

State Expert Appraisal Committee, Bihar

Ref. No- 60.

Patna- 23, Date- 07/06/18.

To,

1. Shri Murarijee Mishra
Vijay Nagar, Near Temple,
Rukunpura, Patna - 800014.
2. Dr. Samir Kumar Sinha,
Wildlife Trust of India,
F-13, Sector - 8, Noida,
Uttar Pradesh - 201301.
3. Dr. Amar Nath Verma,
10192 ATS Advantage, AhinshaKhand - 1,
Near Habitat Centre, Indirapuram,
Ghaziabad - 201014.
4. Dr. Shardendu,
Department of Botany,
Patna Science College, Patna.

Sub :- Proceedings of State level Expert Appraisal Committee which was held on 01.06.2018 at 11:30 A.M. in Conference / Meeting Hall of State level Environment Impact Assessment Authority, 2nd Floor, Beltron Bhawan, Shastri Nagar, Patna - 23.

Sir,

Please find enclosed herewith proceedings of the State Expert Appraisal Committee (SEAC) held on 01st June, 2018 for perusal and needful.

Sincerely Yours

 6/6/18
(Alok Kumar)

Proceedings of the State Expert Appraisal Committee (SEAC) meeting dated 01st June, 2018

A meeting of SEAC was held in the meeting hall of SEIAA, Bihar, 2nd Floor, Beltron Bhawan, Shastri Nagar, Patna- 23 on 01st June, 2018 presided over by the Chairman, SEAC. The following members of the committee were present in the meeting:

1. Dr. Amar Nath Verma, Member, SEAC
2. Dr. Shardendu, Member, SEAC
3. Dr. Samir Kumar Sinha, Member, SEAC
4. Shri Alok Kumar, Member Secretary, SEAC

The project records of the projects included in the agenda were put up before the committee by supporting staffs/officers for necessary appraisal.

The committee discussed the proposal on the agenda and made following recommendations for various projects and sought compliance on the points raised in relation thereto-

1. **Harinagar Sugar Mills Ltd., Village:- Harinagar, Block:- Ramnagar, District:- West Champaran, State:- Bihar (File No. - SIA/5(j)/523/18) Online Proposal No.:- SIA/BR/IND2/25875/2018).**

Harinagar Sugar Mills Ltd. (HSML), is situated at Harinagar, P.O.- Harinagar, Block- Ramnagar in District West Champaran, Bihar having Latitude 27° 09' 17.25" N & Longitude 84° 19' 45.62" E at 102.4 m. above MSL. The existing production of the unit is 10000 TCD and the proposed expansion in the production is 1500 TCD. The total production of the unit would be 11500 TCD after expansion. Total cost of the proposed expansion project is estimated to be Rs. 5264.70 Lakhs (i.e. Rs. 52.64 Crores).

The Proponent & Consultant presented the proposal before the committee. After due discussion and consideration, the committee recommended to issue the ToR. (As Annexure- I).

2. **Proposed Residential Project "Sunrise Rupaspur City", Village:- Rupaspur (Dhanaut), Mohalla:- Rupaspur, Pargana - Phulwari, Tehsil:- Danapur Block, District:- Patna, State:- Bihar. (Proposal No. - SIA/8(a)/524/18) Online Proposal No.:- SIA/BR/NCP/74851/2018).**

The project proponent was/were absent.

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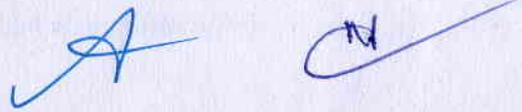
3. Stone Mining including Crushers at Sheikhpura, Village:- Wazidpur & Kare, Anchal:- Sheikhpura, District:- Sheikhpura, State:- Bihar (Proposal No. - SIA/1(a)/525/18). Online Proposal No.:- SIA/BR/MIN/71859/2017).

Stone Mining including Crushers at Sheikhpura is located at village:- Wazidpur & Kare, Anchal:- Sheikhpura, District:- Sheikhpura of Bihar. The project site having mining lease area is 5.06 ha. Project is located at Khata No.- 10, Plot No.- 2570 (P), 29(P). The project site having Latitude 25° 08' 47.26" N to 25° 08' 57.27" N & Longitude 85° 48' 50.21" E to 85° 49' 00.38" E. The proposed production of the project is 5,86,238 TPA. Total cost of the proposed project is Rs. 10,50,00,000/-.

