The 168th meeting of the State Expert Appraisal Committee (SEAC) was held on 11th January, 2015 under the Chairmanship of Dr. R. B. Lal. The following members attended the meeting-

1. Dr. MohiniSaxena, Member
2. Shri K.P. Nyati, Member
3. Dr. Alok Mittal, Member
4. Shri A.A. Mishra, Secretary

The Chairman welcomed all the members of the Committee and thereafter agenda items were taken up for deliberations.

1. Case No. – 2274/2014 **Mr. Neeraj Pande, Controller of Building, Vidhan Sabha CPA, E-5, Arera Colony, Bhopal (MP)-462004** *Environment Clearance for approval of proposed housing project "New MLA Flats, Foothills Vidhan Sabha" at Tehsil-Huzur, District-Bhopal (M.P.)Total land area-88,405 Sq.m.,* ***Total Build up area-44,172.16Sq.m.*** **Building Construction.**
Environment Consultant- Ascenso Management and Consulting Services (P) Ltd. Noida, U.P

This is a building construction / area development project comprising a plot area of 88,405 m2 and total built-up area of 44,172.16 m2. The project is covered as item 8 (a) in the schedule of EIA notification and hence requires prior EC from SEIAA before commencement of any activity at site. The application pertaining to EC was forwarded by SEIAA to SEAC for appraisal and necessary recommendations. PP and their consultant presented the case before the SEAC in this meeting. The submissions and the presentation made by the PP and his consultant revealed following:

Salient features of the project:

Name and Location of the Project	Proposed New MLA Flats at Foothills of Vidhan Sabha Bhavan, Bhopal, Madhya Pradesh
Developers of the project	Vidhan Sabha
Total Plot Area	88,405 m^2
Built-up Area	44,172.16 m^2
Total Water Consumption	231 KLD
Total Freshwater Requirement	111 KLD
Power Requirement	1437 KW
Power Backup	2 DG Sets of total capacity of 500 KVA (2 x 250 KVA)
Total Parking proposed	337 ECS
Solid Waste to be Generated	460 kg/day
Landscape area	40,507.84 m^2
STP Capacity	157 KLD
No. of RWH Pits	2 RWH Pits
Project cost	127 crore

Connectivity & site its surroundings:

Description		*Distance and Direction*
Nearest Railway Station	Habibganj Railway Station	3.26 km towards South
Nearest Airport	Raja Bhoj Airport	9.54 km towards North West
Nearest Settlements	Jahangirabad Malviya Nagar Arera Hills Bhim Nagar Slums Govindpura Gautam Nagar	0.92 km towards North 0.67 km towards West 0.94 km towards East 1.19 km towards South 2.77 km towards North East 2.22 km towards East
Nearest Highways/Roads	Jail Road NH-12 NH-86 Chetak Bridge	Adjacent to the site, North 5.88 km towards North East 5.16 km towards North 1.58 km towards North East
Water Bodies/Lakes	Chota Talao Bada Talao Jawahar Baal Udyan Lake Shahpura Lake	0.75 km towards North West 2.30 km towards North West 1.58 km towards South 3.43 km towards South
Nearest School & College	Kendriya Vidyalaya No.1 Model Higher Secondary School Raman School Bal Bhavan School	1.19 km towards East 2.14 km towards South East 2.99 km towards North East 2.99 km towards South East
Nearest Hospital	Lake City Hospital Citi Hospital Rainbow Children Hospital Jawaharlal Nehru Cancer Hospital and Research Center Bhopal Charitable Hospital	2.53 km towards South 2.08 km towards South 1.77 km towards South 4.73 km towards North 2.69 km towards North
National Park	Van Vihar National Park	3.43 km towards North West
Places of worship	Badwali Masjid Birla Mandir Kalika Mandir	0.91 km towards North 0.63 km towards South 1.39 km towards North West

Area Statement

S. N	Particulars	Area in Sq.m.
1	**Total Plot Area**	**88,405**
2	Permissible Ground Coverage @ 30% of plot area	26,521.50
3	Proposed Ground Coverage @ 12.65% of plot area	11,183.23

4	Permissible FAR @125% of plot area	1,10,506.25
5	**Proposed FAR@ 28.39 % of plot area** Å Residential Block-I (A, B and C) Å Residential Block-II (D and E) Å Amenities Block Å Club house Å Multipurpose halls Å PWD/CPA Quarters	**25,098.77** 12,392.32 8,922.06 1637.09 913.13 769.11 465.06
6.	**Total Non FAR area(including lifts, lobbies , services and stilt area)** Å Residential Block-I (A, B and C) Å Residential Block-II (D and E) Å Amenities Block Å Club house Å Multipurpose halls Å PWD/CPA Quarters	**19,073.39** 6121.81 4855.24 1234.98 663.8 1810.85 293.14
7	Stilt area	4093.57
8	**Builtup Area (FAR+Non-FAR)**	**44,172.16**
9	Total Open Area (Plot Area-Ground Coverage)	77,221.76
10	Required Green Area @ 50% of open area	38,610.88
11	**Proposed Green Area @52.45% of open area**	40,507.84
12	Maximum height of the building	24.0 m

Population details

Density Calculation (As per M.P.building bye laws)		
S N	Plot Area	88,405 sq.m
1	Total Number of flats provided in residential Block A-E	106 Nos.
2	Population @ 5persons/du	530 Persons
3	Total floor area of club house, amenities block and multipurpose halls	3,319.33 sq.m
4	Population @1.5 person/ floor area	2213Persons
5	Total Number of flats provided in PWD/CPA Quarters	12 Nos.
6	Population @ 5 persons/du	60 Persons
7	Total population (2+4+6)	2803Persons
8	Visitors@10% of total population	280 Persons

Water Requirement for the Project

SN	Description	No. of units/Area	Population	Unit water consumption (litres)	Total water required (KLD)	water req. for domestic use (KLD)	Flushing/ Recycled water (KLD)
1	Residential Block(A-	106	530	86	46	34	11

	E)						
2	PWD/CPA Quarters	12	60	86	3	2	1
3	Amenities+Club House+M.P.Hall	3,319 Sq.m	2213	45	100	66	33
4	Visitors		280	15	4	3	2
5	Swimming pool	é			5	0	0
6	Horticulture	40,508 sq.m	é .	1.8	71	é é	é .
	TOTAL	é .	3059	é .	228	106	47
7	Fire fighting				2		
	GRAND TOTAL				231	106	47

Waste water Generation

Details	Water (KLD)
Water requirement for domestic purpose	106
Wastewater to be generated from domestic use (@ 80% of evaporative losses)	84
Water requirement for Flushing Purpose	47
Wastewater to be generated from Flushing (@ 100% of flushing requirement)	47
Total Wastewater generated	***84+47 = 131 KLD***

Sewage Treatment Plant (STP)

A Sewage Treatment Plant (STP) will be based on Moving Bed Biofilm Reactor (MBBR) of capacity 157 KLD is proposed to be installed for treatment of sewage.

Steps shall be followed for treatment of waste water:

- Collection of Sewage
- Oil & Grease Separation
- Equalization Tank
- Biological Oxidation by using MBBR technology
- Tertiary Treatment (For required recycled water requirement)
- Sludge Disposals

❖ Excess treated water during monsoon season is reported to be stored in intermediate holding cum oxidation tank after secondary clarifier and further reused in irrigation of landscape area during non-rainy days and therefore reducing the overall demand of horticulture water requirement.

Provision of dual plumbing

- Water supply scheme has been designed as Dual Plumbing.
- Dual Plumbing refers to the system when the toilets and urinals are served by recycled water while the remaining fixtures are served by potable water.

- The co-existence of the two system requires extra caution to prevent un-authorized plumbing modifications that can lead to cross-connection between recycled water and potable water system.

