*  
9/11/19

- xxii. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna.
- xxiii. 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.
- xxiv. Proper Safety measures as per statutory requirement shall be implemented around the mined out Pit prior to closure of site.
- xxv. 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.
- xxvi. 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.
- xxvii. The Project Proponent shall submit six monthly report on the expenditure incurred on environmental management plan submitted by them.
- xxviii. 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.
- xxix. Approved devices for dust suppression shall be installed.

**B. General conditions**

- i. 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.
- ii. No change in the calendar plan including excavation, quantum of mineral and waste should be made.
- iii. 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.
- iv. The Project proponent shall maintain register for production and dispatch and submit return to the Board.
- v. The Project proponent shall not cut trees / carry out tree felling in leased out area without the permission of competent authority.
- vi. 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.
- vii. 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.







- viii. 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.
- ix. Dispensary facilities for First Aid shall be provided at site.
- x. 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.
- xi. 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.
- xii. 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.
- xiii. 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.
- xiv. 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,SO<sub>2</sub> ,NO<sub>x</sub> (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.
- xv. 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.
- xvi. The environmental statement for each financial year ending 31<sup>st</sup> 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.
- xvii. All statutory clearances shall be obtained before start of mining operations.

C. Other points


3/11/19

- i. 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.
- ii. 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.
- iii. 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.
- iv. 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.
- v. 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.

  
\_\_\_\_\_



  
\_\_\_\_\_

 RUT

## Stone ToR

## Annexure III

The TORs prescribed for undertaking detailed EIA study are as follows:

1. Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.
2. A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
3. All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
4. All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
5. Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
6. Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State: land diversion for mining should have approval from State land use board or the concerned authority.
7. It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.
8. Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
9. The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
10. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and

*Handwritten signature*

*Handwritten signature*  
22/11/19

other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.

11. Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
12. A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
13. Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
14. Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
15. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
16. A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
17. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
18. A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled- I fauna found in the study area, the necessary plan alongwith budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
19. Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed



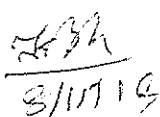
Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be considered.

20. Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
21. R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
22. One season (non-monsoon) [i.e. March-May (Summer Season): October-December (post monsoon season) : December-February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
23. Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
24. The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
25. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.



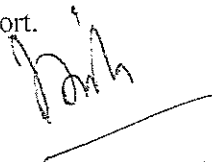






  
3/11/19

26. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
27. Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
28. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
29. Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
30. Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.
31. A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
32. Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.
33. Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.

34. Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
35. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
36. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
37. Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
38. Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
39. Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
40. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
41. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
42. A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
43. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
44. Besides the above, the below mentioned general points are also to be followed :-
  - a) Executive Summary of the EIA/EMP Report
  - b) All documents to be properly referenced with index and continuous page numbering.
  - c) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.

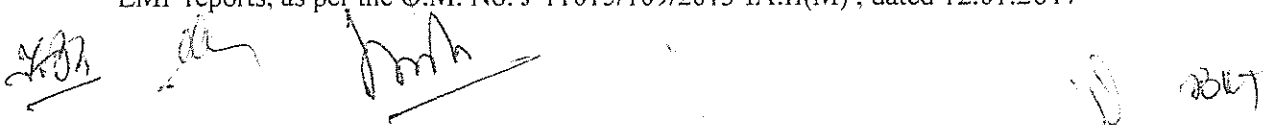
   138

B&T  
282  
4/11/19

- d) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF & CC / NABL accredited laboratories. All the original analysis / testing reports should be available during appraisal of the Project.
- e) Where the documents provided are in a language other than English, an English translation should be provided.
- f) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
- g) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF& CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.
- h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF & CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.
- i) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.
- j) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

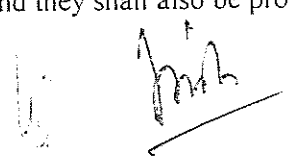
45. After preparing the draft EIA (as per the generic structure prescribed in Appendix- III of the EIA Notification, 2006) covering the above mentioned issues, the proponent will get the public hearing conducted and take further necessary action for obtaining environmental clearance in accordance with the procedure prescribed under the EIA Notification, 2006.

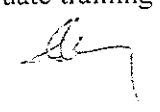
46. The prescribed TORs would be valid for a period of three years for submission of the EIA / EMP reports, as per the O.M. No. J-11015/109/2013-IA.II(M) , dated 12.01.2017

 Several handwritten signatures and initials are present at the bottom of the page, including a signature that appears to be 'S. S. S.', another 'S.', and a signature that looks like 'S. S. S.' with a long underline. To the right, there are initials 'S.' and 'S.S.S.'.

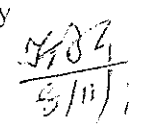
A. **Specific Conditions**

- i. The Environmental clearance is subject to grant of Mining Lease and will be co-terminus with the mining lease period.
- ii. As per EIA notification, 2006 Gram Sabha is a major component of EC for this category of project. In all these projects Gram Sabha report has not been submitted. The EC of these cases is being recommended subject to **submission of the Gram Sabha consent.**
- iii. The **mining work** will be open-cast and only **manual method.**
- iv. 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- 24<sup>th</sup> December, 2013 and SEIAA, Jharkhand guideline dated 07.05.2013 are adhered to.
- v. 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.
- vi. 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.
- vii. 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 (30<sup>th</sup>) 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.
- viii. 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).
- ix. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna.
- x. 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.
- xi. 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.
- xii. 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





30/11


  
3/11/11

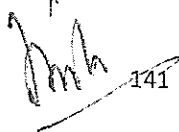
and health aspects. Periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.


- xiii. 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.
- xiv. 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.
- xv. Local flora may be planted in the Core Zone of the Mining Lease area.
- xvi. 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.
- xvii. Environmental clearance is subject to final order of the Hon'ble Supreme Court of India / MOEF Guidelines applicable to Minor Minerals.
- xviii. PP shall maintain minimum distance from Reserved / Protected Forests as stipulated in applicable guidelines.
- xix. 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.
- xx. 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.
- xxi. 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.
- xxii. Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained.
- xxiii. Proper safety measures as per statutory requirement are to be implemented around the mined out Pit prior to closure of site.
- xxiv. 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.
- xxv. 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
- xxvi. 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 –



 141

 BILT

- i. EC is subject to having valid lease and all statutory clearance as applicable.
- ii. Monitoring Committee including Local Panchayat to check on traffic due to transportation and submit an annual report on the same.
- iii. 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.
- iv. 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.
- v. 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.
- vi. 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.
- vii. District level Survey Report should be prepared and area suitable for mining and area prohibited for mining be identified.
- viii. No River sand mining be allowed in rainy season.
- ix. 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.
- x. In River flood plain mining a buffer of 3 meter to be left from the River bank for mining.
- xi. In mining from agricultural field a buffer of 3 meter to be left from the adjacent field.
- xii. 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.
- xiii. 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.
- xiv. No blasting shall be resorted to in River mining and without permission at any other place.
- xv. 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.
- xvi. 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.
- xvii. 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.
- xviii. The top soil in case of surface land mining shall be stored temporarily in an earmarked site and concurrently used for land reclamation.

- xix. 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.
- xx. 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.
- xxi. 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.
- xxii. 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.
- xxiii. Noise arising out of mining and processing shall be abated and controlled at source to keep within permissible limit.
- xxiv. Restricted working hours Sand mining operation has to be carried out between sun rise to sun set.
- xxv. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly.
- xxvi. 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.
- xxvii. 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.
- xxviii. The mining operations are to be done in a systematic manner so that the operations shall create a major visual impact on the site.
- xxix. 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.
- xxx. 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.
- xxxi. Protection of turtle and bird habitats shall be ensured.
- xxxii. 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.
- xxxiii. Spring sources should not be affected due to mining activities. Necessary Protection measures are to be incorporated.



- xxxiv. 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.
- xxxv. The EC should stipulate conditions for adequate steps to check soil erosion and control debris flow etc. by constructing engineering structures.
- xxxvi. Use of oversize material to control erosion and movement of sediments.
- xxxvii. 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.
- xxxviii. No extraction of sand in land slide prone areas shall be carried out.
- xxxix. Controlled clearance of riparian vegetation to be undertaken
  - xl. Site clearance and tidiness is very much needed to have less visual impact of mining.
  - xli. Dumping of waste shall be done in earmarked places as approved in Mining Plan.
  - xlii. Rubbish burial shall not be done in the Rivers.
  - xlili. The EC holder shall take all possible precautions for the protection of environment and control of pollution.
  - xliv. Effluent discharge should be kept to the minimum and it should meet the standards prescribed.
  - xlv. 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.
  - xlvi. Vehicles used for transportation of sand are to be permitted only with of fitness and PUCCertificates.
  - xlvii. 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.
  - xlviii. 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.
  - xliv. No stacking allowed on road side along National Highways.
    - 1. The Project Proponent shall undertake phased restoration, reclamation and rehabilitation of land affected by mining and completes this work before abandonment of mine.
    - ii. Site specific plan with eco-restoration should be in place and implemented.
    - iii. Health and safety of workers should be taken care of.
    - liii. 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.
    - liv. The Project Proponent shall report monitoring data on replenishment, traffic management, levels of production, River Bank erosion and maintenance of Road etc.

*Johns*

*ll*

*BRT* *8/11/13*

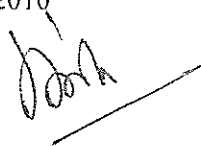
- iv. Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and records maintained: also. Occupational health check ups for workers having some ailments like BP, diabetes, habitual smokers, etc. shall be 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**

- i. 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.
- ii. 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.
- iii. 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.
- iv. 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.
- v. 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

SKM





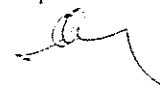
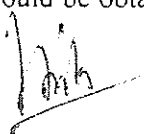


BUT

PART A – GENERAL CONDITIONS

I. Pre- Construction Phase

- i. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel (kerosene/gas) for cooking, safe drinking water, medical health care, etc. The housing may be in the form of temporary structures to be removed after completion of the project.
- ii. Provision of drinking water, waste water disposal, solid wastes management and primary health facilities shall be ensured for labour force. Proper sanitation facilities shall be provided at the construction site to prevent health related problems. Domestic as well as sanitary wastes from construction camps shall be cleared regularly.
- iii. Adequate safety measures shall be adopted for the construction workers.
- iv. All the labourers to be engaged for construction works shall be screened for health and adequately treated before issue of work permits. The contractor shall ensure periodic health check-up of construction workers.
- v. Fencing of the project boundary before start of construction activities.
- vi. Use of energy efficient construction materials shall be ensured to achieve the desired thermal comfort.
- vii. Use of fly ash based bricks/blocks/tiles/products shall be explored to the maximum extent possible.
- viii. Lay out of proposed buildings and roads within premises etc. shall be made in such a way that it shall cause minimum disturbance to existing flora and fauna. Appropriate green belt shall developed to compensate the habitat loss of tree cutting (if any) from competent authority as per prevailing Act/Rules. The exotic species existing within the existing premises, if any, shall be protected. The greening programme shall include plantation of both exotic and indigenous species.
- ix. Dedicated pedestrian paths shall be provided along the proposed Buildings. Appropriate access shall be provided for physically challenged people in the Pedestrian Paths.
- x. The design of service roads and the entry and exit from the buildings shall conform to the norms & standards prescribed by the State Public Works Department.
- xi. The road system shall have the road cross sections for general traffic, exclusive ways for public mass transport (bus) system, pedestrian paths and ways, utility corridors and green strip.
- xii. Topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site. Balance top soil should be disposed at in planned manner for use elsewhere adequate erosion and sediment control measures to be adopted before ensuing construction activities.
- xiii. Prior permission should be obtained from the competent authority for demolition of the



BLT

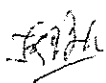
5/10/19

existing structure, if any. Waste recycling plans including top soil should be developed prior to beginning of demolition and construction activity. The plans should identify wastes to be generated and designate handling, recycling and disposal method to be followed.