The Proponent & Consultant presented the proposal before the committee, which after due discussion and consideration directed the project proponent to submit a revised report including the following:-

- The green cover i.e. minimum 33% of the project area consisting of mixture of indigenous and fast growing species of trees, plants and perennial shrubs must be created and maintained. Plantation of (minimum 5 feet tall plants) must be planted in the coming rainy season i.e. (year 2018). Plantation along the side of the mining area & roads and in the open spaces shall be developed to act as sink for air pollutants. The plantation of preferably evergreen species (trees) to complete the requirement of creation of 33% green cover and green belt by making necessary arrangements in cooperation with the nearby farmers/persons owning lands in surrounding area of the mining area.
- Use of water tanker for sprinkling water on approach road of the mining area as well as near crusher.
- Revised annual environment management plan disclosing proportional/appropriate cost including expenditure plan for five years. Submit revised Corporate Environmental Responsibility (CER).
- Risk assessment and management plan.
- Recent photographs of project site.

Compliance of (i) requirements sought by Govt. of India, MoEF&CC (Impact Assessment Division) F. No. 22-8/2018-IA.III dated 20.04.2018, and (ii) information in schedule - I should be enclosed. (As Annexure - II)



4. Stone Mining project at Sheikhpura, Village:- Chakandara/ Barari, Block:- Chewra, District:- Sheikhpura, State:- Bihar (Proposal No. - SIA/1(a)/526/18). Online Proposal No.:- SIA/BR/MIN/74976/2018).

Stone Mining (Quartzite) project at Sheikhpura is located at village:- Chakandara/ Barari, Block- Cherwa, District:- Sheikhpura of Bihar. The project site having mining lease area is 5.06 ha. Project is located at Block No.- 24, Plot No.- 1692 (P), 1644(P). The project site having Latitude & Longitude of four coordinates are Corner A - 25° 05' 47.13" N 85° 53' 17.91" E, Corner B - 25° 05' 40.41" N 85° 53' 19.75" E, Corner C - 25° 05' 45.93" N 85° 53' 31.40" E, Corner D - 25° 05' 49.24" N 85° 53' 29.90" E. The proposed production of the project is 7, 00,000 TPA. Total cost of the proposed project is Rs. 20,02,00,000/-.

The Proponent & Consultant presented the proposal before the committee, which after due discussion and consideration directed the project proponent to submit a revised report including the following:-

- Revised toposheet/map showing the area must be enclosed duly signed.
- Procedure of blasting, disclosure of proposed blasting agency engaged with mining project.
- Risk assessment and management plan.
- Source of water for dust suppression and other purposes.
- Plan for the catch drain/siltation pond.
- Mine closer plan with total depth of mining.
- The green cover i.e. minimum 33% of the project area consisting of mixture of indigenous and fast growing species of trees, plants and perennial shrubs must be created and maintained. Plantation of (minimum 5 feet tall plants) must be planted in the coming rainy season i.e. (year 2018). Plantation along the side of the mining area & roads and in the open spaces shall be developed to act as sink for air pollutants. The plantation of preferably evergreen species (trees) to complete the requirement of creation of 33% green cover and green belt by making necessary arrangements in cooperation with the nearby farmers/persons owning lands in surrounding area of the mining area.

Compliance of (i) requirements sought by Govt. of India, MoEF&CC (Impact Assessment Division) F. No. 22-8/2018-IA.III dated 20.04.2018, and (ii) information in schedule - I should be enclosed. (As Annexure - II)

5. Stone Mining project at Sheikhpura, Village:- Barari, Block:- Sheikhpura, District:- Sheikhpura, State:- Bihar (Proposal No. - SIA/1(a)/527/18). Online Proposal No.:- SIA/BR/MIN/74975/2018).