Rain Water Harvesting Pits-

S. N	Diameter of the Pit	Depth of the Pit	Volume of the Pit	Runoff in 15 minutes	No. of pits required	No. of pits proposed
1.	4.5 m	4.5 m	71.53 m3	122.6	2	2 pits

Plantation and Landscape details

- ❖ Increasing vegetation in the form of greenbelt is one of the preferred methods to mitigate air pollution. Plants serve as a sink for pollutants, reduce the flow of dust and reduce noise pollution.
- ❖ As per CPCB norms it is proposed to develop plantation of species effective in absorption of expected pollutants at site. Parks will also be developed by the management.
- ❖ The project envisages cutting down of 1149 trees for the development of New MLA Flats and re-plantation of 4792 trees in its place.

Road details & parking calculation

Internal Road - Project has 6 meters wide drive way at the periphery and inside the premises.
Entry/exits provided in the Building Premises ï 2 main exit/entry points has been proposed in the project.

Description	**As Per M.P. Building Byelaws**	**Parking (E.C.S.)**
Parking Required	Residential ECS required @ 1 ECS per 75 sq.m	334.65 **say 335**
Parking Proposed	Stilt area for parking	4,093.57
	ECS provided for stilt @ 1ECS per 30 sq.m	**137 ECS**
	Open parking area	5,000
	ECS provided for open area @ 1ECS per 25 sq.m	**200 ECS**
	Total ECS provided	**137+200= 337 ECS**

Power requirement and its source

Power Requirement	1437 KW
Power Backup	2 DG Sets of total capacity of 500 KVA (2*250 KVA)

Solid waste Generation

SN	Category of Solid Waste	Waste Generation*	Average	Occupancy	Waste generated
1.	Residential Refuse (Residents and PWD quarters)	0.3 to 0.6 kg/cap/day	0.45	530	238.5 kg

2.	Community Area	0.1 to 0.2 kg/cap/day	0.1	2213	221 kg
	Total waste generated				460 kg/day

Fire fighting system

The project site falls under Mercantile occupancies according to National Building Code 2005. Following provisions are required to be made according to National Building Code 2005. The fire fighting system has been designed considering the following codes, manual and guidelines;

- National Building Code of India (NBC);
- Latest relevant NFPA (National Fire Protection Association) codes, USA, in particular NFPA ï 13, 14, 20 & 22;
- IRI (Industrial Risk Insurer) guidelines;
- As per requirement of fire officer/local fire approving authorities; and
- As per Indian Standard Code for Fire Protection (IS Codes)

After deliberations committee found the submissions and the presentation satisfactory and acceptable hence it was decided to recommend the case for grant of prior EC from Environmental angle subject to the following special conditions:

1. Fresh water requirement for the project shall not exceed 231 KLD.
2. No ground water shall be used as proposed.
3. Use of Photovoltaic cells (Solar energy) in common areas to be taken up.
4. Press-filter dried STP sludge and the MSW shall not be stored at site for more than 48 hours; accordingly space of appropriate size shall be developed at suitable location within the project premises.
5. Appropriate play spaces shall be developed in the project.
6. Clearances / Pre- Clearances shall be obtained as applicable.
7. All the directions issued by Hon'ble Supreme Court of India/National Green Tribunal/Ministry of Environment, Forest & Climate Change, New Delhi from time to time shall be applicable.

2. Case No. – 2032/2014 Shri B.N. Tripathi, Project Director, Indore Development Authority, Indore (MP)-462016 *Environmental Clearance for approval of proposed residential project Scheme No.- 165 of Indore Development Authority at Village & Tehsil-Rau, District-Indore (MP) Total Plot Area - 13.977 Ha.,* **Building Construction. Env. Cosultant- Greenciindia Consulting Pvt. Ltd. Ghaziabad (U.P.)**

The case was earlier deferred as most of the members did not receive the documents pertaining to the project. The case was again presented by the PP and his consultant. Scrutiny of the case reveals that the plan has been completely changed from the original proposal submitted to SEIAA and the presentation was prepared as per the changed plan, hence PP was asked to submit the changed plan to SEIAA. PP requested to consider the project after complete submission has been made to SEIAA. Committee agreed to consider the case after receipt of re-submitted documents from SEIAA.

3. Case No. – 2033/2014 Shri B.N. Tripathi, Project Director, Indore Development Authority, Indore (MP)-462016 *Environmental Clearance for approval of proposed residential*

project Scheme No. - 175 of Indore Development Authority at Village-Nipania, Kanadia, Tigaria Rao & Bicholi Hapsi, Tehsil & District-Indore (MP) ***Total Plot Area - 475.379 Ha.,(Net Planning Area- 389.338 Ha.)*** **Building Construction. Env. Cosultant- Greenciindia Consulting Pvt. Ltd. Ghaziabad (U.P.)**

The case was earlier deferred as most of the members did not receive the documents pertaining to the project. The case was again presented by the PP and his consultant. Scrutiny of the case reveals that the plan has been completely changed from the original proposal submitted to SEIAA and the presentation was prepared as per the changed plan, hence PP was asked to submit the changed plan to SEIAA. PP requested to consider the project after complete submission has been made to SEIAA. Committee agreed to consider the case after receipt of re-submitted documents from SEIAA.

4. Case No. – 2034/2014 Shri B.N. Tripathi, Project Director, Indore Development Authority, Indore (MP)-462016 *Environmental Clearance for approval of proposed residential project Scheme No. - 136 of Indore Development Authority at Village-Niranjanpur & Kabirkhedi, Tehsil & District-Indore (MP)* ***Total Plot Area - 92.237 Ha.,*** **Building Construction. Env. Consultant- Greenciindia Consulting Pvt. Ltd. Ghaziabad (U.P.)**

The case was earlier deferred as most of the members did not receive the documents pertaining to the project. The case was again presented by the PP and his consultant. Scrutiny of the case reveals that the plan has been completely changed from the original proposal submitted to SEIAA and the presentation was prepared as per the changed plan, hence PP was asked to submit the changed plan to SEIAA. PP requested to consider the project after complete submission has been made to SEIAA. Committee agreed to consider the case after receipt of re-submitted documents from SEIAA.

5. Case No.-1832/2014 M/s Trent Chemical Industries, Partners Praful G Patel, N-78, Anoop Nagar, A. B. Road, Indore-(M..P.) 452008 *E.C of Proposed Trent Chemical Industries at Plot No. -184-A, Meghnagar ,Tehsil-Meghnagar,District Jhabua, (M.P.)* **For- EIA Presentation. Env. Consultant – EQMS, Delhi.**

This is a case of manufacturing of synthetic Organic Chemicals (H acid and Intermediates). The project is covered under the provisions of EIA Notification, mentioned as item 5(f) in the schedule of the EIA Notification. The project is reported to be proposed in a plot located in notified industrial area. Thus by virtue of the location of the proposed unit it falls under category B, thus requires prior EC from SEIAA before commencement of production. TOR to carry out EIA was issued by the SEAC. EIA report submitted by the PP was forwarded by SEIAA to SEAC for appraisal and necessary recommendations. The EIA / EMP were presented by the PP and his consultant before the SEAC. The presentation and submission made by the PP reveals following:

Location	Plot No. 184, Meghnagar Industrial Area, Jhabua, Madhya Pradesh

Lat / Longitude, Elevation	22°54'51.90ò N and longitude 74°33'31.79ò E, 250-400m
Total Plot Area and land Use	26000 Sq. m, AKVN developed Industrial Area
The Proposal	Manufacturing of Synthetic organic Chemical (H acid and Intermediates)
Project Cost	50 Cr

Product and Production Capacity

S.No.	Product Name	License Capacity
1.	H-Acid	200 MT/Month
2	PNTOSA	200 MT/Month
3	Gama Acid	25 MT/Month
4	K- Acid	25 MT/Month
5	Metanilic Acid	50 MT/Month
6	DASDA	200 MT/Month

By-Product Generation

S.No.	Product Name	License Capacity	Origin
1	Sodium sulphate	840 MT/Month	ZED Plant, Crystallizer and MEE of H acid
2	Gypsum	2986 MT/Month	Neutralization Reaction, From H-acid and ZED
3	Liquid sodium Bi sulphate	403 MT/Month	Sox Scrubber system from H-acid , other intermediate product
4	Dil Nitric acid / Nitrite solution	195 MT/Month	NOx Scrubber System from H-acid
4	Ammonia Solution	91 MT/Month	Ammonia Scrubber System from Gama Acid and K-Acid.