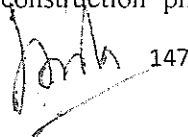
- xiv. Disposal of muck including excavated material during construction phase should not create any adverse effects in the neighbourhood and the same shall be disposed of taking the necessary precautions for general safety and health aspects.
- xv. The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which should be in the vernacular language, informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Environment Impact Assessment Authority, Jharkhand and the same matter also be sent to Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional Office of this Ministry at Ranchi.
- xvi. Risk assessment study along with Disaster Management Plan (DMP) shall be prepared. The mitigative measures for disaster prevention and control shall be prepared and get approval from competent authority. All other statutory clearances/licenses/permissions from concerned State Governments Departments, Boards and Corporations shall be obtained for directions issued by Central Government/State Government, Central Pollution Control Board/Jharkhand State Pollution Control Board.
- xvii. Baseline Environmental Condition of Project area i.e. Monitoring of AAQ as per NAAQS 2009, Monitoring of Ambient Noise Level & Analysis of Ground Water Samples should be conducted and report should be submitted to State Environment Impact Assessment Authority (SEIAA), Jharkhand and Jharkhand State Pollution Control Board (JSPCB), Ranchi prior to start of construction activities.

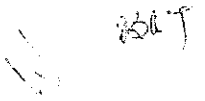
## II. Construction Phase

- i. It shall be ensured that the construction debris is properly stored on the site prior to disposal. Such requirements shall be made part of the contractor agreement.
- ii. All the top soil excavated during construction activities shall be stored for use in horticulture/landscape development within the project site. Proper erosion control and sediment control measures shall be adopted.
- iii. Earth material generated from excavation shall be reused to the maximum possible extent as filling material during site development. The construction debris and surplus excavated material shall be disposed off by mechanical transport through the Saraikela Municipal Corporation.
- iv. Disposal of muck, including excavated material during construction phase, shall not create any adverse effects on the neighbouring communities and shall be disposed off taking the necessary precautions for general safety and health aspects.
- v. Low Sulphur diesel generator sets should be used during construction phase. Diesel generator sets during construction phase shall have acoustic enclosures and shall






 147



- conform to Environment (Protection) Rules, 1986 prescribed for noise emission standards.
- vi. All vehicles/equipment deployed during construction phase shall be ensured in good working condition and shall conform to applicable air and noise emission standards. These shall be operated only during non-peaking hours.
  - vii. Ambient noise levels shall conform to the standards prescribed by MoEF & CC, Govt. of India.
  - viii. The protective equipment such as nose mask, earplugs etc. shall be provided to construction personnel exposed to high noise levels.
  - ix. Construction spoils, including bituminous material and other hazardous materials including oil from construction equipment must not be allowed to contaminate soil/ground water. The dumpsites for such material must be secured so that they shall not leach into the ground water.
  - x. Proper and prior planning, sequencing and scheduling of all major construction activities shall be done. Construction material shall be stored in covered sheds. Truck carrying soil, sand and other construction materials shall be duly covered to prevent spilling and dust emission. Adequate dust suppression measures shall be undertaken to control fugitive dust emission. Regular water sprinkling for dust suppression shall be ensured.
  - xi. Use of Ready-Mix concrete is recommended for the project.
  - xii. Accumulation/stagnation of water shall be avoided ensuring vector control.
  - xiii. Regular supervision of the above and other measures shall be in place all through the construction phase so as to avoid disturbance to the surroundings.
  - xiv. Water during construction phase should be preferred from Municipal supply.
  - xv. All directions of the Airport Authority, Director of Explosives and Fire Department etc. shall be complied.
  - xvi. Unskilled construction labourers shall be recruited from the local areas.
  - xvii. Provisions shall be made for the integration of solar water heating system.
  - xviii. Provision of vermin-composting for the biodegradable solid wastes generated from the proposed extension buildings as well as the large amount of biomass that shall be available from the tree plantation shall be made.
  - xix. Monitoring of ground water table and quality once in three months shall be carried out. Construction of tube wells, bore wells shall be strictly regulated.
  - xx. Permeable (porous) paving in the parking areas, and walkways should be used to control surface runoff by allowing storm water to infiltrate the soil and return to ground water.
  - xxi. All intersections shall be designed and developed as roundabouts.
  - xxii. All utility lines (electricity, telephone, cable, water supply, sewage, drainage, etc. shall be laid below ground level. Ducts shall be provided along and across the roads to lay



21/7

18/7/19  
25/11/19

the utility lines. Major trunk (water/sewerage) lines are to be laid along the utility corridor.

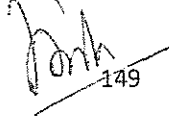
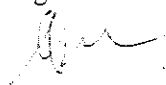
- xxiii. The road drainage shall be designed to enable quick runoff of surface water and prevent water logging.
- xxiv. Adequate provision shall be made to cater the parking needs. Parking spaces standards as given in "Manual on Norms and Standards for Environmental Clearance of Large Construction Projects" issued by Ministry of Environment and Forests, Government of India shall be adopted.
- xxv. Rest room facilities shall be provided for service population.
- xxvi. Monitoring of AAQ as per NAAQS 2009, Monitoring of Ambient Noise Level & Analysis of Ground Water Samples, should be conducted and report should be submitted on monthly basis to SEIAA, Jharkhand & Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi.

#### **Water Body Conservation :-**

- i. Water body falling within premises (if any) shall not be lined or no embankment shall be cemented. The water bodies, if any, shall be kept in natural conditions without disturbing the ecological habitat.
- ii. Improvement or rehabilitation of existing nallas (if any) shall be carried out without disturbing the ecological habitat.

#### **III. Post Construction/Operation Phase**

- i. The environmental safeguards and mitigation measures contained in the application shall be implemented in letter and spirit.
- ii. All the conditions, liabilities and legal provisions contained in the Environmental Clearance shall be equally applicable to the successor management of the project in the event of the project proponent transferring the ownership, maintenance of management of the project to any other entity. Ground water shall not be abstracted without prior permission from the competent authority.
- iii. The storm water management plan shall be implemented in such a manner that the storm water is discharged through an existing dedicated Storm Water Outfall only.
- iv. The height of the stack of the DG sets should be as per norms of Central Pollution Control Board (C.P.C.B.), New Delhi.
- v. Medical (First-Aid) facility must be provided for visitors & employees. Para-medical staff should be attached as Medical facility provider.
- vi. Plantation along the side of the buildings & roads and in the open spaces shall be developed to act as sinks of air pollutants. The plantation of trees shall be completed in the construction stage. The plantations shall consist of mixture of available indigenous, fast growing and sturdy species of trees, shrubs and herbs. Preferential plantation of flowering trees with less timber and fruits value shall be carried out.



- vii. Two chambered container or two separate containers (one for recyclable wastes and other for all organic and compostable wastes) shall be placed at appropriate distance on the roadsides and inside the building. Covered dustbins/garbage collector in convenient places to collect the Municipal solid wastes shall be provided.
- viii. Proper composting / vermi-composting of municipal solid wastes shall be carried out. All municipal solid wastes shall be segregated, collected, transported, treated and disposed as per provisions of the Municipal Solid Wastes (Management and Handling) Rules, 2000 (As amended).
- ix. The use of hand gloves, shoes and safety dress for all waste collectors and sorters shall be enforced.

#### **IV. Entire Life of the Project**

- i. The project proponent should implement Environmental Monitoring Programme as per details submitted in EMP.
- ii. No expansion/modification activity should be carried out obtaining prior Environmental Clearance as per EIA Notification 2006.
- iii. Monitoring of AAQ as per NAAQS 2009, Monitoring of Ambient Noise Level & Analysis of Ground Water Samples, Monitoring of Stock Emissions & Testing of emission from DG sets should be conducted and report should be submitted on monthly basis to SEIAA, Jharkhand & JSPCB, Ranchi.

#### **PART B- SPECIFIC CONDITIONS**

##### **I. Pre-Construction Phase**

- i. Project Proponent should obtain prior consent to establish (NOC) under Section 25 & 26 of the Water (Prevention & Control of Pollution) Act' 1974 and under Section 21 of the Air (Prevention & Control of Pollution) Act' 1981 from State Pollution Control Board before start of construction activities.
- ii. It was also advised that CSR activity of the Project Proponent should be measurable and quantifiable, and it should be visible even after the completion of the project. The Project Proponent was also directed to deposit 10% of the CSR cost (2.5% of the total project cost). The security deposit is imposed to ensure the proper performance/implementation of the committed CSR activities.
- iii. Project Proponent should obtain prior permission for ground water withdrawal from CCWA/CGWB if applicable.
- iv. Construction shall conform to the requirements of local seismic regulations. The project proponent shall obtain permission for the plans and designs including structural design, standards and specifications of all construction work from concerned authority.
- v. Use of energy efficient construction materials to achieve the desired thermal comfort shall be incorporated. The desired level of roof assembling "U" factor and insulation

“R” value must be achieved. Roof assembling “U” factor for the top roof shall not exceed 0.4 watt/sq.m./degree centigrade with appropriate modifications of specifications and building technologies. The provisions of National Building Code 2005 shall be strictly followed.

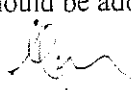
- vi. Street/Corridor lighting shall be energy efficient. The High Pressure Sodium Vapour (HPSV) Lamps & Compact Fluorescent Lamps (CFL) along Building premises shall be provided. High intensity, high mast lights to be installed at few strategic points. Solar energy may be used for outdoor lighting.
- vii. Reduction of hard paving-onsite (Open area surrounding all buildings) and/or provision of shades on hard paved surfaces to minimize heat island effect and imperviousness of the site should be undertaken.
- viii. All proposed air/conditioned buildings should follow the norms proposed in the ECBC regulations framed by the Bureau of Energy Efficiency.
- ix. Monitoring of AAQ as per NAAQs 2009, Monitoring of Ambient Noise Level & Analysis of Ground Water Samples, Monitoring of Stack Emissions from DG sets should be conducted, and reports should be submitted on monthly basis to State Pollution Control Board (SPCB).
- x. Project proponent shall install Wind Augmentation and Air Purifying Unit (4 Units at one location in Ranchi) on Pilot basis to deal with particulate matter pollution.

## II. Construction Phase

- i. All the conditions laid down in NOC issued by SPCB should be strictly complied with during entire construction cycle of the Project.
- ii. The water treatment plant shall be provided for treatment of water. The treatment shall include screening, sedimentation, filtration and disinfections. Appropriate arrangement shall be made for treatment and reuse of backwash water of filtration plant.
- iii. Project proponent shall provide adequate measuring arrangement at the inlet point of water uptake and at the discharge point for the measurement of water utilized in different categories and monitoring daily water consumption.
- iv. Regular water sprinkling shall be done all around the site to minimize fugitive dust emission during construction activities.
- v. Rain water harvesting structures should be provided as per submitted Plan.

## III. Post Construction / Operation Phase

- i. Project Proponent should obtain prior consent to operate under Air Act, 1981 & Water Act, 1974 from State Pollution Control Board before commissioning of the project.
- ii. Water saving practices such as usage of water saving devices/fixtures, low flushing systems, sensor based fixtures, auto control walls, pressure reducing devices etc. should be adopted.



