Case No. - 5195/2016 Director, M/s Mahavir Coal Resources Private Limited, Jain Complex, Pureni, Katni (MP) ***Prior Environment Clearance for Coal Washery Plant of 0.95 MTPA/150 TPA Ha. at Khasra No.-593, 596, 597, & 598, Village-Noudiha, Tehsil-Chitrangi, Distt.-Singrauli (M.P.)*****FoR- ToR.**

This is a case of EC to the project on Coal washery. Project is covered under EIA notification and mentioned as item no. 2 (a) in the schedule of EIA notification, by virtue of its location and the capacity project falls under category B. Hence it requires prior EC from SEIAA. The application for EC was forwarded by SEIAA to SEAC for scoping so as to determine TOR to carry out EIA and prepare EMP.

Project Details

Project Site (Site I)	Noudiha, Tehsil- Chitrangi, District- Singrauli, Madhya Pradesh	
Alternative Sites Explored	Site II- Bamhnidand, Site III- Chamrauti Tola, Site IV- Pipra.	
Location	Village- Noudiha, Tehsil- Chitrangi, District – Singrauli, State- Madhya Pradesh	
Co-ordinates	**Latitude**	**Longitude**
Capacity	24°12’51.2” N	82°34’20.6” E
Technology	‘Batac Jig technology’ or ‘Heavy Media Bath’ technology.	
Plot/Survey/	Village Noudiha: Plot No. 593, 596, 597 & 598.	

Khasra No.	
Water Intake Point	Ground Water
Nearest Railway Station	Mahdeiya Rail Station (1.3 Km, ESE)
Nearest Airport	Lal Bahadur Shastri International Airport, Varanasi (139 Km)
Nearest Sea Port	Dhamra Port, (590 km)
Distance from Inter-state boundary	Inter-state boundary with Uttar Pradesh from project site at 12.2 km in South East direction.
Seismological Information	Sesmic Zone III
Project Cost	Approx. 2,990.27 lacs

Project Requirements

Coal	2900 TPD .
Water	Total water requirement 4355 KLD, Make up fresh water is 648 KLD.

Land	Total area 4.744 Hectares/ 11.722 Acres.
Electricity	Total power requirement 750 KVA. Sourced from MP Poorva Kshetra Vidhyut Vitaran Company.

Comparative Analysis of Alternate Acceptable Sites

Sl. No.	Factors	Site I (Noudiha)	Site II (Bamhnidand)	Site III (Chamrauti Tola)	Site IV (Pipra)
1	Latitude	24° 12‘ 50.5“ N	24° 12‘ 20.5“ N	24° 18‘ 29.5“ N	24° 07‘ 10.1“ N
	Longitude	82° 34‘ 20.1“ E	82° 28‘ 20.4“ E	82° 34‘ 21.2“ E	82° 29‘ 48.8“ E
2	Location	Village Naudiha	Village Bamhnidand	Village Chamrauti Tola	Village Pipra
3	District	Singrauli	Singrauli	Singrauli	Singrauli
4	Site contour	396 - 402 m	400 - 405 m	424 - 434 m	430 - 434 m
5	Area	4.74 Ha.	4.46 Ha.	4.24 Ha.	5.13Ha.

6	Land type & Ownership	Government barren Land	Single Crop Agriculture Land & Open Scrub Land	Single Crop Agriculture Land & Open Scrub Land	Single Crop Agriculture Land
7	Families affected	Nil	30-35	30	15-20
8	House Hold Displaced	Nil	Nil	Nil	Nil
9	Distance from nearest railway	Mahdaiya Rly Station 1.4 km	Bargawan Rly Station 1.7 km	Mahdaiya Rly Station 10.7 km	Bargawan Rly Station 9.3 km
10	Approach road	NH-75	NH-75	Singrauli Chitrangi Road,	Major