Utilities and other aspects

S.N	Product Name	License Capacity	Origin
1	Water	398 KLD	AKVN and Ground water Supply
2	Power Supply	2000 KVA	MPSEB , backup Dg 1000 KVA
3	Manpower	250 no	Preference to Local people

- No ecologically protected area or archeologically protected site or other environmental sensitivity has been reported within 10 km radius of the site

Land break up

S. N	Title	Area, m^2	% of Total Area
1	Plant Facilities	2600	10 %
2	Tank Farm Area	520	2 %
3	Raw material go down	780	3 %
4	Storage (Fuel)	780	3 %
5	Storage (water)	260	1 %
6	Storage (Hazardous waste)	2340	9 %
7	Hardwar store/work shop	520	2 %
8	Utility plant	1560	6 %
9	ZLD plant	780	3 %
10	Weigh bridge	260	1 %
11	Green area	9100	35 %
12	Office	520	2 %
13	Parking	260	1 %
14	Road	4420	17 %
15	Open to sky	1300	5 %
TOTAL		26000 M^2	100%

Industries around the project

Industry	Type of industry	Distance	Direction

A P India Pvt. Ltd., AKVN , Meghnagar	Pharmaceutical Plant	500 m	West
S R Ferro alloys, AKVN, Meghnagar	Metal industries	200 m	East
Mehul Industries, AKVN, Meghnagar.	Mineral water	near the Project site	East
Caliber oil Industries	Oil industry,	near project site	
Omkar chemical Pvt Ltd, AKVN, Meghnagar	Synthetic organic chemical	near project site	West
Sape chemical Industries, AKVN, Meghnagar	Synthetic organic chemical	2 km	South
Bromose chemicals, AKVN, Meghnagar	Bromine recovery plant,	Near project site	
Madhya bharat agro Industries, AKVN, Meghnagar	Agro chemical towards	1.5 Km	North
Krishna phoschem Limited, AKVN, Meghnagar	SSP	1.4 km	South

Environmental Budget

S.no	Items	Capital Cost(in Rs Lac)	Items	Recurring Cost/yr (in Rs Lac)
1	ETP Crystallizer(SSRP)	240	Occupation Health and Safety	**30**
2	MEE	160	Effluent treatment	**270**
3	Spray Dryer + ATFD	280		
4	RO system	NA		
5	Solid Waste Management	150	Solid waste Management (With Transportation Cost)	**180**
6	Green belt development	50	Green belt Development	**8**

7	Scrubbers	110	Air pollution control management	**62**
9	Water Harvesting	75		
11	Contingency 10%	106.5	**Contingency 10 %**	**55**
	Total	**1171.5**		**605**

Environmental studies:

Air Emission Worst Case Scenario

- H acid and DASDA plants are Independent and is analyzed on maximum production capacity: same will be the worst case for this plant
- K Acid, GAMA Acid and Metanilic acid are produced in combined plant. The emission levels are same however discharge volume differs in each of these products. The maximum sweeps possible is as follows:

Product	**Planned production TPM**	**Swap Production TPM**
K- Acid	25	50
Gama Acid	25	40
Metanilic acid	50	60

- The per day volume of these products is very less compared to total load from H ACID and DASDA plants. These products emission does not results in significant increase in emission volume for worst case analysis. Hence planned production volume is considered as worst case scenario.

Fuel consumption & stacks details

S. NO.	Stack Attached to	Type of Fuel	Stack Height in m	Fuel consumption in MT/Hr	No. of Operating Hours (Approx.)
1	Steam Boiler-1 (10TPH)	Coal	35	2.5	20
2	Steam Boiler-2 (4TPH)	Coal		1	20
3	Hot Air Generator For ZED Spray Dryer	Coal	25	1.5	20

4	DG set	HSD	12	200 liter/Hrs	On Emergency power failure

Process generates wastes having valuable chemicals. Trent propose to process these wastes and recover valuable chemicals. Brief of the recovery system are given below:

- SBS slurry ï SOx gas, which is scrub in multistage alkaline scrubber to form the SBS slurry , which is reuse in the process
- Sodium Nitrite slurry :- The process of neutralization will generate NOx gas, which is scrub in multistage alkaline scrubber to form the Sodium Nitrite slurry , which is reuse in the Fusion reaction as well in the synthesis of reactive dyes.
- Ammonia Solution: Ammonia gas, which is scrub in multistage chilled water circulation ventury scrubber to form liquor ammonia solution , which is reused in the process.

Water Consumption

	Water Consumption KL/Day (first Day)	**Recycled KL/Day**	**Actual Fresh Water Consumption KL/Day (Source: AKVN / Bore well with permission from CGWA)**	**Remarks**
Domestic	15	0	15	-
Process	173	0	173	-
Boiler	205	0	205	-
Cooling	120	120	0	Condensate reuse
Laboratory	05	0	05	-
Gardening	25	25	0	Treated STP water use
Total	**543**	**145**	**398**	

Wastewater generation

Particulars	**Waste Water Generation**	**recycle**	**Disposed in to ZLD**	**Remarks**
Domestic	14	**14**	**0**	**Reuse in Gardening**
Process	238	0	238	Evaporate in ZLD 120 KL Condensate reused in cooling tower
Boiler	06	06	0	Reuse in Gardening

Cooling	05	05	0	Reuse in Gardening
Laboratory	05	0	05	Evaporate in ZLD
Gardening	0	0	0	-
Total	**268**	**25**	**243**	

- 120 KL /Day Condensate generated from ZLD will be reuse in cooling tower
- 25 KL /Day Treat waste water from STP will be reuse in Gardening.
- COC in cooling is reported to be 4 cycles.

Solid / Hazardous Waste Management

Type of Waste	Hazardous Waste Category	Quantity per Year T/YEAR	Source	Method of Collection	Treatment / Disposal
Gypsum form Process	26.10	15816	Process	6 inch RCC impervious Layer along with leachate collection and testing system designed as per CPCB guideline ñfor storage and disposal to landfill of hazardous wasteò	Sale to authorized Cement Factory
Gypsum Sludge from ZLD	34.3	20016	ZLD	do	Sale to authorized Cement Factory
ZLD waste sludge	34.3	1800	ZLD	do	TO TSDF (Pithampur
Iron sludge Solid waste	26.1	9636	Process	Do	Sale to authorized Cement Factory
Glauber Salt	26.2	10080	ZLD	Collection in HDPE Liner bags with Liner bags	Disposal By 80% Re use in H-acid plant 20% left quantity sell to buyers

Fly ash	-	720	Boiler	Collect in specially designed silo and pack in HDPE bags	Sell to cement industries and road construction company also use for road leveling
Carbon Waste	35.3	5	Solvent Recovery System in H Acid Plant	Collect in HDPE bags	To authorized solid disposal site (Pitham pur TSDC site)
Used Oil	5.1	0.50	Plant equipments		Authorized Register recycler
Discarded Containers/Liners	33.30	10000 Nos HDPE Bags 1000 Nos Drums	From RM		Sold to recycler after Decontaminatio n
Discarded Containers/Liners	33.30	10000 Nos HDPE Bags 1000 Nos Drums	From RM		Sold to recycler after Decontaminatio n