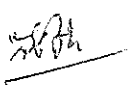
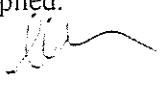
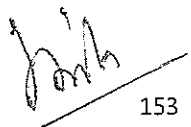


- iii. Water budget should be adopted as per the plan submitted in the supplementary Form I A & EMP.
- iv. All the generated domestic effluent should be sent to ETP/STP for treatment & further recycling & reuse.
- v. Treated water recovered from STP would be used for flushing the toilets, gardening purpose, make up water in air conditioning systems, etc. As proposed, Fluidized Bed Reactor (FBR) type sewage treatment plant should be installed. The Sewage Treatment Plant shall be ensured before the completion of Building Complex.
- vi. Rainwater from open spaces shall be collected and reused for landscaping and other purposes. Rooftop rainwater harvesting shall be adopted for the proposed Buildings. Every building of proposed extension project shall have rainwater-harvesting facilities. Before recharging the surface runoff, pre-treatment must be done to remove suspended matter and oil and grease.
- vii. Municipal solid wastes generated in the proposed extension buildings shall be managed and handled in accordance with the compliance criteria and procedure laid down in Schedule- II of the Municipal Wastes (Management and handling) Rules, 2000 (As amended).
- viii. The standard for composting & treated leachates as mentioned in Schedule-IV of the Municipal Wastes (Management and handling) Rules, 2000 (As amended) shall be followed.
- ix. All hazardous wastes shall be segregated, collected, transported, treated and disposed as per provisions of the Hazardous Wastes (Management and Handling) Rules, 1989 (As amended).
- x. Recycling of all recyclable wastes such as newspaper, aluminium cans, glass bottles, iron scrap and plastics etc. shall be encouraged through private participation. Project proponent shall take appropriate action to ensure minimum utilization of plastic carry bags and plastic small containers etc. within the proposed buildings shall be ensured.
- xi. Project proponent shall operate and maintain the sewage collection/conveyance system, sewage pumping system and sewage treatment system regularly to ensure the treated water quality within the standards prescribed by Ministry of Environment and Forests, Government of India.
- xii. Properly treated and disinfected (Ultra Violet Treatment) sewage shall be utilized in flushing the toilets, gardening purpose, make up water in air conditioning systems etc.
- xiii. Non-mixing of faecal matter with the municipal solid wastes shall be strictly ensured.
- xiv. Non-mixing of sewage/sludge with rainwater shall be strictly ensured.
- xv. Noise barriers shall be provided at appropriate locations so as to ensure that the noise levels do not exceed the prescribed standards. D.G. sets shall be provided with necessary acoustic enclosures as per Central Pollution Control Board norms.
- xvi. Back up supply shall be based on natural Gas/cleaner fuel subject to their availability.
- xvii. The project proponent shall resort to solar energy at least for street lighting and water heating for Proposed Building Complex, gardens/park areas.

- xviii. During maintenance, energy efficient electric light fittings & lamps- low power ballasts, low consumption high power luminaries, lux level limiters & timers for street lighting shall be provided.
- xix. A report on the energy conservation measures conforming to energy conservation norms finalized by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, "R" and "U" factors etc.
- xx. Monitoring of AAQ as per NAAQS 2009, Monitoring of Ambient Noise Level & Analysis of Ground Water Samples, Monitoring of Stack Emissions from DG sets & Testing of Untreated & treated effluent samples of STPs should be conducted and report should be submitted on monthly basis to SPCB.

#### IV. Entire Life of the Project

- i. All the conditions laid down in NOC & consent to operate issued by SPCB should be strictly complied with during entire life cycle of the project.
- ii. Monitoring of Ambient Noise Level & Analysis of Ground Water Samples, Monitoring of Stack Emissions from DG Sets & Testing of Untreated & treated effluent samples of STPs should be conducted and reports should be submitted on monthly basis to SPCB.
- iii. The project authorities shall ensure that the treated effluent and stack emissions from the unit are within the norms stipulated under the EPC rules or SPCB whichever is more stringent. In case of process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- iv. The overall noise levels in and around the project area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules 1989 viz. 75 DBA (day time) and 70 DBA (night time).
- v. The project authorities shall provide requisite funds for both recurring and non-recurring expenditure to implement the conditions stipulated by SEIAA, Jharkhand with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
- vi. Plantation along the side of the buildings & roads and in the open spaces shall be developed to act as sinks of air pollutants. The plantation of trees shall be completed in the construction stage. The plantations shall consist of mixture of available indigenous, fast growing and sturdy species of trees, shrubs. 15% of the total plot area shall be used for plantations.
- vii. Whenever developer will hand over building to the society, the developer must mention in the agreement or sale deed that 15% green belt area of total plot area should be mentioned & Environmental Conditions given by SEIAA, Jharkhand has to be complied.



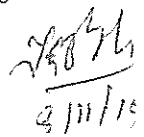
- viii. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.
- ix. The funds earmarked for the environmental protection measures shall not be diverted for other purposes.
- x. In case of any changes in the scope of the project, the project shall require a fresh appraisal by the SEAC/SEIAA.
- xi. The SEAC/SEIAA, Jharkhand will have the right to amend the above conditions and add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
- xii. It shall be mandatory for the project management to submit six (06) monthly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard copies and soft copies to the regulatory authority concerned Regional Office of MoEF & CC at Ranchi and Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi.
- xiii. Any appeal against this Environmental Clearance shall lie with the National Green Tribunal (NGT), if preferred within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010

we



BUT



  
3/11/15

## Industry EC

## Annexure VI

### A. Specific Conditions

1. As proposed, only propane gas will be used as fuel to reduce particulate emissions.
2. Efforts shall be made to reduce PM levels in the ambient air. Ambient air quality monitoring stations shall be set up in the downwind direction as well as where maximum ground level concentration of PM are anticipated in consultation with the State Pollution Control Board (SPCB). Data on ambient air, stack and fugitive emissions shall be submitted to the SEIAA Office JSPCB and CPCB.
3. On-line ambient air quality monitoring and continuous stack monitoring facilities for all the stacks and sufficient air pollution control devices shall be provided. The emissions of particulate matter from various process units shall conform to the standards prescribed by the concerned authorities from time to time.
4. The company shall monitor the raw and treated wastewater quality for trace metals and air quality at sources and ambient including routine parameters and the reports shall be submitted regularly with six monthly compliance report.
5. The company shall connect the pollution control equipment to DG set to ensure operation of these equipments during power failure. The company shall also provide interlocking system with the process equipment so that the plant automatically stops in case the pollution load exceeds the guaranteed limits.
6. The industry shall ensure that the treated effluent and stack emissions in the unit are within the norms stipulated under the EP Rules or JSPCB whichever is more stringent. In case of process disturbances/failure of pollution control equipments adopted in the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.
7. In-plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Dust suppression and dust extraction systems shall be provided to control fugitive emissions at material handling points. Fugitive emissions shall be controlled by providing closed storages, water sprinkling system, etc. to arrest the suspended particles.
8. Secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed. The emission standards issued by the Ministry in May, 2008 shall be followed.
9. Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.
10. Total water requirement from ground water source shall not exceed 495 m<sup>3</sup>/day. All the wastewater generated from the process shall be treated in the effluent treatment plant (ETP) and recycled and reused in the process and/or used for dust suppression, green belt development and for various activities at the project site. No effluent shall be discharged outside the premises. 'Zero' discharge shall be strictly adopted.
11. Prior permission for the drawl of 150 m<sup>3</sup>/day water from ground water source shall be obtained from the concerned department and a copy of the letter shall be submitted to this office within 6 months of issue of the environment clearance.
12. As proposed, all the metal scrap, iron oxide and dust shall be disposed for recycle / reuse in furnaces. The domestic waste including sewage sludge shall be treated biologically and used

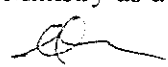
as manure for green belt. Used/spent oil shall be sold to authorized recyclers as per the Hazardous Waste (Management, Handling & Transboundary Movement) Rules 2016 and subsequent amendments.

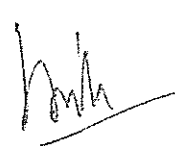
13. A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.
14. Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding end use of solid/hazardous waste shall be submitted to the SEIAA, JSPCB and CPCB.
15. Plantation should be done over an area equal to 33% of plant area including Green Belt inside and Plantation outside the premises. Local species trees should be planted as per the CPCB guidelines.
16. Proper care shall be taken in structural design to protect against earthquake if the site falls under earthquake zone and implemented during construction phase.
17. The company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP/Soak Pit, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

#### A. General Conditions

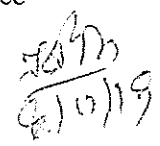
1. The project authorities must strictly adhere to the stipulations made by the Jharkhand State Pollution Control Board (JSPCB) and the State Government.
2. No further expansion or modifications in the plant shall be carried out without prior approval of the concerned authority/ SEIAA, Jharkhand.
3. The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The Jharkhand State Pollution Control Board (JSPCB) may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time, the emission levels shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.
4. At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of PM, SO<sub>2</sub> and NO<sub>x</sub> are anticipated in consultation with the State Pollution Control Board. Data on ambient air quality and stack emission shall be regularly submitted to this office and JSPCB / CPCB once in six months.
5. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

U

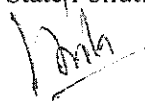




BKT

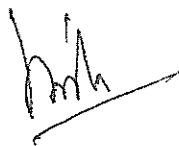
  
8/10/19


6. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
7. Industrial wastewater shall 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. The treated wastewater shall be utilized for plantation purpose.
8. The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
9. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented. Copy of same should be submitted to this office for record.
10. The company shall undertake rainwater harvesting measures by collecting the rainwater through drains. The water collected shall be connected to raw water pipeline for reuse in the plant. The company shall provide proper drainage system for rainwater to prevent water logging within and in the vicinity of the plant.
11. Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act. OHSAS certification should be obtained within two years.
12. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA / EMP report and during the public hearing meeting. Further, the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.
13. 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.
14. Adequate funds shall be earmarked towards capital cost and recurring cost/annum for the environmental pollution control to implement the conditions stipulated by the SEIAA as well as the State Government. An implementation schedule for complying with all the conditions stipulated herein shall be submitted to the JSPCB. The funds so provided shall not be diverted for any other purposes.
15. 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.



B.T

16. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / 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 web site of the company by the proponent.
17. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the SEIAA Office, CPCB and the JSPCB. The criteria pollutant levels namely; PM, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
18. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the SEIAA, the respective Zonal Office of CPCB and the JSPCB. The Zonal Office of CPCB / JSPCB shall monitor the stipulated conditions.
19. 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 concerned 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 alongwith the status of compliance of environmental conditions and shall also be sent to the respective Offices.
20. Project authorities shall inform the SEIAA Office, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.
21. 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.



B&T   
8/11/19

## Industry ToR

### Annexure VII

The TORs prescribed for undertaking detailed EIA study are as follows:

#### A. Standard Terms of Reference

##### 1. Executive Summary

##### 2. Introduction

- i. Details of the EIA Consultant including NABET accreditation.
- ii. Information about the project proponent
- iii. Importance and benefits of the project

##### 3. Project Description

- i. Cost of project and time of completion.
- ii. Products with capacities for the proposed project.
- iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
- iv. List of raw materials required and their source along with mode of transportation.
- v. Other chemicals and materials required with quantities and storage capacities
- vi. Details of Emission, effluents, hazardous waste generation and their management.
- vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
- viii. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided
- ix. Hazard identification and details of proposed safety systems.
- x. Expansion/modernization proposals:
  - a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing / existing operation of the project from SPCB shall be attached with the EIA-EMP report.
  - b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification, 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

##### 4. Site Details

- i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.
- ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)

NABET



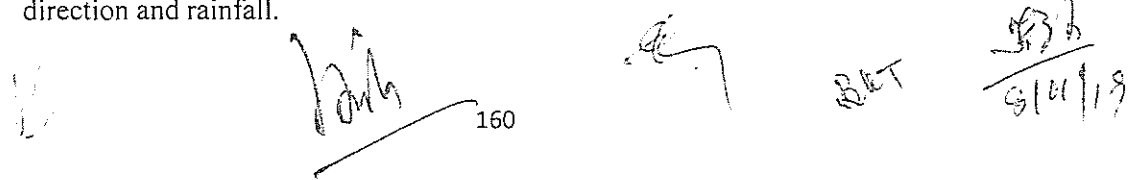
- iii. Details w.r.t. option analysis for selection of site
- iv. Co-ordinates (lat-long) of all four corners of the site. .
- v. Google map-Earth downloaded of the project site.
- vi. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
- vii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
- viii. Landuse break-up of total land of the project site (identified and acquired), government/private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)
- ix. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
- x. Geological features and Geo-hydrological status of the study area shall be included.
- xi. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)
- xii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- xiii. R&R details in respect of land in line with state Government policy

**5. Forest and wildlife related issues (if applicable):**

- i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)
- ii. Landuse map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha)
- iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
- iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden thereon
- v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area
- vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.