					Di str ict Ro ad
11	Environm ent sensitivity	No sensitive receptors* within 15 km	No sensitive receptors* within 15 km	No sensitive receptors* within 15 km	No sensitive receptors * within 15 km

The Process of Coal Washing

- Raw coal from mines will be transported to the coal washery by tippers/ dumpers.
- Trucks will either dump coal into the ground hopper or on to the nearby ground dump from where the same shall be fed in the ground hopper.
- From the ground hopper the raw coal will be fed to a rotary breaker for primary sizing of coal to 200mm.
- The primary sized coal shall then be subjected to close circuit crashing & screening & finally sized to minus 50 mm. The sized coal shall be taken to a stronger bunker.
- 0.5 to 50 mm Raw Coal from bunker will be fed to the Coal - Washery (Batac Jig) for washing wherein washed and reject coal will be separated out and will be dumped at two different places.
- Coal Slurry will be forwarded to the Thickener, Drum Filter and Settling Tanks so the fine Coal will be separated out and water will be recycled.
- The coal washery plant follow will two cut process.

Project Requirements

Water Requirement:

- Daily makeup water requirement will be 685 m^3/day.
- Required water will be collected from ground water from bore wells inside the proposed plant after taking necessary permission from CGWB.

Power Requirement:

- 750 KVA power will be required for the unit which will be sources from the Madhya Pradesh Poorve Khetra Vidhyut Vitaran Company.

Land Requirement:

- 4.744 Hectares land has already been allotted to the Proponent by Govt. of Madhya Pradesh.
- Project site is barren land with few scattered trees.
- As per revenue record, total land area falls under Government land.

Water Requirement

Sl. No.	**Particulars**	**Daily Water Requirement (m^3/day)**	**Makeup Water Requirement (m^3/day)**	**Effluent (m^3/day)**	**Mode of Treatment/ Disposal**
1	Coal Washing	4318	648	3670	Settling in thickener & recycled in process
2	Dust Suppression	30	30	0	

3	Plantation	5	5	0	
4	Domestic	2	2	1	$1m^3$/day water discharged in septic tank and soak pit system
	Sub Total	**4355**	**685**	**3671**	
5	Fire Fighting (One Time only)	200	-	-	
Total		4555	685	3671	

Trips for Coal Transportation

Sl No.	**Particulars**	**Coal (TPA)**	**Coal (TPD)**	**Trips per Day**
1	Raw Coal	9,50,000	2,602.74	130
2	Washed Coal	6,55,000	1794.52	90

3	Reject Coal	2,85,000	780.82	39

The salient features of the project and proposed TOR were presented by the PP and his consultant wherein after presentation committee decided to issue standard TOR prescribed by the MoEF&CC with following additional TOR's:

1. Area proposed for fine/dust rejects, clean coal and rejects along with APCD should be discussed in the EIA.
2. Is it a two cut washery or three cut washery? If it is two cut washery ratio of clean coal and reject coal be discussed in the EIA.
3. Gross calorific value along with ultimate analysis of clean coal and rejects.
4. Plan for management of existing trees in the proposed lay out be included in EIA as during presentation it was observed that there are around 30 fully grown trees of Mahua, on the site.
5. Air Pollution Control Devises proposed in crushing, screening and all transfer points should be discussed in the EIA.
6. Drawing & design of settling tanks with all technical details should be detailed out in the EIA report.
7. Fire fighting arrangements proposed should be detailed out in the EIA report.
8. PP should explore the possibility of using water from the abandoned mines located nearby, as seen in the Goggle image.
9. PP should also carryout hydro geological studies of the proposed area and should obtain CGWB permission for abstraction of ground water. PP should also submit that as per CGWB, the proposed area falls in which zone.
10. Process flow diagram should be submitted with water & material balance in the EIA report.
11. Washing technology should be freezed and same should be detailed out in the EIA.
12. Videography of site and nearby existing abandoned mines should be submitted with EIA report.