Stone Mining project at Sheikhpura is located at village:- Barari, Block - Sheikhpura, District:- Sheikhpura of Bihar. The project site having mining lease area is 5.06 ha. Project is located at Block No.- 25, Plot No.- 1644 (P). The project site having Latitude & Longitude of four coordinates are Corner A - 25° 05' 40.02" N 85° 53' 04.21" E, Corner B - 25° 05' 37.45" N 85° 53' 05.33" E, Corner C - 25° 05' 40.41" N 85° 53' 19.75" E, Corner D - 25° 05' 47.13" N 85° 53' 17.91" E. The proposed production of the 6,30,000 TPA. Total cost of the proposed project is Rs. 19,99,21,000/-.

The Proponent & Consultant presented the proposal before the committee, which after due discussion and consideration directed the project proponent to submit a revised report including the following:-

- Revised toposheet/map showing the area must be enclosed duly signed.
- Procedure of blasting, disclosure of proposed blasting agency engaged with mining project.
- Risk assessment and management plan.
- Source of water for dust suppression and other purposes.
- Plan for the catch drain/siltation pond.
- Mine closer plan with total depth of mining.
- The green cover i.e. minimum 33% of the project area consisting of mixture of indigenous and fast growing species of trees, plants and perennial shrubs must be created and maintained. Plantation of (minimum 5 feet tall plants) must be planted in the coming rainy season i.e. (year 2018). Plantation along the side of the mining area & roads and in the open spaces shall be developed to act as sink for air pollutants. The plantation of preferably evergreen species (trees) to complete the requirement of creation of 33% green cover and green belt by making necessary arrangements in cooperation with the nearby farmers/persons owning lands in surrounding area of the mining area.

Compliance of (i) requirements sought by Govt. of India, MoEF&CC (Impact Assessment Division) F. No. 22-8/2018-IA.III dated 20.04.2018, and (ii) information in schedule - I should be enclosed. (As Annexure - II)

6. Stone Mine project at Village:- Matokhar, District:- Sheikhpura, State:- Bihar (Proposal No. - SIA/1(a)/528/18). Online Proposal No.:- SIA/BR/MIN/70176/2017).

Stone Mine project at Sheikhpura is located at village:- Matokhar, Block - Sheikhpura, District:- Sheikhpura of Bihar. The project site having mining lease area is 5.06 ha. Project is located at Block No.- 01, Plot No.- 1030 /P. The project site having Latitude & Longitude of four coordinates of Part A are Corner A - 25° 08' 15.98" N 85° 48' 35.27" E, Corner B - 25° 08' 18.90" N 85° 48' 18.77" E, Corner C - 25° 08' 20.07" N 85° 48' 18.04" E, Corner D - 25° 08' 23.31" N 85° 48' 18.02" E Corner E - 25° 08' 19.53" N 85° 48' 28.77" E and Part B are Corner F - 25° 08' 08.49" N 85° 48' 23.66" E, Corner G - 25° 08' 05.35" N 85° 48' 20.27" E, Corner H - 25° 08' 08.33" N 85° 48' 19.29" E, Corner I - 25° 08' 09.63" N 85° 48' 22.52" E. The proposed production of the project is 5,24,300 cubic meter/annum.

The Proponent & Consultant presented the proposal before the committee. The committee observed that the project consultant did not have accreditation as list - 1 consultant which is required under the relevant rules. The proposal was as such not appraised by the SEAC. The project proponent/consultant was asked to produce/furnish the required documents/clarification from QCI in this regard.

7. Stone Mining project at Village:- Chandhi, Block:- Sheikhpura, District:- Sheikhpura, State:- Bihar (Proposal No. - SIA/1(a)/529/18). Online Proposal No.:- SIA/BR/MIN/70404/2017).

Stone Mine project at Sheikhpura is located at Mauja:- Chandhi, Block - Sheikhpura, District:- Sheikhpura of Bihar. The project site having mining lease area is 5.05 ha. Project is located at Block No.- 29, Plot No.- 1810 (P). The project site having Latitude & Longitude of four coordinates of are Corner A - 25° 03' 57.45" N 85° 48' 09.63" E, Corner B - 25° 04' 01.09" N 85° 48' 15.04" E, Corner C - 25° 03' 55.03" N 85° 48' 21.30" E, Corner D - 25° 03' 50.70" N 85° 48' 16.79" E. The proposed production of the project is 11,25,600 TPA. Total project cost 2735 lakhs.