- PP has submitted a MoU signed with Cement Company for sale of fly-ash, gypsum and iron sludge.
- PP has also submitted provisional membership of CTSDF, Pithampur

Environmental Impacts & Management Plan:

Components	Expected Impact	Impact Zone	Management Plan
Air Environment	Increase in ambient air Quality (ground level Concentration w.r.t to PM10,PM2.5 So2 NOX, NH3). Incremental GLC in microgram/m3 PM10 : 0.471 PM2.5 : 0.189 SO2: 1.442 NOx : 0.577	Maximum incremental GLC 1 km in ENE in summer season	• Emission control systems (scrubbers, high efficiency dust collector, cyclone separator, solvent in close loop system, leak detection and repair system) • Periodical Monitoring

		NH3 : 0.534		
Water Environment		Generation of high TDS and High COD effluent. Zero Discharge System on worst case scenario. Insignificant impact with ZLD in place.	Within Plan Boundary	ZLD system interlock with production process. If ZLD breakdown, the production will stop. Effluent storage provision for about 100KLD for emergency situation. Periodic checking and monitoring. STP for domestic effluent
	Land Environment	Solid waste disposal and Hazardous waste generation storage may lead to soil contamination if stored without precautions. Storage of hazardous waste planned following CPCB guidelines for hazardous waste land fill site and ultimate disposal to cement plant and TSDF. Hence impact will be insignificant. Waste generation and storage details already defined earlier slides.	Solid waste disposal and Hazardous waste generation Within plant boundary	Periodic monitoring of leachate and ground water quality. Immediate corrective action if found any leachate of soil contamination.

	Noise Environment	Increase in ambient Noise level from equipments, pump DG sets and compressors. However incremental level is insignificant due to provision of acoustic enclosures for noise generation sources.	Within Plant Boundary	• Provision of rubber padding/ noise isolators • Provision of silencers to modulate the noise generated by machines. • Provision of protective devices like ear muff/plugs to the workers. • Periodic Monitoring.

Worst case scenario and consequences analysis for Air and Water environmental impacts was presented by the PP and his consultant.

EMP for Air Environment

At source control Measures (scrubbers, cyclone separators, graphite cooler etc) The fugitive emissions of organic chemicals and VOCs come from leakage through valves, fittings, pumps, etc. Though this is not expected to be significant, it may be reduced further by adopting the following measures:

- Regular maintenance of valves, pumps and other equipment to prevent leakage and thus minimizing the fugitive emissions of VOCs.
- Regular monitoring of VOCs shall be conducted in the areas prone to fugitive emissions.
- The monitoring at working environment shall be carried out and shall be recorded in the prescribed form of the Factories Act.

EMP for Water Environment and Solid waste

Å ZLD and STP installation and other measures detailed before.
Å Three peizometric wells to monitor the ground water quality.

Minimization of water use

Å Wastewater from different sources to be treated and recycled to the extent possible.
Å Segregation and collection philosophy for effluent to minimize waste generation and facilitate treatment as well as recycle and reuse
Å Treatment philosophy to achieve regulatory standards
Å Reuse/recycle and disposal if required.
Å Some of the measures, which have to be implemented, include:
Å Use equipment wash down waters as makeup solutions for subsequent batches, if feasible.
Å Use high-pressure jet hoses for equipment cleaning to reduce the amount of water consumption and wastewater generation.
Å Reducing the actual process water consumption by way of improvement in operation of processing units and Ensuring proper operation and maintenance schedule for the ETP
Å Ensuring handling of Hazardous and solid waste as detailed before

Green Area Development:

- Total area of greenbelt will be in 9100 sq. m. area (35%) and water requirement will be 25 kl/day after targeted development of greenbelt
- Trent is committed to develop the greenbelt in three phase manner in about three /four years. Plants will be selected as per local climate and environment as well as the plants which can absorb pollutants. Assistance may be taken from experts / forest department.
- Tentatively plants will be Siris, Bamboo, Neem, Pipal, Jamun, Narial, Amla, Piludi, Kerdo, Babul etc after consultation of local farmers and horticulturist. Density of pieces will be 500 pieces per acres
- Provision for average annual budget will be 7.5 lacs for first three years and 3.25 for onwards.

Occupational Health and Safety

- Annual health check for employees shall be carried out and record shall be maintained.
- Fire protection system, fire detection system, continuous monitoring system and qualified fire staff shall be running in round the clock for handling any emergency. Regular training to plant personnel in safety, fire fighting and first aid shall be provided.
- The proposed plant shall maintain a healthy work environment. This shall be accomplished through the identification, evaluation and control of workplace environmental factors, which may cause sickness, impaired health or significant discomfort and inefficiency among workers. Environmental factors such as noise, physical hazards toxicity/chemical hazard and ergonomic hazards shall be regularly monitored to assist in maintaining a healthy work environment.
- Workerôs exposure to noise and toxic materials shall be evaluated against applicable recognised exposure levels in the Factories Act.
- Hearing protection aids shall be provided to workers who work in the high noise areas, during construction of the proposed facilities and also to those who will continue through the life of the facility.

EMP Budget

S.no	Items	Capital Cost(in INR Lakh)	Items	Recurring Cost/yr (in INR Lakh)
1	ETP Crystallizer(SSRP)	240	Occupation Health and Safety	**30**
2	MEE	160	Effluent treatment	**270**
3	Spray Dryer + ATFD	280		
4	RO system	NA		

5	Solid Waste Management	150	Solid waste Management (With Transportation Cost)	**180**
6	Green belt development	50	Green belt Devlopment	**8**
7	Scrubbers	110	Air pollution control management	**62**
9	Water Harvesting	75		
11	Contingency 10%	106.5	**Contingency 10 %**	**55**
	TOTAL	**1171.5**		**605**

After deliberations Committee observed that the submissions and presentation made by the PP are satisfactory and acceptable hence the case was recommended for grant of prior EC subject to the following special conditions:

1. Metanilic acid and DASDA should not be stored for more than 24 hours, if required due precautions should be taken as per the MSDS.
2. DASDA transportation should be done with all designed parameters.
3. Entire plant (working area) should be made impervious using double liner system / appropriate media.
4. Lechate-collection system has to be placed taking into consideration the topography and hydro-geomorphology of the region in consultation with the MPPCB.
5. Automated PLC should be provided such that the complete production process stops in case of any failure in the unit.
6. Continuous Emission Monitoring system (CEMS) shall be installed in each of the stacks with sensors of expected / relevant pollutants.
7. Continuous Ambient Air Monitoring System shall be installed one each in wind-ward and lee-ward directions with sensors of expected / relevant pollutants.
8. The monitored data from CEMS and CAAQMS should be made available to MPPCB / CPCB on real time basis.

6. Case No. – 1703/2013 **Gwalior Development Authority, Gwalior, M.P. Through Chief Executive Officer, Shri S.K. Mishra, Vikas Bhawan, 1, Ravi Nagar, Gwalior (M.P.) 474002** *Commercial Complex " Madhav Plaza " at Khasra No. – 756, Village – Lashkar, Tehsil - Huzrat Road,Lashkar, Distt. – Gwalior (M.P.) Total Plot Area- ……. sq.mt. Total Built Up Area – 54,240 sq.mt. for residential area development and 3212.15 sq.mt. Plotted Area.* **Building Construction. Env. Consultant: Kadam Env. Con. Delhi**

Neither the Project Proponent (PP) nor his representative was present to explain the query which might be raised or to make any commitment which may be desired by the committee during the deliberation. A letter (FAX) has been received from CEO, GDA, Gwalior dated 08/01/2015 stating they are in process of updating the application form hence

they need some more time for the final presentation. Committee decided to call the PP in subsequent meetings after hearing from PP. A request has to be made by the PP for scheduling the case in coming meetings within a monthôs time after which the case shall be returned to SEIAA assuming that PP is not interested to continue with the project.