**6. Environmental Status**

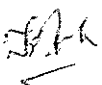
- i. Determination of atmospheric inversion level at the project site and site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.

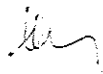

  
 160


- ii. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
- iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with - min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
- iv. Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
- v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.
- vi. Ground water monitoring at minimum at 8 locations shall be included.
- vii. Noise levels monitoring at 8 locations within the study area.
- viii. Soil Characteristic as per CPCB guidelines.
- ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
- x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule- I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
- xi. Socio-economic status of the study area.

#### 7. Impact and Environment Management Plan

- i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- ii. Water Quality modelling - in case of discharge in water body
- iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor- cum-rail transport shall be examined.
- iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.
- v. Details of stack emission and action plan for control of emissions to meet standards.
- vi. Measures for fugitive emission control.
- vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall









- also be included. EMP shall include the concept of waste-minimization, recycle / reuse / recover techniques, Energy conservation, and natural resource conservation.
- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
  - ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
  - x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
  - xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
  - xii. Action plan for post-project environmental monitoring shall be submitted.
  - xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

#### 8. Occupational health

- i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers
- ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.
- iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved.
- iv. Annual report of health status of workers with special reference to Occupational Health and Safety.

#### 9. Corporate Environment Policy

- i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
- ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
- iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
- iv. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

*[Handwritten signatures and initials]*

BLT 5/11/13

10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.

**11. Enterprise Social Commitment (ESC)**

i. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.

12. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

13. A tabular chart with index for point wise compliance of above TOR.

**B. SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR METALLURGICAL INDUSTRIES (FERROUS & NON FERROUS)**

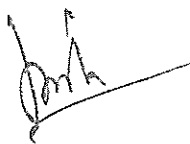
1. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs & outputs (material and energy balance).
2. Details on blast furnace/ open hearth furnace/ basic oxygen furnace/ladle refining, casting and rolling plants etc.
3. Details on installation/activation of opacity meters with recording with proper calibration system
4. Details on toxic metals including mercury, arsenic and fluoride emissions
5. Details on stack height requirement for integrated steel
6. Details on ash disposal and management -Non-ferrous metal
7. Complete process flow diagram describing production of lead/zinc/copper/ aluminium, etc.
8. Raw materials substitution or elimination
9. Details on smelting, thermal refining, melting, slag fuming, and Waelz kiln operation
10. Details on Holding and de-gassing of molten metal from primary and secondary aluminum, materials pre-treatment, and from melting and smelting of secondary aluminium
11. Details on solvent recycling
12. Details on precious metals recovery
13. Details on composition, generation and utilization of waste/fuel gases from coke oven plant and their utilization.
14. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
15. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
16. Trace metals in waste material especially slag.
17. Plan for trace metal recovery
18. Trace metals in water

**C. ADDITIONAL TOR FOR INTEGRATED STEEL PLANT**

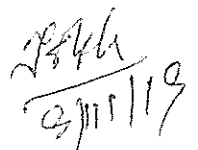
1. Respirable Suspended particulate matter (RSPM) present in the ambient air must be analyzed for source analysis - natural dust/RSPM generated from plant operations (trace elements). The RSPM shall also be analyzed for presence of poly-aromatic hydrocarbons (PAH), i.e. Benzene soluble fraction, where applicable. Chemical characterization of RSPM and incorporating of RSPM data.
2. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
3. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
4. Plan for slag utilization
5. Plan for utilization of energy in off gases (coke oven, blast furnace)

**D. Other**

1. Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the F.R for securing the TOR) should be brought to the attention of SEIAA, Jharkhand with reasons for such changes and permission should be sought, as the TOR may also have to be altered.
2. After preparing the draft EIA (as per the generic structure prescribed in Appendix- III of the EIA Notification, 2006) covering the above mentioned issues, the proponent will get the public hearing conducted and take further necessary action for obtaining environmental clearance in accordance with the procedure prescribed under the EIA Notification, 2006.
3. The prescribed TORs would be valid for a period of three years for submission of the EIA / EMP reports, as per the O.M. No. J-11015/109/2013-IA.II(M) , dated 12.01.2017.



B&T

  
3/11/19



In the SEAC meeting held on 24.10.19, the above proposal was appraised. During the appraisal certain observations were raised.

The PP has replied the observations on 01.11.2019.

The PP has submitted the required documents at the fagend of the meeting which could not be examined. Hence document submitted by the PP along with all the documents is being forwarded to SEIAA for needful.

**Day 4 : November 07, 2019 [Thursday]**

**Any other matter with the permission of the Chair:-**

Earliar list of pending proposal in SEAC was sought by Chairman SEAC, so that proposals possible to be disposed off may be considered. After being provided the list, it was observed that large number of small brick clay mining and other projects have been transferred by SEIAA after the cut off date. Large number of Representatives of Brick Kiln manufacturing association made their representation to provide them an opportunity to be heard considering the last meeting of the present SEAC and SEIAA. They are very small and facing unemployment as also the extended period for installing to new Brick Kiln Green Technology, otherwise they will miss the opportunity provide by State and large scale possible labour migration and revenue loss to State might take place.

Consequent to this, Chairman SEAC advised all members to explore working 3-4 hours each day beyond the normal working hours of the meeting, if possible considering the possible impact of not permitting their representation,

It was observed further that number of project proposals of small units like bricks and stone mines were lying to be appraised for want of time. In the interest of infrastructure development, seasonal nature and employment consideration of weaker segment and rural economy on the initiation of the State Government, these projects were permitted by the Chairman to be taken up. Since it was not possible to isolate the brick mining from the list, the other proposals received in SEAC after 18<sup>th</sup> October, 2019 i.e. upto 24<sup>th</sup> October, all were taken up for appraisal with all due diligence and careful scrutiny.

### Consideration of Proposals

1. **Pokharia Stone Mine Project of M/S K.K.Stone at Mouza- Pokharia , P.O-Benagaria, P.S- Shikaripara, Dist-Dumka Jharkhand (2.98 Ha)**

This is a Stone Mining Project with an area of 2.98 Ha [Plot No. –538(P), 539(P), 540(P), 541, 542(P), 543(P), 1186(P), 1189, 1190(P), 1191(P), 1192, 1197(P), 1221, 1222, 1223, 1224(P),1225(P), 1226, 1227, 1228(P), 1229(P), 1230(P), 1231(P), 1232(P), 1233, 1234, 1235(P)]. The latitude and longitude of the project site is 24°12'6.74"N To 24°11'54.45"N and 87°33'35.32"E To 87°33'38.64"E. The nearest railway station is Pinargaria Railway Station 8.5 Km East and nearest airport is Birsa Munda Aiport,Ranchi. 250 km SW. Total water requirement is 5.76 KLD (Dust Suppression : 3.71 KLD, Afforestation / Green belt : 0.97 KLD, Drinking / Domestic : 1.08 KLD). The drinking & domestic water need will be

*[Handwritten Signature]*  
8.11.19





**MINUTES OF THE 82<sup>ND</sup> MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE (SEAC), JHARKHAND HELD ON 04<sup>TH</sup>, 05<sup>TH</sup>, 06<sup>TH</sup> & 07<sup>TH</sup> NOVEMBER, 2019**

The 82<sup>nd</sup> meeting of State Level Expert Appraisal Committee (SEAC), Jharkhand was held on 04<sup>th</sup>, 05<sup>th</sup>, 06<sup>th</sup> & 07<sup>th</sup> November, 2019 under the Chairmanship of Sh. K.P. Bhawsinka in the Conference Room at SEAC, Ranchi.

The following members were present :

- |                        |                    |
|------------------------|--------------------|
| 1. Sri K.P. Bhawsinka  | - Chairman         |
| 2. Dr. B.K. Tewary     | - Member           |
| 3. Dr. R. N. Singh     | - Member           |
| 4. Sri Y.K. Singh      | - Member           |
| 5. Sri S.P. Srivastava | - Member           |
| 6. Dr. V.P. Sinha      | - Member           |
| 7. Dr. R. V. Singh     | - Member           |
| 8. M.S. Bhagwat        | - Member           |
| 9. Sri U.P. Singh      | - Member           |
| 10. Sri Om Prakash     | - Member Secretary |

SEIAA forwarded various projects to the SEAC for the technical appraisal after the last SEAC meeting held on 23<sup>rd</sup>, 24<sup>th</sup> & 25<sup>th</sup> October, 2019. These projects have been put up for discussions. Besides, these Projects, wherein PP's were asked to provide requisite information's / clarifications in SEAC earlier meeting, were also considered for appraisal. The Project Proponents have been asked to make technical presentation for the appraisal of their projects before the committee.

The following observations /recommendations were made during the presentation (Project -wise), as under:-


**Day 1 : November 04, 2019 [Monday]**

**Consideration of Proposals**

**Chairman observed following aspects for appraisal in all such brick earth mining projects discussed:**

Soil is essential land component which contributes to agriculture productivity depending upon type of agriculture the fertility, water innutrition requirement, irrigation climate. Conditions and many other climate factors. Value of agriculture land depends upon its yield and other revenue related regulation & norms. Environment impact includes soil erosion, salinity, nutrient deficiency & dust dispersed in air under varying climate conditions. On the other hand, supply side considerations for earth includes following considerations.

Soil & Earth excavation comes under minor mineral activity. Mining of Earth is targeted to use mined out product for production of burnt clay & as such earth excavation is considered as a linked project. Traditionally earth mining & burnt clay bricks is a decentralized activity being practiced in a rural areas of country. Although operation of such burnt clay brick production utilizes local skills. Bricks is used for wall envelope making in shelter & construction works. Yet it affects land environment and land use.

  
K.P. Bhawsinka

So efficient use of resources becomes issue of prime concern for optimized decisions making. While considering recommendations for soil excavation, it becomes pertinent to examine issues for linked project. Presently, mostly the burnt clay bricks utilizes CBT kilns & as such utilizes huge quantity of local coal for burning on average ranging from 18-20 MT/ lac bricks.

Utilization of this technology results in high Carbon foot print and poor air quality, production of low quality bricks beside low productivity / lower revenue surplus living little surplus and attention for employment security & welfare. Migration of labor & loss of revenue under the prevailing situation, thus, becomes a vicious circle.

Recent advancement in switch over to ID/Natural Zig- Zag Kiln is expected to reduce coal consumption by 6-8 MT/ Lac bricks besides better productivity & higher revenue generation which may lead to better attention for labor security and engagement for labor welfare activities. It is in this background Hon'ble NGT and Supreme Court directed to switch over to go Zig-Zag kiln. Hon'ble CM, Jharkhand now have extended time limit for installation of cleaner brick kilns - ID/Natural Zig- Zag Kiln before the last date to obtain CTE from JSPCB. Considering all these proposals, the proposal for sustainable

Earth mining has been considered by SEAC in its 82th meeting.