7. Case No. – 2190/2014 Mr. K.L. Moolani, MD, Bhojpal Builders & Developers Pvt. Ltd., Mez. Floor-3, R.K. Tower, 93-94, Zone-II, M.P. Nagar, Bhopal-462011 *"Shri Krishna Heights" at Vill.-Barrai, Tehsil-Huzur, District- Bhopal (M.P.)* **For- Building Construction.**

Neither the Project Proponent (PP) nor his representative was present to explain the query which might be raised or to make any commitment which may be desired by the committee during the deliberation. Committee decided to call the PP in subsequent meetings after hearing from PP. A request has to be made by the PP for scheduling the case in coming meetings within a monthôs time after which the case shall be returned to SEIAA assuming that PP is not interested to continue with the project.

8. Case No. – 2191/2014 Mr. Pradeep Sharma, Partner, M/s Priyadarshini Unique Construction, S-4, Shri Ramesh Tower, 10 No. Market, Bhopal-462016 *"The Atheneaum" at Vill.-Bawadiya Kalan, Tehsil-Huzur, District- Bhopal (M.P.)* **For-Building Construction. Env. Consultant-In Situ Enviro Care, Bhopal.**

Salient feature of the project

Total Area Of The Plot	: 24170.00 Sq.mt
Proposed Builtï Up Area	: 26241.00 Sq.mt
Land Use	: Residential
Building Height	: 30.0 m. Maximum
ROW	: 18.0 m. Wide Road (Max.)
Road width /MOS	: 12 M. Front, 7.5 M. All Side
LIG	: 7 Nos.
3 BHK Flats	: 72 Nos.
Duplexes	: 36 Nos.
EWS	: 10 Nos.
Total Net Fresh Water Demand	: 96 KLD
Municipal Water Supply	: 96 KLD
STP Capacity	: 76 KLD on 100 % load (Proposed 100 KLD)
Solid Waste Generation	: 0.263 TPD
Power Demand	: 805 KVA
Back Up Source	: 90 KVA (D.G. Set ï 2 x 45 KVA)
Nearest Water Body	: Kaliyasot River, Distance 105.55 M. From HFL
Railway Station	: Habibganj Railway Station ï 7.7 Km away from site
Air Port	: Bhopal Airportï 24.1 Km away from site

Statutory approvals obtained

1. T & CP APPROVAL-BHOPAL SN/1678/LP108/29-30/NGRANI/GKA/2013 DATED 03/10/2013
2. COPY OF COLONY DEVELOPMENT PERMISSION ï S.N/619/KAPRAKO/2013 DATED 22/06/2013
3. COPY OF COLONIZER REGISTRATION - S.N. 419 DATED 24/08/2013
4. REGISTRATION OF FIRM.
5. COPY OF BUILDING PERMISSION FROM BMC.
6. COPY OF WATER SUPPLY APPLICATION TO BMC.
7. COPY OF MSW DISPOSAL CONSENT FROM BMC. ï S.N/622/SW.V/14 DATAED 28/11/2014
8. COPY OF DISPOSAL OF EXTRA TREATED WATER FROM BMC. ï S.N/623/SW.V./2014 DATED 28/11/2014
9. PROVISIONAL FIRE NOC
10. WATER TANKER SUPPLY AGRREMENT FOR CONSTRUCTION PHASE
11. REGISTERED JOINT VENTURE AGREEMENT BETWEEN DEVELOPER & LAND OWNERS.

Area statement

Plot Area:

S.NO.	**PARTICULAR**	**AREA**
A	Land Area	24170 Sqm.
	Area Under 24.0 Mt. wide Road	1893.84 Sqm.
	Net Area Under Planning	22276.16 Sqm.
	Area Under Plotable Planning	18709.18 Sqm.
	Area Under Mixed Land Use	3566.98 Sqm.
	Area Under Plots	10096.74 Sqm.
B	Area Under Informal Sector	828.02 Sqm.
	Area Under entertainment Centre & Community Hall	907.88 Sqm.
C	Open Area	1922.34 Sq.m.

Total built-up areas

S.NO.	PARTICULAR	AREA Sqm.
A	Plotted Areas	12623.42
B	Informal Sector	1035.02
C	Entertainment Centre & Community Hall	1127.35
D	Area of Flats	7584.39
E	Area of Shops	842.7
F	Area Under Podium Parking	1514.06
G	Area Under Basement Parking	1514.06
		26241.00

Water requirement for the project:

The Main source of water supply will be Municipal water supply. It will cater the domestic requirement whereas additional water requirement will be fulfilled by treated water from STP. In construction phase we will take water supply form the private tanker suppliers.

S. N	Item Description	Residential
1.	Domestic Water Requirement	56 KLD
2.	Flushing Water Requirement	28 KLD
3.	Landscaping & other uses	12 KLD
4.	Total Water Demand	96 KLD
5.	Available Treated Water through STP	68 KLD
6.	Net Fresh Water	56 KLD
7.	STP Capacity	100 KLD (76 KLD on 100% Load)

Design Basis of STP:

- Source of water : Sewage
- Treatment Concept: MBBR Based on Preliminary treatment + Aerobic biodegradation treatment followed by tertiary treatment.
- Capacity : 100 KLD (76 KLD on 100% Load)
- Operation : 20 Hours

Environmental management plan-

Air:

Construction Phase

- Dust control plan
- Regular Maintenance of vehicles
- Proper ventilation system shall be provided to all part of the work areas of site.
- All dust producing construction materials will be transported with proper cover as tarpaulin.
- Regular sprinkling of water shall be done at site for dust suppression.
- Green belt development along road side to attenuate the effect of air pollution will begins from construction phase.
- Large leaf plants will be use in tree plantation all around the project site and road side reduces the impact of the air pollution.
- Use of Ready mixed cement
- Reduce on site activities by Off-site fabrication of structural components

Operational Phase

- Green belt along road side in different tiers to attenuate the effect of air pollution
- Provision of signage's for easy circulation of traffic.
- Provision for adequate parking space.
- Use of low sulphur diesel for DG set.
- Provision of sufficient stack height for DG set.
- Use of back-up DG set (acoustic enclosed) during power failure only.
- The green belt will be developed especially around dust generating areas.

Water:

Construction Phase

- Leak proof containers for storage and transportation of oil/ grease.

- RMC shall be used.
- Impervious oil/grease handling area.
- Provision of Drinking Water and temporary sanitation facilities for workers.