In addition to soil erosion, soil quality is affected by other aspects of agriculture. These impacts include compaction, loss of soil, structure, nutrient degradation & soil salinity & loss of agriculture produce. The effect of soil erosion go beyond the loss of fertile land.

Excavation hazards may include during earth collapse due to shallow pit excavation, falling into excavated pits contact with buried electrical, gas / oil pipe lines, collapse of soiling vicinity of building structure etc and may give rise to injury, shocks, suffocation due to soil heats & electrification in addition to leakage from underground waste.

Excavation of earth considered is a manual activity. Soil as vital face of techs agriculture productivity depending upon type of agriculture the fertility, water nutrition requirement, irrigation and climate Conditions and many other climate factors. Value of agriculture land depends upon its yield and other revenue related regulation & norms. Environment impact includes soil erosion, salinity, nutrient deficiency & dust spread in air under varying climate conditions. On the other hand, supply side considerations for earth includes following considerations. Soil & Earth excavation comes under minor mineral activity. Mining of Earth is targeted to use mined out product for production of burnt clay & as such earth excavation is considered as a linked project. Traditionally earth mining & burnt clay bricks is a decentralized activity being practiced in a rural areas of country. Although operation of such burnt clay brick production utilizes local skills. Bricks is used for wall envelope of shelter & shelter construction sector. Yet it affects land environment and soil. So efficient use of resources becomes use of issue of prime concern for optimized decisions.

While considering recommendations for soil excavation, it becomes pertinent to examine issues for linked project. Presently, mostly the burnt clay bricks utilizes FTCBT kilns & as such utilizes huge quantity of local coal for burning on average ranging from 18-20 MT/ lac bricks. Utilization of this technology results in production of poor quality of bricks beside poor productivity, low revenue surplus & so little attention for employment security & lab our welfare. Migration of labor & loss of revenue under the prevailing situation, thus becomes a vicious circle. Recent advancement in switch over to 10/ natural zig zag kiln is expected to reduce coal consumption by 6-8 MT/ Lac

bricks besides better productivity & higher revenue generation which may lead to better attention for labor security and engagement for our welfare activities. It is in this background Hon'ble NGT and Supreme Court directed to switch over to go big-Tax kiln. Hon'ble CM, Jharkhand now have extended time limit for installation of cleaner brick Kilns ID / Natural Zig- Zag Kiln before the last date to obtain CTE from JSPCB. Considering all these proposals, the proposal for sustainable Earth mining has been considered by SEAC in its 82 Th meeting. In addition to soil erosion, soil quality is affected by other aspects of agriculture. These impacts include compaction, loss of soil, structure, nutrient degradation & soil salinity & loss of agriculture produce. The effect of soil erosion go beyond the loss of fertile land. Excavation hazards may include during earth collapse due to shallow pit excavation, falling into excavated pits contact with buried electrical, gas / oil pipe lines, collapse of soil in vicinity of building structure etc. and may give rise to injury , shocks , suffocation due to soil heats & electrification in addition to leakage from underground waste.

**Following Conditions in addition to conditions of annexure 1, shall be applicable in all considered Brick Clay mining projects:-**

1. PP shall link the work force with maximum coverage under PM shramyogi scheme to provide them better health facilities.
- 2 PP shall provide guard rails/ barricade with warning signals.
- 3 PP shall provide minimum two entries/ exits & install emergency escape from excavated areas.
- 4 Top soil up to 30 cm shall be preserved separately & used further in areas requiring improvement of agriculture productivity.
- 5 This EC is recommended subject to fulfillment of condition that PP shall install ID/natural draft Zig-Zag Kiln within the time frame allowed by state as per NGT order and gety CTE from JSPCB.
- 6 This is subject to all due diligence as per regulatory bodies and Court directives.
- 7 PP shall seek advise/instruction by informing concern departments as to the location of buried electrical lines/gas pipe lines, so that no event of electrocution/pipe line damage takes place to avoid injury and other health hazards.

**1. Burka Brick Clay Deposit of M/s Bedal Bricks at Vill : Burka, Thana : Bhandra, Dist : Lohardaga (0.996 Ha).**

**(Proposal no. : SIA/JH/MIN/44309/2019)**

This is Brick clay Mining Project with an area of 0.992 Ha [Plot No. 38 & 46, Khata No. 05. The latitude and longitude of the project site is 23°20'19.52"N to 23°20'23.95"N and 84°45'00.11"E to 84°45'03.95"E. The nearest railway station is Irgaon at a distance of 10.0 km and nearest airport is Ranchi airport at a distance of 58 km. Total water requirement is 3.5 KLD. Water will be taken from private tanker.

The indicated project cost is Rs 12.0 Lakh and a provision of Rs 2.00 Lakh has been indicated for Environment management.

Total minor mineral reserve of the applied area is about 12916 cum. As per estimation of requirement of 1715.30 cum for casting the granted number of Six Lakhs bricks / Season, the life of proposed area comes to be 7.50 seasons.

DFO, Wildlife Ranchi vide memo no. 1037, dated 16.09.19 certified that the not within of 10 km is under ESZ National Park, Bio-Diversity, Sanctuary.

DFO, Lohardaga Division vide letter no. 36, dated 04.01.19 certified that the distance of notified forest is 3000 m from proposed project site.

The CO, Bhandra (Lohardaga) vide letter no. 731, dated 23.09.19 has mentioned the plot no. of the project are not recorded as "Jangle Jhari" in Khatiyani.

DMO, Lohardaga vide memo no. 643, dated 28.08.2019 certified that no other lease is exists within 500 m radius from proposed project site.

Besides, the DSR of the district has not incorporated the said brick earth mining site. The tenure of this committee (SEIAA / SEAC) is expiring on 8<sup>th</sup> November, 2019. In the interest of the development of the State the committee has taken the views for expediting the clearance process.

SEAC recommends the proposal for EC to SEIAA subject to submission of certificate from DMO / Dy. Director, Geology & Mines Deptt., Govt. of Jharkhand regarding inclusion in the DSR. An undertaking in this regard has been submitted by the proponent.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for **Burka Brick Clay Deposit of M/s Bedal Bricks at Vill : Burka, Thana : Bhandra, Dist : Lohardaga (0.996 Ha)** be conditionally (project site not mention in DSR) recommended for subject to submission of DSR from competent authority directly to SEIAA consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as **Annexure - I**.

2. **Chakla Brick Clay Deposit of M/s Ravi Bricks at Vill : Chakla, Thana : Ormanjhi, Dist : Ranchi (1.003 Ha).**

(Proposal no. : SIA/JH/MIN/44294/2019)

This is Brick clay Mining Project with an area of 1.003 Ha [Plot No. 1032 (P), 1033 & 1034 (P), Khata No. 97]. The latitude and longitude of the project site is 23°27'52.82"N to 23°27'56.99"N and 85°28'31.79"E to 85°28'37.07"E. The nearest railway station is Mersa at a distance of 8.0 km and nearest airport is Ranchi airport at a distance of 23.0 km. Total water requirement is 2.0 KLD. Water will be taken from private tanker.

The indicated project cost is Rs 15.0 Lakh and a provision of Rs 6.6 Lakh has been indicated for Environment management.

Total minor mineral reserve of the applied area is about 14372 cum. As per estimation of requirement of 1715.30 cum for casting the granted number of Six Lakhs bricks / Season, the life of proposed area comes to be 8.38 or 8.50 seasons.

DFO, Wildlife Ranchi vide memo no. 1055, dated 24.09.19 certified that the National Park, Bio-Diversity, Sanctuary not within 10 km and proposed site is under ESZ.

CF / DFO, Ranchi Division vide letter no. 4804, dated 17.11.17 certified that the distance of forest is 1100 m from proposed project site.

The CO, Ormanjhi (Ranchi) vide letter no. 522, dated 26.09.19 has mentioned the plots of the project are not recorded as "Jangle Jhari" in R.S Khatiyani.

DMO, Ranchi vide memo no. 02, dated 01.01.2018 certified that no other lease is exists within 500 m radius from proposed project site.

The project is mentioned in District Survey Report (DSR) of Ranchi District.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for **Chakla Brick Clay Deposit of M/s Ravi Bricks at Vill :Chakla, Thana : Ormanjhi, Dist : Ranchi (1.003 Ha)** be recommended for consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as **Annexure - I**.

3. **Sakrauli Brick Clay Deposit of M/s Sahu Brick (Prop: Sri Pankaj Kumar Sahu) at Vill – Sakrauli, Thana : Sakrauli, Dist. : Gumla (0.894 Ha).**

**(Proposal no. : SLA/JH/MIN/44511/2019)**

This is Brick clay Mining Project with an area of 0.894 Ha [Khata no. 26, Plot no. 1022 (P), 1041 (P), 1042 (P)]. The latitude and longitude of the project site is 23°09'34.77"N to 23°09'39.37"N and 84°47'44.13"E to 84°47'48.52"E. The nearest railway station is Nagjua at a distance of 26.5 km and nearest airport is Ranchi airport at a distance of 55 km. Total water requirement is 3.1 KLD. Water will be taken from private tanker.

The indicated project cost is Rs 10.0 Lakh and a provision of Rs 2.00 Lakh has been indicated for Environment management.

Total minor mineral reserve of the applied area is about 10082 cum. As per estimation of requirement of 1714.60 cum for casting the granted number of Six Lakhs bricks / Season, the life of proposed area comes to be 5.80 or 6.00 seasons.

DFO, Wildlife Ranchi vide memo no. 1149, dated 11.10.19 certified that the proposed site is National Park, Bio-Diversity, Sanctuary and not within 10 km under ESZ.

DFO, Gumla Division vide letter no. 387, dated 29.01.18 certified that the distance of notified forest is 1000 m from proposed project site.

The CO, Sisai vide letter no. 780, dated 04.10.19 has mentioned the plot of the project is not recorded as "Jangle Jhari" in R.S Khatiyani & Register II.

DMO, Gumla vide memo no. 921, dated 11.10.2019 certified that no other lease exists within 500 m radius from proposed project site.

Besides, the DSR of the district has not incorporated the said brick earth mining site.

The tenure of this committee (SEIAA / SEAC) is expiring on 8<sup>th</sup> November, 2019. In the interest of the development of the State the committee has taken the views for expediting the clearance process.

SEAC recommends the proposal for EC to SEIAA subject to submission of certificate from competent authority of Jharkhand regarding inclusion in the DSR. An undertaking in this regard has been submitted by the proponent.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for **Sakrauli Brick Clay Deposit of M/s Sahu Brick (Prop: Sri Pankaj Kumar Sahu) at Vill – Sakrauli, Thana : Sakrauli, Dist. : Gumla (0.894 Ha)** be conditionally (project site not mention in DSR) recommended for

subject to submission of DSR from competent authority directly to SEIAA consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as **Annexure - I**.

**4. Kulbhanga Stone Deposit of M/s Maa Durga Stone Works (Prop. : Shri Bishnu Prasad Yadav) at Vill : Kulbhanga, Block + Taluka: Jirwabadi (OP), Dist. : Sahebganj (4.70 Ha).**

**(Proposal no. : SLA/JH/MIN/44723/2019)**

This is a Stone Mining Project with an area of 4.70 Ha [Khata no. 79, 55, 48, 58, 14, 72, 84, Plot No.- 51, 53, 54, 55, 56, 58 & 59 (P) ]. The latitude and longitude of the project site is 25° 12' 24.88" N to 25° 12' 33.92" N and 87° 34' 37.62" E to 87° 34' 49.45" E. The nearest railway station is Sahibganj at a distance of 8.0 km and nearest airport is Ranchi at a distance of 450 km . Total water requirement is 2.5 KLD. Water requirement will be met through boring a bore hole, pumping arrangement and overhead tanks as well as pit sump and settling tanks. Water is required for sprinkling on haul roads, watering of plants and drinking water for workers.