Operational Phase

- Treatment of sewage on site in STP.
- Use of treated sewage water for Flushing & Landscaping.
- RWH and SWM scheme
  - Rainwater from Roof top and terraces will be used for ground water recharging.
  - SWM will be done with the help of well planned storm water drainage network as per BMC remarks.
- Minimizing Water Consumption
- Use dual flush system, Auto flushing sensors for urinals
- Efficient Plumbing Fixtures

Cost of Environmental Management Plan

DESCRIPTION	CAPITAL COST (LAKHS)	RUNNING COST (LAKHS/YEAR)
Air		
Construction Phase	1.5	
Operation Phase		0.3
Noise		
Construction Phase	0.5	
Operation Phase		0.1
Water and Land		
Construction Phase	2.0	
Operation Phase		0.3
Sewage Treatment Plant	15.0	4.1
Rainwater Harvesting & Storm Water Management	2.0	0.4
Solid Waste Management	1.5	0.4
Energy		
Lighting	3	0.6
Biological		
Landscaping	2.5	0.8
Total	Rs. 28 Lakhs	Rs. 7.0 Lakhs / Year

The submissions and the presentation made by the PP were observed to be satisfactory and acceptable; hence committee recommended the case for grant of prior EC subject to the following special conditions:

- Double row peripheral plantation shall be provided.
- Water supply shall be from BMC as committed.
- No ground water shall be used as proposed.
- Use of Photovoltaic cells (Solar energy) LED / CFL in common areas to be taken up.
- Press-filter dried STP sludge and the MSW shall not be stored at site for more than 48 hours; accordingly space of appropriate size shall be developed at suitable location within the project premises.
- Appropriate play spaces shall be developed in the project.
- Clearances / Pre- Clearances shall be obtained as applicable.
- All the directions issued by Hon'ble Supreme Court of India/National Green Tribunal/Ministry of Environment, Forest & Climate Change, New Delhi from time to time shall be applicable.

9. Case No. – 2196/2014 **Shri Bhupendra Singh Rao, GM, M/s Mine Corp India Pvt. Ltd., 14-A, Globus City, Kolar Road, Chuna Bhatti, Bhopal (MP)-462016** *Sand Stone (Farshi Patthar) Quarry Lease Area – 3.950 ha., Capacity- 30000 Cu.mt./Year, at Khasra No. – 210, 212, 214, Village-Sunnd, Tehsil-Raisen, District-Raisen (MP).*

This is a case of mining of Sand- stone (Farshi Patthar).The application was forwarded by SEIAA to SEAC for appraisal. The proposed site is located *at Khasra No. – 210, 212, 214, Village-Sunnd, Tehsil-Raisen, District-Raisen (MP)* in *3.950* ha. The project requires prior EC before commencement of any activity at site.

PP has submitted a copy of approved Mining Plan, letter from Mining Officer certifying the leases within 500 meters radius around the site and requisite information in the prescribed format duly verified by the Tehsildar and DFO. It was reported by the concerned Mining Officer of mining department vide letter no. 865 dated 27/09/2014, that 09 mines are operating / proposed within 500 meter radius around the said mine the total lease area being 22.104 Ha. PP has reported that the pit formed after mining shall be developed into a water body.

The EMS and other submissions made by the PP were found to be satisfactory and acceptable, hence committee decided to recommend the case for grant of prior EC subject to the following special conditions:

1. The amount towards reclamation of the pit and land in MLA shall be carried out through the mining department. The appropriate amount as estimated for the activity by mining department has to be deposited with the Collector to take up the activity after the mine is exhausted.
2. The mined out pits shall be developed into water body being appropriately fenced and with safe stairway.

3. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA
4. Transportation of material shall be done in covered vehicles.
5. Necessary consents shall be obtained from MPPCB and the air pollution control measures have to be installed as per the recommendation of MPPCB.
6. Permission / NOC shall be obtained from Gram Panchayat for lifting water from the village resources and shall be furnished to MPPCB while obtaining necessary consents under the provisions of Air / Water consents.
7. Curtaining of site shall be done using appropriate media.
8. Production of Sand stone (Farshi Patthar) shall be as per the mining plan not exceeding 30,000 m^3/Year and maximum average depth of pits shall not exceed12 meters.
9. The proposed plantation should be carried out along with the mining and PP would maintain the plants for five years including casualty replacement.
10. Transportation shall not be carried out through forest area.
11. PP will take adequate precautions so as not to cause any damage to the flora and fauna during mining operations.
12. Appropriate activities shall be taken up for social up-liftment of the Region. Funds reserved towards the same shall be utilized through Gram Panchayat.
13. The validity of the EC shall be as per the provisions of EIA Notification subject to the following: Expansion or modernization in the project, entailing capacity addition with change in process and or technology and any change in product - mix in proposed mining unit shall require a fresh Environment Clearance.

10. Case No. - 2311/2014 **Shri Bhupendra Singh Rao, GM, M/s Mine Corp India Pvt. Ltd., 14-A, Globus City, Kolar Road, Chuna Bhatti, District-Bhopal (MP)-462016** *Sand Stone (Farshi Patthar) Quarry Lease Area –3.00 ha., at Khasra No. –, Capacity- 46,358Cu.mt./Year, Village-Sunnd, Tehsil-Raisen, District-Raisen (MP)*

This is a case of mining of Sand- stone (Farshi Patthar).The application was forwarded by SEIAA to SEAC for appraisal. The proposed site is located *at Village-Sunnd, Tehsil-Raisen, District-Raisen (MP)* in *3.00* ha. The project requires prior EC before commencement of any activity at site.

PP has submitted a copy of approved Mining Plan, letter from Mining Officer certifying the leases within 500 meters radius around the site and requisite information in the prescribed format duly verified by the Tehsildar and DFO. It was reported by the concerned Mining Officer of mining department vide letter no. 865 dated 27/09/2014, that 09 mines are operating / proposed within 500 meter radius around the said mine the total lease area being 22.104 Ha. PP has reported that the pit formed after mining shall be developed into a water body. The EMS and other submissions made by the PP were found to be satisfactory and acceptable, hence committee decided to recommend the case for grant of prior EC subject to the following special conditions:

1. The amount towards reclamation of the pit and land in MLA shall be carried out through the mining department. The appropriate amount as estimated for the activity by mining

department has to be deposited with the Collector to take up the activity after the mine is exhausted.

2. The mined out pits shall be developed into water body being appropriately fenced and with safe stairway.
3. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA
4. Transportation of material shall be done in covered vehicles.
5. Necessary consents shall be obtained from MPPCB and the air pollution control measures have to be installed as per the recommendation of MPPCB.
6. Permission / NOC shall be obtained from Gram Panchayat for lifting water from the village resources and shall be furnished to MPPCB while obtaining necessary consents under the provisions of Air / Water consents.
7. Curtaining of site shall be done using appropriate media.
8. Production of Sand stone (Farshi Patthar) shall be as per the mining plan not exceeding 46,358 m^3/Year and maximum average depth of pits shall not exceed12 meters.
9. The proposed plantation should be carried out along with the mining and PP would maintain the plants for five years including casualty replacement.
10. Transportation shall not be carried out through forest area.
11. PP will take adequate precautions so as not to cause any damage to the flora and fauna during mining operations.
12. Appropriate activities shall be taken up for social up-liftment of the Region. Funds reserved towards the same shall be utilized through Gram Panchayat.
13. The validity of the EC shall be as per the provisions of EIA Notification subject to the following: Expansion or modernization in the project, entailing capacity addition with change in process and or technology and any change in product - mix in proposed mining unit shall require a fresh Environment Clearance.

11. Case No. – 1960/2014 M/s Umbra Mining Pvt. Ltd., 23-A, Royal Residency, Pipalyahana, Indore (MP)-452006 Revised Form ï I Rec. *Rewati Basalt Stone & Murram Quarry* ***Lease Area – 3.66 ha****. at Village-Rewati, Tehsil-Hatod, District-Indore (MP).*

Neither the Project Proponent (PP) nor his representative was present to explain the query which might be raised or to make any commitment which may be desired by the committee during the deliberation. Committee decided to call the PP in subsequent meetings after hearing from PP. A request has to be made by the PP for scheduling the case in coming meetings within a monthôs time after which the case shall be returned to SEIAA assuming that PP is not interested to continue with the project.