The details of mine capacity as per Approved Mining Plan are

Proved Mineable Reserve	:	34,75,475 tonne
Probable Mineable Reserve	:	1,88,222 tonne

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

1 <sup>st</sup> Year	:	2,10,200 tonne
2 <sup>nd</sup> Year	:	2,41,294 tonne
3 <sup>rd</sup> Year	:	2,04,404 tonne
4 <sup>th</sup> Year	:	2,31,852 tonne
5 <sup>th</sup> Year	:	2,56,592 tonne

The daily production as per Form-I is 156 tonne.

The indicated project cost is Rs 75.00 Lakh, a provision of Rs 8.5 Lakh has been indicated for Environment management and CER is 5.00 Lakh.

DFO, Wildlife Hazaribagh vide letter no. 1583, dated 09.08.19 certified that the Udhwa Lake Bird Sanctuary is 31115 m from project site and not within 10 km from National Park, Bio-Diversity & Sanctuary and proposed project is not situated in any ESZ.

DFO, Sahebganj Division vide memo no. 2316, dated 22.12.17 certified that the distance of notified forest is 370 m from proposed project site.

DMO, Sahebganj vide memo no. 1041, dated 31.07.19 certified that no other lease are exists within 500 m radius from proposed project site.

The CO, Mandro vide memo no. 258, dated 13.03.19 has mentioned the plots of the project are not recorded as "Jangle Jhari" in R.S Khatiyani & Register II.

The project is mentioned in District Survey Report (DSR) of Sahebganj District.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for **Kulbhanga Stone Deposit of M/s Maa Durga**

Stone Works (Prop. : Shri Bishnu Prasad Yadav) at Vill : Kulbhanga, Block + Taluka: Jirwabadi (OP), Dist. : Sahebganj (4.70 Ha) be recommended for consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as Annexure - II.

5. **Proposed Rehabilitation & Resettlement Package (R & R) for HEC Displaced Persons of M/s Greater Ranchi Development Agency Ltd. at Site 1, HEC area, Vill. : Aani, Dhurwa, Ranchi.**

(Proposal No. : SLA/JH/NCP/22997/2018)

The proposed project is of Rehabilitation & Resettlement Package for HEC displaced persons being developed by Greater Ranchi Development Agency limited (GRDA) of Jharkhand at Site-1, H.E.C area, Aani Dhruwa, Ranchi, Jharkhand. The project comprises of the Residential houses, Primary School, Community Centre, Shopping centre etc.

The proposed project is being developed on the total plot area of 236835.4 sq.m. & the built up area of the proposed project is 48890.54 sq.m. including the FAR.

Project is classified as Category 8(a) as per EIA Notification as the built up area is less than 1.50,000 sq m and development area is less than 50 ha.

The said project is a violation case, since the BCD, Government of Jharkhand, Ranchi has started the construction work without obtaining prior EC. In order to obtain EC from MoEF&CC the PP had applied before EAC, MoEF&CC to get the EC, as per procedure prescribed in Notification dated 14.03.2017.

**Chronological Events :**

S. No	Particulars	Dates
1.	Land allotment	19 <sup>th</sup> November, 2011
2.	Construction Work Started	15 <sup>th</sup> December, 2016
3.	Proposal submitted to MoEF & CC in violation category	11 <sup>th</sup> September, 2017
4.	Transferred proposal to SEIAA Jharkhand	28 <sup>th</sup> March, 2018
5.	EDS Letter	15 <sup>th</sup> May, 2018
6.	TOR Proposal (Resubmission) EDS reply	20 <sup>th</sup> June, 2019
7.	Acceptance of ToR proposal	20 <sup>th</sup> June, 2019

**Salient features of the project:**

1.	Name of the project	Rehabilitation & Resettlement Package for HEC displaced persons
2.	Name of applicant	Greater Ranchi Development Agency Limited (GRDA)
3.	Category of the project	8 (a) Building and Construction Projects
4.	Project location	Village Aani Dhruwa, Ranchi. Jharkhand <b>Latitude : 23°19'22.9"N to 23°19'35.8"N</b> <b>Longitude : 85°17'03.8"E to 85°17'02.4"E</b>
5.	<b>Total Plot Area</b>	236835.4 sq.m.
6.	Permissible Ground Coverage @ 50% of plot area	118417.719 sq.m.
7.	<b>Proposed Ground Coverage @ 20.505 % of plot area</b>	48563.107 sq.m.
8.	<b>Permissible FAR @ 2 of plot area</b>	473670.877 sq.m.
9	<b>Proposed FAR @0.2 of plot area</b>	48563.986 sq.m.
a	Area for 400 DU	47184.000 sq.m.
b.	Pre Primary School (G+1)	674.809 sq.m.
c.	Community Centre	460.736 sq.m.
d.	Convenience Shopping (2 NOS)	328.764 sq.m.
e	WW	109.56 sq.m.
f	LCS	132.67 sq.m.
	<b>Total Built-up Area</b>	48890.54 sq.m.
8.	Open Area ( plot area - achieved ground coverage)	188272.3318 sq.m.
9.	Landscape area provided@10% of open area	18827.233 sq.m.
10.	Paved Area	169445.099 sq.m.
11.	Nearest Airport / Railway	Birsa Munda Airport, approx. 2.3 Km towards East
12.	Total Water Requirement	310 KLD
13.	Fresh Water Requirement	179 KLD
14.	Wastewater Generation	215 KLD
15.	Capacity of STP	STP - 260 KLD
16.	Solid Waste Generation	867 kg/day
17.	Parking Required & Provided	400 ECS
18.	Power Demand & Source	1020 KVA(by JSEB)
19.	RWH Pits	15 pit
20.	Total project cost	185 crores

23/11/19



S. No.	FEATURES	DESCRIPTION	DISTANCE & DIRECTION
1.	Location	Site-1, H.E.C. Area, Village-Aani, Dhruwa, Ranchi, Jharkhand.	
2.	Connecting road	Nayasarai Road Ring Road	0.6 km towards South 3.7 Km towards West
3.	National Highway	NH-75 NH-23	1.9 Km towards East 5.2 Km towards North West
4.	Nearest Railway Station	Hatia Railway station Ranchi Railway station	4 km towards South East. 3.8 Km towards North East
5.	Airport	Birsa Munda Airport, Ranchi	2.3 Km towards East

**Water requirement:**

During construction phase, source of water is private water tanker. It is estimated that water demand during the construction phase may vary from 20 KLD. Water requirement during the operational phase will be met through either Municipal supply (Ranchi Municipal Corporation or Ground water after taking permission from CGWA). The total water requirement for the proposed project has been estimated to be 310 KLD. Total domestic water requirement of the project is estimated as 176 KLD.

**Power requirement:**

Estimated power load for the project is 1020 kVA. Source of the power will be Jharkhand State Electricity Board. DG Sets are not proposed for power back up.

**Parking facility:**

The total parking 400 ECS has been proposed as 1 ECS for per Dwelling unit.

**Solid waste generation and management**

It is estimated that maximum solid waste generation would be about 867 kg/day and 156.52 kg of sludge (wet basis). Organic waste converter shall be providing to manage the biodegradable waste. The domestic solid waste will be generated by the occupants of the R & R Packages, pertains to the two categories, Bio-degradable and Non-biodegradable. Small

area will be designated for secondary processing, where the proper segregation of waste will take place before sending it for proper disposal. These solid wastes will be collected separately by putting three types of separate bins at the source of generation. For the biodegradable waste green bins will be provided, for the Non-biodegradable waste White bins and for the domestic hazardous waste black bins will be provided.

The E-waste (Discarded computers, copiers, fax machines, electric lamps, cell phones, audio equipment, etc) generated will be managed as per the E-Waste (Management) Rules, 2016. The Hazardous waste (Used Oil, Oil Contaminated Wastes ) generated will be managed as per the Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016.

**Ecological Damage Assessment :**

Project proponent has completed construction work and ready occupation before getting Environmental Clearance under EIA Notification, 2006 as observed in field inspection by the SEAC members on dated 26.07.19. This has been estimated as per the field study data generation and analysis by the NABET accredited and NABL approved consultant and laboratory as per the MoEF&CC notification S.O. 1030(E), dated 08.03.18 for violation cases directive.

**Natural Resources Damage Assessment**

Components	Activities	Probable impact	Remark
Land resources	The land was allotted to project proponent by Jharkhand government for the development of assembly building project. Clearing of shrubs and herbs Excavation for laying foundation;	Loss of top soil; land use changes; changes in drainage patterns; soil erosion; & soil contamination.	The top soil is kept at the earmarked places within the project site and stabilized through vegetative means to stop wash off and erosion. No change in land use and effective storm water management system is proposed to ensure no change in drainage patterns.
Water resource	Water drawl of about 24 KLD for construction. Wastewater generation (90 KLD)	Depletion of ground and surface water resources, contamination of ground and surface water	Rainwater recharging with in project site and in study area; Maximum reuse of treated water (STP); reduce the load on ground water by providing treated water to the nearby building construction activities No discharge will be

*Handwritten signature and date: 25/11/19*

			made to any water body.
Waste resource	Waste generation of 357 Kg per day . Excavated soil	Littering of waste Dumping of excavated soil in the open land in vicinity.	All the waste will be managed as per
Energy resource (Fuel; Electricity)	Utilization of wood/ coal, diesel and electricity	Deforestation for collecting wood; Impact on flora and fauna	LPG cylinder will be used for cooking and wood and coal will not be used. Ultra low sulphur diesel will be used in DG sets and vehicles.
Air Environment	Excavation Loose construction material Storage Use of DG sets	Particulate matter Emission Fugitive dust emission. Gaseous emission	Suppression of dust and fugitive emission, only PUC certified vehicle will be used. All loose construction material will be covered. DG sets will have stack having stack height as per CPCB. DG sets will be used only in case of power failure.
Noise Environment	Increase in traffic frequency and resultant noise. Noise from DG sets	Disturbance to vulnerable groups Disturbance to nearby residents	There will be acoustic enclosure for DG sets; construction activity will be during day time only. Only properly maintained and PUC vehicle will be used. Honking will be discouraged.
Water Environment	Water withdrawal Generation of waste water	Stress on water resources. Discharge of untreated sewage and domestic effluent.	Site is in safe zone as per CGWA; River Subarnarekha River is in vicinity; the water will be supplied by

			Nagar Nigam; There will be a provision of STP based on MBBR technology so as ensure that water resource are reused within site and ground water is not contaminated.
Land Environment	Excavation of laying down foundation Land loss Vegetation removal	Spillage Top soil deterioration; landuse & drainage pattern change; cutting and filling.	Vacant land with shrubs and herb; no tree cutting proposed – number of tree will be planted at the site; Nonagricultural private land. Green belt development; RWH Proposed to reduce runoff from site as ground water recharge.
Ecology& Biodiversity Environment	Site clearance Clearing of shrubs and herbs	Loss of topography. Loss of vegetation Migration of flora and fauna	Proper levelling and filling The shrubs and herbs found at the project site were of common occurrence and similar type of habitat is abundantly available in the study are therefore no significant impact envisaged, conservation plan is proposed.
Socio-economic Environment	Migration of people Welfare activities Employment facilities Solar lights Environmental sustainability	Increase in infrastructural facilities. Improved employment;	Positive Impact

DFO, Ranchi Division vide letter no. 3245, dated 10.07.19 certified that the distance of notified forest is 1100 m from proposed project site and not within 10 km from National Park, Bio-Diversity & Sanctuary, not under the No Mining Zone, and proposed project is not situated in any ESZ.