12. Case No. – 1713/2013 M/s Sharda Maa Enterprises Pvt. Ltd., Kanchenjunga Building, UGF 1 & 2, 18 Barakhamba Road, New Delhi - 110001 *Bijuri Coal Beneficiation Lease Area – 8.1 ha., Capacity – 0.9MTPA Coal Washery at Khasra No. – Village – Mantola, Tehsil – Kotma, Distt. – Anuppur (M.P.)* **For-EIA Presentation. Env. Consultant: EMTRC Consultant Pvt. Ltd., Delhi. ToR (139 Meeting) letter issued letter no. 728 dt. 11/10/13.**

This is a project pertaining to Wet washing of ROM Coal with throughput of coal to the tune of 0.9 million ton per anum. The project falls under category B and mentioned as item no. 2(a) in the schedule of the EIA Notification. Thus it requires prior EC from the SEIAA before commencement of production. TOR to carry out EIA was issued by the SEAC vide letter dated 11/10/2013. EIA report submitted by the PP was forwarded by SEIAA to SEAC for appraisal and necessary recommendations. The EIA / EMP were presented by the PP and his consultant before the SEAC. The presentation and submission made by the PP reveals following:

Summary of the project:

- Source of Coal: Purchased from nearby SECL mines - Jamuna, Kotma, Hasdeo, ohagpur and Chirmiri area .
- Transportation of ROM, Washed Coal and Rejects: 3000 TPD ROM coal by dumpers from mines to washery and 3000 TPD Washed Coal and Rejects by dumpers from washery to Bijuri Railway siding.
- Entrepreneurs Memorandum obtained from District Trade & Industries Center, Anuppur for 900000 tons coal.
- National Park, Wildlife Sanctuary, Biosphere Reserve: None (Certified by State Forest Department)
- Nearby Forests: Nand Lal Patera Reserve Forest ï 8.5 km NE to SE and Mangle Reserve Forest - 6.2 km East
- Chhattisgarh State Boundary : 15 km away (Certified by Nayab Tahsildar)
- NOC from Gram Panchyat: Obtained
- Man Power: 75 people (Direct) and 100 people (indirect).
- Project Cost: 15.0 crores
- Land : 19.102 acres (8.1 ha) non-forest land
- Land Type: 2.5 acres agriculture land balance barren land.
- Statement of ownership of land : Panchshala P-II submitted.
- 100% land in possession of Maa Sharda
- Nearest Town : Kotma approx. 10 km away
- District Head Quarter : Anuppur approx. 20 km away
- Bijuri Railway Siding: approx. 7.5 km
- Nearest Highway: approx. 0.6 km away
- Nearest village: Mantola approx 1 km away
- Water Bodies: Kewai River (0.8 km W) and Karnal Nala (1.5 km N)
- Fresh Groundwater Requirement : 96 KLD
- Permission obtained from CGWA on 27-11-2014
- Power Requirement: 500 KVA from State Electricity Board
- DG sets : 1 x 500 KVA (to meet emergency requirement)

Process Description:

- Coal washery comprises of coal unloading, handling, crushing, screening, washing with water, dewatering and separation of fines from washed water and storing the clean coal and rejects.
- The coal washery will yield 65% (1950 tons) clean coal and 35% (1050 tons)rejects.
- 3000 tons per day of coal will be washed.
- Raw coal shall be received inside the washery by Tippers from nearby coal mines.
- It will be sent to crushing and screening plant.

- After screening it will be sent to the washery section by conveyor belt.
- After separation of rejects by Rotary Breaker, the coal will be cleaned using heavy media cyclone bath.
- Clean coal and rejects will be stocked separately.
- The washed water will be taken to thickener, where coal fines will be separated.
- The water after separation of coal fines will be 100% reused for coal washing.
- The washing circuit is completely closed and no wastewater will be discharged.
- Dense media bath technology has been selected for this proposed washery

Material Balance of Coal Washery

Materials	Input, Tons / Day	Output, Tons / Day
ROM Coal (input)	3000 (Ash ï 45 % S ï 0.5%)	
Washed Coal (output)	--	Washed coal -1950 (Yield 65%) Ash-34%, S ï 0.5%
Rejects (output)	--	Rejects 1050 (Yield 35%) Ash 66%, S ï 0.5%

Water Balance of Coal Washery

Process / Section	Water Requirement KLD	Wastewater Generation KLD
Fresh water make-up to washing circuit	90 (Groundwater)	Nil (100% re-circulated)
Dust Suppression	23 (treated water from ETP will be used)	Nil (100% evaporated)
Domestic uses	6.5 (Groundwater)	5.0 (Treated in septic tanks and soak pits)

Mode of Transportation

- ROM coal - from nearby mines located in Chirmiri (West), Jamuna), Damini, Rajendra, Bangwar, Sharda), Jhima, Dhanpuri area.
- ROM Coal ï transport to washery by 35 tons tippers
- Clean coal and rejects - transported to Bijuri siding by 35 tons dumper

Air Pollution Control:

- Internal surface (including roads) inside the coal washery, where material movement is expected, shall be made concrete.
- Surface shall be cleaned twice daily using vacuum sweeping machine.
- Water sprinklers shall be provided during ROM coal unloading and stacking.
- Closed conveyor belts shall be used for moving ROM coal from yard to crusher.
- Dry fog type dust suppression arrangement will be made to control fugitive dust during coal crushing.
- The coal crushing and screening plant will be provided with enclosures / shirt boards to prevent fugitive dust from flying away.
- 15 m wide greenbelt shall be made around the washery.
- 33% of the total land shall be converted in to greenery.

Source of air pollution from different sections and control measures proposed for each.

Source	Control Measures for air pollution control
Coal stock pile area/ storage bin	Water sprinklers. Stabilized surface and internal roads.
Coal crusher	Covered with skirt boards from top to bottom Dry fog type dust suppression system at screens Suction system with ducts connected to a bag filter PM emission < 50 mg/Nm3. 11 m tall stack Closed type conveyor belts
Dry screening operations, conveyor belt transfer points/ loading unloading operations	The proposed coal washery is wet type, hence no fugitive dust emission is envisaged. Screens shall be placed inside the crusher house and dry fog type dust suppression system shall be provided. All conveyors shall be closed type.
Vehicles movements	All internal roads will be made concrete.

Water Pollution Control:

- Washery to have closed water loop as all effluents to be sent to effluent treatment plant.
- ETP consists of 1 hi-rate thickener and a multirole belt press; associated with flocculent dosing system and underflow sludge carrying pump.
- Effluent shall be collected in the thickener tank.
- This tank shall be dosed with flocculants, which aids settlement of suspended solids and helps to give a clear overflow.
- The settled solids shall be collected from the bottom cone of the thickener tank.
- The solids from bottom of thickener shall be pumped to multirole belt press for reclaiming water from sludge.
- The overflow of the thickener which is clear water is pumped back to the preparation plant for recirculation.
- The effluents from washery will not flow beyond the washery premises.

Noise Pollution Control:

- The crusher and other vibrating screens will be housed in a covered enclosure.
- Pumps and compressors shall be kept covered on solid foundation.
- Oiling and greasing of all the equipment, rollers, pumps shall be done.
- Liners in equipment shall be replaced time to time.
- Workers exposed to noise will be provided with earplugs / ear muffs.