PP and the consultant presented the project and submitted the earlier required documents. They admitted that the large quantity of construction work has been completed before the grant of EC. Thus this is a violation case as per the E (P) Act, 1986 and MoEF&CC

*Handwritten signature and date*  
5/11/19

notification S.O. 1030 (E), dated 08.03.18 as construction work 90% completed without prior EC.

SEAC is concerned to find the violation of E (P) Act by the executing agency in a number of projects in the plea of ignorance. There is a need to identify the reason of lapses in not seeking prior EC before starting the work. This amounts to repeated violation under E (P) Act.

Earlier the proposal was presented in SEAC on 24-26.07.19 in which requisite documents were sought as under -

- i. *PP to submit an Undertaking / Affidavit that the work has now been stopped till the EC awarded.*
- ii. *The work order / scope of work to the Architect / Contractor as the work was awarded earlier.*
- iii. *CO certificate regarding class of land (whether as Jangle Jhari or not).*

The above mentioned requisite documents have been submitted by the PP, except CO certificate regarding class of land (whether recorded as Jangle Jhari or not).

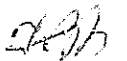
On scrutiny of the document eg :

- i. Undertaking : The PP has submitted the undertaking that all activities, as per SEAC direction have been stopped till EC is obtained.
- ii. CO certificate regarding the nature of land submitted. This Certificate is provided by Addl. Collector but the class of land as recorded in Khatiyani & Register II as to whether Jungle-Jhari or not, has not been mentioned .
- iii. Geotechnical report for the site is yet to be submitted in the certificate.

In the work order of the Architect, it is observed in para 3.2.8, Stage II, column (c) – that the architect has been entrusted to get the approval and clearances from the statutory authorities as required. The PP & the contractor have not adhered to the task and directly started the work without getting prior E.C, leading to case of violation of E (P) Act, 1986.

To identify the damage to the environment and assessment of the corrective measures as per the MoEF&CC notification S.O. 1030(E) dated 08.03.2018, a site visit was conducted by the SEAC members on 26.07.2019. The observations of site visit is as follows :

- (i) The construction work of the individual units of 400 dwelling units have been almost completed.
- (ii) The roads, drainage system, fire fighting measures are under various stages of completion.
- (iii) A nalla flows nearby the project site and a large quantity of the debris have been thrown out. Thus, leading develop a protective measures for maintaining the ecology of the nalla.
- (iv) The status of completion of Rehabilitation colony was observed to be about 90%. The location of cluster of septic tanks and soak pits for the entire Rehabilitation colony was found to on the western /south western, western bank of the natural perennial stream/water course. Since proximity of the septic tanks/soak pit is close to the natural stream and the terrace level, on which these are located at a depth of about 1.25m from terrace level of the

  
26/7/19

colony's road, possibly a little higher than the river bank terrace level during monsoon, contamination of water in the stream & disturbance to ecology is imminent due to dispersion of effluent from soak pit.

Thus, for protecting the stream and its downstream from imminent contamination and environmental hazard, these two possible mitigation measures, are as under :

- a. Complete relocation of cluster of Septic tanks and Soakpits to a far away place (farther from stream), so that after dispersion and its dilution of the effluent, concentration of polluting effluent will be minimum.
- b. Abandoning all the soakpits/cluster of soakpits and taking the discharged effluent from the soakpit and routing and treating it to a suitably located and adequately designed STP system with strong consideration on the quality of effluent from STP likely to be discharged from STP (within all admissible limits of ingredients).

Beside the above, permission from Water Resources Deptt., GOI for grant of consent to discharge in the natural stream may have to be sought by the project proponent.

- c. Presently the work has been stopped.

In earlier meeting dated 29-30.08.19 the PP & consultant presented a preliminary result of the evaluations as per matrix method and the storm water drainage system proposed and sewerage system, safety measures to be adopted parking & other activities. The identification of community development measures were discussed.

The PP has submitted undertaking vide Executive Engineer, Special Works Division, Building Construction Deptt., Jharkhand letter no. 1100, dated 28.08.2019 that in case the proposed project site is found to be Jungle-Jhari land then in that case PP would abide by the provisions of Forest (Conservation) Act, 1980 and submit requisite proposal.

The Deputy Commissioner, Ranchi has submitted undertaking regarding Jungle-Jhari as per Revenue and Land Reform Department, Govt. of Jharkhand letter no. 4792, dated 04.12.18 that user agency would abide by the provisions of Forest (Conservation) Act, 1980 and submit requisite proposal, if the project site found to be Jungle –Jhari in future.

The proposal was presented in SEAC on 29-30.08.19. The PP was informed the following findings vide subsequent communication :

1. *Since, construction phase is over, budgetary provisions made for Rs. 37.5 lakhs in Table 12-3 has no relevance for the Ecological/Environment damage assessment. A detailed analysis need to be prepared for the true / realistic assessment based on each affected component of project site like quantity of Excavation, Transportation of quantified qty. of raw materials, land use pattern, drainage & discharge pattern happening during all these 4 years of construction.*
2. *Cost of Remediation measure for "Water Environment" is as follows :  
It mentions that DG with acoustic enclosure = "Rs. 5 Lakh x 5 year Capital cost and Rs. 0.5 lakh X 5 yrs. recurring cost"  
Since it is a remediation measure, budgetary quotation need to be submitted as the amount needs to be deposited on account of this Similarly Budgetary quotation for Noise protective equipment to the obtained & submitted.*

*JKH/B*  
*8/11/19*

3. *In Preamble Pg 1-1 mentions that approx. 80% of construction activities have been done on the site at other place it is mentioned as 90% & other place it is mentioned that construction is completed.*
4. *In 1.2 Brief description of project, it is mentioned that topography "almost plain" but from contour plan it is not plain.*
5. *CO, Nagri letter dt. 14.08.19, it is mentioned that Dhurwa Dam is located within 500 m distance but in page I-4, it is mentioned that Hatia Reservoir as 6.5 km SW. Both these documents are Contradictory ?*
6. *For proposed Water Conservation Measures, page XII-13 mentions :  
"All concrete structures will be painted with anti-curing agent to save water" since construction work is over, the PP need to submit contractor's approved BoQ for this specified work . In absence of evidence for this, it will be concluded that no such paint has been used in the construction, in spite of being envisaged/planned.*
7. *Page XII-13 mentions that "Ponds should be made using Cement & Sand mortar to avoid water flowing away from the flat surface while curing". The PP need to submit documentary evidence from the contractor's contract showing availability of this work in contractor's scope or any evidence substantiating that this pond construction work has been carried out & made use of, during curing activity of constructions work requiring curing, which is now completed.*
8. *Rain Water Harvesting Pits PXII-14  
In calculation of R.W. Harvesting pit, no provision has been kept for free board. Considering free board, the numbers of pits would be increased. Location of recharging pit need to be shown in key Plan.*
9. *Conclusion & Discussion (Construction phase)  
Construction of Silt fences/berms is proposed to minimise soil runoff. The PP to confirm whether these silt fences/berms proposed during construction phases were constructed. If not constructed, it is concluded that soil run off has taken place during construction. During site visit, silt fences / berms were these not visible.*
10. *Disposal of Construction debris in "earmarked area" shall be submitted . PP to confirm the same & mark on drawing / key plan, the earmarked area for its verification.*
11. *Nature Resource damage assessment :  
Water Source : Maximum reuse of treated water for building construction activities were envisaged by PP. (treatment through STP). Since STP not constructed, this aimed reuse of Water not achieved during Building Construction.*
12. *Table 12.1 Page XII-2 Land Resource :  
Remarks that "no change in Land use & Drainage system is proposed" is not a correct statement & needs to be corrected."*
13. *Energy Resource : (Fuel : Electricity)  
Remark column states that wood & coal will not be used & Low sulphur diesel will be used PP need to certify the same as construction phase is over.*
14. *Water Environment Table 12.2 pg XII-4 :  
There is no provision for STP for the effluent from septic tanks, it has presently been planned to be discharged into soak pits constructed adjacent to perennial stream flowing – Needs Re-planning*
15. *Ecological Environment Status XII-20 Here it is mentioned that:*

- (a) That proposal is for development of residential & commercial project (needs correction)
- (b) Project site is 5656.30 acres (needs correction)
16. Reply to compliance ToR point no. 4 "Entire area has been virgin land no trees have been cut during project development". In this chapter XII, it is mentioned that during field investigation in core zone more than 25 tree species were observed. There seems to be some contradiction.
17. In reply to specific condition point no. 3 compliance of ToR, wherein nallah river flowing on northern side, it is mentioned on page I-12, that there is no nallah flowing : But on Page XII-20, it is clearly mentioned "Two streams are observed in the core zone namely LAMATA & NATI STREEMS." This is a contradiction & needs elaboration. These streams have not been indicated in the key plan or in the contour plan. All details like its width, route etc shall be indicated in the contour plan to examine the drainage scheme of the project.
18. Table XII-24 500 trees estimate need to be corrected with road length of the colony.
19. Table 12.10 Damage Assessment  
Damage assessment on all the six fronts needs breakup calculation, analysis & elaboration
20. Chapter 2.12  
While details of construction materials have been identified, these have not been quantified. For remediation, estimate, quantification of these need to be done, based on which material movement/material handling undertaken will be estimated to assess the damage.

PP has submitted reply vide letter no. 1110 (NE) dated 29.08.19 wherein reply to query no. , Sri S.P. Srivastava, Member SEAC observed that:

The quantities of earth work appear to be too low for a project of this magnitude and needs quantification of soil at indicated depth of excavation.

These figures have not been substantiated with the BOQ for foundation, site preparation, terracing backfilling site levelling to achieve the finished terrace level drains, boundary wall etc.

The PP has submitted reply to the above observation in the 2<sup>nd</sup> week of September 2019.

#### **[A] Documents required / corrections needed**

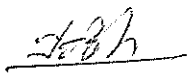
Appropriate layout drawing with proper co-ordinate system, Contour plan was requested which PP could not provide at the time. Layout plans without any coordinate system & legible levels of contour has so far been furnished. PP was asked to submit following other documents as detailed as below:

1. Dimensioned layout plan of the R& R Colony including all its allied units, road layout, open area, drain, Retaining wall, Alignment & details of Hume pipe laying , WTP, STP, Septic Tanks etc on a proper coordinate system (all units with coordinates, dimensions & details) superimposed on the Contour plan in A0 size to assess Earthwork in Excavation & Site levelling Quantities. Location of RWH Pits with proper coordinate in the drawing to be indicated.



All connecting dimensions, overall dimensions from boundary wall to buildings/units to boundary wall need to indicated.

2. The FTL(Finished Terrace Level of the area , road levels, Invert levels of Hume pipes etc to be indicated on the above drawing.. Dimensioned plan of various units & utilities ,each in A4 sheet to be furnished.
3. Layout plan of Boreholes plotted on proper coordinate system indicating the ground RLs & co-ordinates of all the Boreholes plotted on the Contour plan to examine if the coverage of entire project area has been there & also if Rock excavation ,if any., has taken place.
4. A few cross-sections through full length & full width showing units/ need to be submitted on a magnified scale in at least A0/A1 drawing. Cut & fill sections also for site levelling to be furnished showing clearly the depth of fill, original GL & FTL.
5. To furnish approved Township development plan, site layout plan indicating the location of all units, STP, UG Tank , Road & Drain layout, Sewer line etc. & Building plans of Individual Buildings & structures/units sanctioned by RMC, Ranchi wherein Building permission for the entire proposed built up area as mentioned in the project proposal has been obtained by RMC.
6. PP to confirm if the entire project on plot area of 236835.4m<sup>2</sup> is within RANCHI MUNICIPAL CORPORATION AREA. If not, a plan be submitted indicating the municipal boundary on the plot & balance area's jurisdiction of other urban local body or rural body.
7. Master Plan whether approved or not. .Information/documents to be furnished
8. NOC from CGWB for ground water withdrawal or Copy of application for permission for obtaining GW from CGWB . On page 18 , it is stated that during operation phase water requirement will be met either from Municipal Authority (Ranchi Municipal Corporation) or from Ground water after taking permission from CGWA, now since over 90% project is completed, The permission/ application for the permission be furnished as there is no municipal water supply line available in the locality
9. Computational details of Earthwork in Excavation Quantities under the following heads:  
  
400 DUs, Other Amenity Buildings like School, Community center, shopping comp, WW, LCS etc, Retaining walls 460m, Hume pipe laying 5.35 kms, Completed Roadside drain 7.7 Kms, , Laying of Water supply DI Pipelines 5.5 km, Underground Reservoir-one, 46 Nos Feeder pillars, ,Water Treatment plant, Septic Tanks & Soakpits, , 275 nos Manholes for RWH, Rain Watyer Harvesting pits 15 nos, Chambers 164 nos for water supply ferrul & 215 nos for Sewerage Manholes, total= 379 Nos, Excavation for executed Road out of total scope of 53500m<sup>2</sup>, Earthwork Excavation Quantity for entire site leveling , any other major units(not identified above) with Excavation quantity of more than 100 m<sup>3</sup>.