Solid Waste Management:

- The coal washery will produce rejects and coal fines as byproduct.
- Both have significant calorific value and therefore sold to power plant.
- No dump yard will be there inside the washery premises.
- Environment Impacts and the EMP proposed:

SN	Expected Impact	Impact Zones	Management Plan

Air Environment			
1	Coal dust pollution & pollution due to traffic exhaust	Within 500 m of coal washery and within 10 m either side of road	Bag filter, water sprinklers, dry fog type sprinkler, concrete surface and roads, 15m dense greenbelt & operating vehicles with PUC
Water Environment			
2	Water pollution of nearby streams due to coal dust	River Kewai, downstream of site	Full fledged ETP, 100% recycling of treated water for coal washing, emergency holding pond, sedimentation pits
Land Environment			
3	Loss of agriculture land	2.5 acres (Agriculture land)	Compensation paid to land owners (more than market price). Land losers will be preferred for employment in project, CSR budget of Rs.30 lakhs provided
Noise Environment			
4	Noise pollution from crusher, screens, road traffic	500 m of crusher Within 10 m either side of road	Crusher inside shed, routine maintenance of equipment and vehicles, 33% land for greenbelt development, PPE to workers

Permissions / certificates / NOC obtained-

- Permission from CGWA vide letter dated 27/11/2014 for abstraction of 96 m3 ground water per day.
- Certification of no National park, wild-life protected areas and Bio-sphere Reserves within 10 Km around the proposed site from concerned DFO.
- NOC from Gram Sabha.
- Certification from Tehsildar for no inter-state border from the boundary of the project site.

Public Hearing:

The public hearing proceedings were discussed at length. In general the public hearing was infavour of the project. Some issues regarding pollution of river Kewai were raised in the PH. It was observed that the river is non-perennial and is about 800 meters from the project site. The river joins to a perennial river after about 10 Km, from which water is supplied to Kotma habitation. In this regard it clarified by the PP that only 119 KLD water is proposed to be lifted in the process which will be 100 % re-cycled, maintaining ǿero-dischargeô In addition to this check-dams shall be constructed on all the slopes so as to trap any water expected to go outside the premises. The clarification furnished by the PP is satisfactory.

The presentation and the submission made by the PP are satisfactory and acceptable hence committee decided to recommend the case for grant of prior EC subject to the following special conditions:

1. Hundred Percent waste water shall be re-cycled maintaining ózero-dischsrgeô as proposed.
2. Check-dams shall be constructed along with other activities at site on the appropriate locations so as to ensure that no water is discharged from the premises.
3. The particulate matter concentration shall be maintained below 50 mg/ Nm3.
4. Records for the coal rejects shall be meticulously maintained and such rejects shall be sold to the qualified thermal power plants only.
5. At least 15 meters wide lush green belt shall be developed all around the premises.
6. Native species of tree plants (three years old saplings) shall be used for afforestation.
7. The proposed plantation should be carried out along with the other activities and PP would maintain the plants including casualty replacement.
8. All roads in the premises should be concreted.
9. The village roads shall be maintained regularly by the PP.
10. Need based CSR activities shall be taken up in coordination with the Gram Panchayat.

13. Case No. - 1710/2013 M/s Abdul Razzak, 903, Badi Omti – Jabalpur, Distt . –Jabalpur (M.P.) 482001 *Nimas Marble Mines Lease Area – 2.67 ha. Capacity – 15000 Cumts. At Patwari Halka No. – 41/82, Khasra No. – 435 & 436, Village – Nimas,Tehsil –Bahoriband, Distt. - Katni (M.P.)* **For –EIA Presentation ToR (142) issued letter no. – 780 dt. 26/11/13 Env. Consultant: Apex Minetech Consultants, Udaipur** (Raj.)

This is mining project comprising mining of Marble form a lease area of 2.67 Ha. The project requires EC from SEIAA. The TOR for the project to carry out EIA / EMP was issued by SEAC vide letter no. 780 dated 26/11/2013. EIA report was forwarded by SEIAA to SEAC for appraisal and necessary recommendations. The EIA report and the EMP were presented by the PP and his consultant before the committee. The submissions and the presentation reveals following:

- The mining lease was granted in favour of M/s. Abdul Rajjak near village Nimas, Tehsil Bahoriband, District Katni over an area of 2.67 hect. in Khasra No. 435 & 436 by Mineral Resource Department, Govt. of Madhya Pradesh vide letter No. 4-05/2001/12/2, dated 23.09.2001 for a period of 10 years from the date of agreement, lease period is effective from 06.09.2001 to 05.09.2011 & first renewal has been applied on 03/06/2010.
- Presently Mine working is not in operation due to grant of Environment Clearance. Renewal has been applied on 03.06.2010 which is pending for EC.
- Initially lease was granted on 23.08.2001 for 10 years to Shri Abdul Razzaq.
- Lease deed executed on 06.9.2001, thus First lease period of 10 years was effective upto 05.09.2011.

- Consecutive lease agreement (renewal of lease) was done on 14.2.2012 for another 10 years.
- CTO was granted on 30.12.2010 for production 8000 t. per annum of marble.
- PP applied for expansion of production from 8000 t. per annum to 15,000 Cu. m.
- TOR was granted vide letter no. 780/PS-MS/MPPCB/SEAC/TOR(142)/2013, Bhopal dated 26.11.2013.
- Public hearing was conducted on dated 10.07.2014.

New mine/ existing mine (old lease period in case of existing mine)	Existing mine Lease period: 06.09.2011 to 05.09.2021	
Name of the mineral	Marble	
Location of the mine	Khasra no. 435, 436; Village: Nimas Tehsil Bahoriband, District Katni Latitude : 23°35ô44.5ò to 23°35ô48.6ò N Longitude : 80°10ô08.1ò to 80°10ô18.9ò E	
Lease area/ Production	Lease area 2.67 ha, Production 15000 cum/year	
Dominant nature of land	Gently sloping flat land	
Litho logy	(i) Soil ï 2-4 m; Overburden ï 6 m (ii) Marble ï 16 m	
Geological reserve	653422 cum in situ	
Minable reserve	394587 cum in situ	
Anticipated life of the mine	26 years	
Year wise development and production plan (first five years)	Year Quantity 1st 13230 cum ; 2nd 14693 cum 3rd 14598 cum ;4th 14598 cum 5th 15724 cum ;(Source Approved Mining Plan) Five year development plan shown in subsequent slide.	
Aerial distance from the forest area	Jujhawal RF in North Open Mixed Jungle in W Open Mixed Jungle in S Amoch RF Open Mixed Jungle in NE Open Mixed Jungle in E Dhanwah RF in SE	3.50 km 6.50 km 5.00 km 1.50 km 6.50 km 6.50 km 8.50 km
Aerial distance from the public road , railway track etc	i. NH 7 from core zone ii. Railway Main line passing through Dundi	3.50 km 7 km

The EMP and other submissions made by the PP including the public hearing issues were discussed by the committee. The submission and the presentation made by the PP were found to be satisfactory

and acceptable hence committee decided to recommend the case for grant of prior EC subject to the following special conditions:

1. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
2. Transportation of material shall be done in covered vehicles.
3. Necessary consents shall be obtained from MPPCB and the air pollution control measures have to be installed as per the recommendation of MPPCB.
4. Permission / NOC shall be obtained from Gram Panchayat for lifting water from the village resources and shall be furnished to MPPCB while obtaining necessary consents under the provisions of Air / Water consents.
5. The entire plantation should be taken up in the first year itself along with the mining with plantation of local species of at least 03 years old saplings with casualty replacement.
6. Appropriate activities shall be taken up for social up-liftment of the Region. Funds reserved towards the same shall be utilized through Gram Panchayat.
7. The validity of the EC shall be as per the provisions of EIA Notification subject to the following: Expansion or modernization in the project, entailing capacity addition with change in process and or technology and any change in product - mix in proposed mining unit shall require a fresh Environment Clearance.
8. Angle of repose shouls be maintained at 35^{o}.
9. The budget for CSR should be enhanced to Rs 3.0 lac / Year.

Meeting ended with thanks to the Chair and the Members

[R.B. Lal, Chairman] **[Dr. Mohini Saxena, Member]**

[K.P. Nyati Member] **[Dr. Alok Mittal, Member]**

[A.A. Mishra, Secretary]