  
3/11/19

10. All Earthwork in various filling for the entire project, like area terracing, backfilling around foundation, plinth filling etc for all units & structures, walls, drains, drain pipelines, chambers, pipe laying etc to be furnished item wise.  
  
All substantiating documents for above Computation of Earth work like CUMMULATIVE EXECUTED QUANTITY OF EARTHWORK as on 18.09.2019 (copy of latest MB etc to be enclosed, copy of Technically sanctioned DPR showing all the Excavation quantities etc). Only computation or statement in absence of authentic proof will not be considered.
11. PP to furnish various techniques adopted for Green Building Concept. On page 70, it is mentioned that “All efforts will be taken to make the building in accordance with the green building concept by using various techniques.”
12. It is observed that page 9, the question that “What are the quantities of earthwork involved in the construction activity-cutting, filling, reclamation etc during construction phase (Give details of the quantities of earthwork involved, transport of fill materials from outside the site etc.?)” has not been appropriately replied. Details to furnished.
13. Details Fire fighting equipment etc as per NBC & its adequacy & Protection measures from lightening etc as per BIS codes to be furnished .

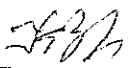
**[B] OTHER OBSERVATIONS :**

1. On page 78, it is mentioned that “Overflow from last Recharge pit shall be connected to water Drain line. The arrangement provides appropriate protection to the site against flooding”. It is observed that without examining the availability of a functional water drain line at project site to receive overflow from last recharge pit., which presently is non-existent. Discharge of the Colony has been planned. it will cause water logging/ flooding in the neighborhood of the project site. A complete realistic report, therefore, needs to be submitted for proper project appraisal after proper design , survey & investigation. In the form of inclusion of a chapter.
2. UNDER Clause 8 (5) on page 78, it is mentioned that “The entire site is provided with extensive planned underground drainage system with gravity connections to the Recharge pits. Overflow from last Recharge pit shall be connected to water Drain line. But, On page 21, a major contradiction has been observed wherein it is mentioned that a network of “storm water drain” is proposed all along the direction along the main roads and cross roads. All storm water drains will be “covered with RC slabs” so as to prevent the entry of soil and dust. Storm water collected through storm water drains and discharged into existing Storm Water Drains. Storm water drains will be constructed on all the edges of roads.  
  
There has to be a clarity whether the project has been designed with Underground Pipe Drainage network or open drains with concrete covers along all roads & cross-roads, Extract of BOQ is required to substantiate the correct statement.
3. On page no 21, there is a statement that “For basement parking, the rainwater from ramps will be collected in the basement storm water storage tank. This water will be

pumped out to the nearest external storm water drain.” Inclusion of this irrelevant statement is irresponsible & may be explained.

4. On page-3, entirely misleading information about the project is stated which states that approximately 20% of construction activities have been done on the site.
5. On page 61, provision of Rs15 lakhs for Sewage Treatment Plant for one STP of 2400 KL capacity appears too low, to be checked.
6. On page 83, the following statement needs to be checked “Fire protection for these rooms will be done by portable extinguishers of suitable type and size. Suitable number & type of portable extinguishers will be provided as first-aid fire-fighting system.”
7. Shri Shrivastava and few others have observed serious inconsistencies in the statements provided in in FORM- 1A submitted by PP as these appear to refer to some other projects:
  - i. On page 70 , under clause 6, details of Building Block mentions “This proposed Assembly Building project having following blocks”
  - ii. On page 72 under clause 7, Water Requirement, Supply and Distribution, it mentions that Water will be collected in Raw Water Reservoir and after Chlorination, Treatment in WTP, it will be sent to the consumer points of Assembly Building through Hydro-pneumatic system.
  - iii. On page 79, under clause 10 power requirement, it is mentioned that “The Electrical design for Assembly Building has been conceptualized from the very inception of the project along with the architectural and structural design concept as an integrated whole”.
  - iv. On page 80, under clause 10 power requirement, it is mentioned under sub-head “Solar System” that the Solar system to be used for area lighting & accordingly centralised photo electric cell panel shall be designed for this purpose and PV panel to be installed at roof of Assembly building.”
  - v. On page 80, under clause 11 Solid Waste Generation and Management, it is mentioned that the project will adopt a systematic approach for solid waste collection .The domestic solid waste will be generated by the occupants of the Assembly building, pertains to the two categories.)
  - vi. On page 83under clause 12 Fire Fighting System, it is mentioned that Firefighting installations will be designed, Fire-fighting installations as proposed in all blocks of Assembly Buildings are as follows: • Fire Hydrant with hoses ...”
8. On page 43, under “Passive Solar Design Consideration”, following consideration adopted for passive solar design of the buildings in the proposed project has been mentioned. Now , when the project is almost complete, the statements mentioned below need to be realistic & conforming to the actual construction undertaken. In view of this the following may be corrected:

“• Maximum openings would be towards the north to get natural light that will not unduly heat up the interiors.

  
9/11/19

- Least opening would be provided towards southern and western walls so as to cut out the hot incident rays of the sun.
- Windows provided would be shaded adequately by designing double layer glass glazing so that no direct rays of sun can come into the building.”

“Most of the external surface of the building will be designed in a way to have an air gap between the wall surface and the external skin. This should reduce the transmission of heat into the building as the heat would get dissipated into the air gap to an extent.”

On page 44 , “Glass panel will have maximum light transmission but low solar heat radiation. This will reduce quantity of heat inflow into the building. Single pane glass of 0.25 inches thickness with visible transmittance up to 85% day lighting may be used.” Also stated on Page44,

Under “Architectural features used in solar design include”: Residential building is North – South Oriented. North side never gets direct solar exposure. South side is easy to shade. Buildings have overhangs and terraces to achieve mutual shading ”, on pg 45,” There will be less numbers of openings on the west side and ore numbers of openings on south side & also Projections such as balconies are provided on the south direction such that summer sun is stopped and winter sun is let in

9. The revised estimate of cost as furnished by the PP now is reproduced below to assess Ecological Damage:

Sr. No	Major Environment	Details	Cost , Rs Crores
	Air Environment	Treatment of Respiratory Diseases due to uncontrolled emissions of Particulate Matter PM10 and PM2.5 Total Population =127779, persons affected@0.11% (CPCB Report-Study of Respiratory Diseases, WHO Report, Lancet Journal and Indian Researchers) due to incremental load of 0.1µg/m <sup>3</sup> ,and for every 10 µg/m <sup>3</sup> ,13% population develops Respiratory problems. Cost of Treatment involved =Rs.42000/= per person, no. of persons affected due to project =141 Total cost of Treatment =(141*42000)=Rs0.59 Cr	0.59
	Land Environment	Loss of Water Shed Area as direct component of ecology.(WORT Report) .The cost of constituent micro watershed is not available readily, hence the indirect cost of GDP price of the land involved has	1.77

		<p>been considered. It is derived by dividing Total GDP (GSDP) value of Jharkhand State (Economic Survey 2017-18) and Total geographic area of Jharkhand State and it comes to Rs.189.0 m2. Applying correction of - 20 % to the value the net value of water shed to get the approximate value( in absence of details of natural resources such as crop/vegetable/ oil seeds/milk/fodder/forest etc production), comes to Rs.75 m2. The total area of VS 1.77 Plot = 236835.4 m2 * 75 = Rs.1.77 Cr</p>	
	Water Environment	<p>Direct Recharge Loss due to catchment area and as component to natural recharge to ground water regime of the ecology and most importantly to the 'ecological flow' of the ecosystem being a part of larger Subarnarekha Basin reducing its life sustaining capacity. Plot Area = 236835.4 m2, Average Rainfall = 1100 mm (Ranchi District-IMD Data), Recharge factor as infiltration to ground water from surface runoff over the area = 0.2 (CGWB Guidelines ,GEC 1997), Therefore total natural Recharge loss = 236835.4 * 1.1 * 0.2 = 52103.78 m3, Vol of Recharge as envisaged in EIA Report = 1554.02 m3, Net Recharge Loss = 50549.76 m3,</p> <p>Now one tanker load = 4 m3, No. of Tankers = (50549.76/4) = 12637 nos. , Cost of 1 Tanker load of water = Rs. 264 ( assumption at current bulk cost) , = Rs.0.33 Cr ii. Treatment cost of water borne diseases due to uncontrolled septage, defecation /oilgrease contamination etc. during construction stage) considering as lumpsum charges = say Rs. 0.05 Cr</p>	<p>0.33</p> <p>0.05</p>
	Soil Environment	Direct loss to soil environment as natural resource of ecosystem. Total	0.09

*[Handwritten Signature]*  
3/11/18

		vol. of soil excavated , hauled and stored at certain place = 6543.0 m <sup>3</sup> , fines generated during excavation and loading into dumpers and loss as water erosion during rains/monsoon at storage site = 10 % = 654.3m <sup>3</sup> , balance soil as material balance = 6543.0 – 654.3 = 5888.7 m <sup>3</sup> , Fines generated during restoration/backfilling =10% =588.87 m <sup>3</sup> . Total soil fines lost =(654.3+588.87) =1243.17 m <sup>3</sup> . No of dumper loads @ 4 m <sup>3</sup> = 311 nos, cost of 1 dumper load at current price = Rs. 3000.00, =3000 * 311 =Rs0.09 Cr. ii. Loss of soil nutrients as natural resource considering for 10 years of farming ( assumption) = 0.05 * 10 = 0.5Cr	0.5
		Total value of soil as natural resource , say	0.59
	Socio Economic Environment	As loss of agricultural crops( only single crop is assumed for simple calculations in absence of actual data.) i. Total Plot area = 236835.4 m <sup>2</sup> ii. Paddy production per Kharip season (Jharkhand Agriculture Data ) = 1361 Kg/Ha iii. Procurement price of paddy crop (Jharkhand Agriculture data 2018) = Rs.1750 per quintal iv. Total paddy production = 322.28 quintal Cost of paddy produced = 0.56 Cr Say Rs.0.50 C	0.50
<b>Total</b>			<b>3.83 Cr.</b>

SEAC discussed the replies of queries raised in the earlier meetings and finds the revised remediation cost Rs. 3.83 crores provisionally seems likely value, as agreed by PP considering that construction started much before the Application for prior EC could be considered and many other possible damages might not have been possible to assess.

Finally SEAC recommends this proposal to SEIAA for issuance of EC subject to confirmation of submission of **bank guarantee** to the tune of Rs. **3.83 crore** provisionally in favour of Jharkhand State Pollution Control Board, Ranchi with the conditions as provided in **Annexure – V** attached with this MOM.

*[Handwritten Signature]*  
5-11-19