The Proponent & Consultant presented the proposal before the committee. The committee observed that the project consultant did not have accreditation as list - 1 consultant which is required under the relevant rules. The proposal was as such not appraised by the SEAC. The project proponent/consultant was asked to produce/furnish the required documents/clarification from QCI in this regard.

8. **"KUNDAGHAT RESERVOIR SCHEME", Village:-Sikandra, Block:- Sikandra, Block:-Sikandra, District:- Jamui, State:- Bihar, (Proposal No. - SIA/1(c)/428/17). Online Proposal No.:- SIA/BR/RIV/26099/2016).**

KUNDAGHAT RESERVOIR SCHEME, is situated at village - Sikandra, Block:- Sikandra, Block:- Sikandra, District - Jamui of Bihar having Latitude $24^{\circ} 52' 18.84''$ N & Longitude $86^{\circ} 01' 32.36''$ E.(Toposheet 72 L/1 & 72 K/13). It is proposed to construct dam across bahuar River and supposed to provide assured irrigation over a CCA of 2035.61 Ha

An application along with filled up 'Form - I' and pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 30.12.2016 and scrutiny fee deposited on dated 20.01.2017 for obtaining approved Terms of Reference (ToR).The proposal was considered by the SEAC in its meeting held on 28th & 29th January 2017 to determine the ToR for preparation of EIA/EMP Report. The SEIAA issued ToR vide Ref. No. 534, dated 16.02.2017. Final EIA report was submitted on 24.05.2018.

The Proponent & Consultant presented the proposal before the committee. The committee after proper consideration of the proposal unanimously observed that the proposal is for construction of a dam and not an upgradation and/or modernization of existing structure that is the weir as claimed by project proponent. It was clear from perusal of the forest clearance (diversion of forest land) under the Forest (Conservation) Act of 1980, whereby an area of 60.41 Ha forest land is diverted for construction of dam on river Bahuar at Kundaghat. It is therefore imperative that the process of public consultation as laid down by EIA Notification 2006 must be completed before appraisal and granting Environmental clearance in respective of this proposal.

The project proponent was directed to get the public consultation done.

9. **Stone Mining project at Village:- Chandhi, Block:- Sheikhpura, District:- Sheikhpura, State:- Bihar (Proposal No. - SIA/1(a)/530/18). Online Proposal No.:- SIA/BR/MIN/71034/2017).**

Stone Mine project at Sheikhpura is located at Village:- Chandhi, Block - Sheikhpura, District:- Sheikhpura of Bihar. The project site having mining lease area is 5.06 ha. Project is located at Block No.- 28, Plot No.- 1810 (P). The project site having Latitude & Longitude of four coordinates of are Corner A - $25^{\circ} 03' 57.30''$ N $85^{\circ} 48' 09.33''$ E, Corner B - $25^{\circ} 03' 52.37''$ N $85^{\circ} 48' 05.30''$ E, Corner C - $25^{\circ} 03' 46.09''$ N $85^{\circ} 48' 11.71''$ E, Corner D - $25^{\circ} 03' 50.34''$ N $85^{\circ} 48' 16.46''$ E. The proposed production of the project is 9,91,200 TPA. Total cost of the proposed project is Rs. 9,35,00,000/-.

The Proponent & Consultant presented the proposal before the committee. The committee observed that the project consultant did not have accreditation as list - I consultant which is required under the relevant rules. The proposal was as such not appraised by the SEAC. The project proponent/consultant was asked to produce/furnish the required documents/clarification from QCI in this regard.

10. Common Bio-Medical Waste Treatment Facility, Village:- Karai, Block:- Bikram, District:- Patna, State:- Bihar, (Proposal No.- SIA/7(da)/458/17) Online Proposal No.- SIA/BR/MIS/18952/2017.

The Project proponent did not give presentation before the SEAC as he had not come prepared for this purpose. The committee showed its displeasure and advised him to come dully prepared for presentation in respect of project details in the next meeting of the SEAC.

11. Stone Mining project at Mauja:- Pachar, Anchal:- Rafiganj, District:- Aurangabad, State:- Bihar, (Proposal No.- SIA/1(a)/531/18) Online Proposal No.- SIA/BR/MIN/75052/2018.

Stone Mine project at Aurangabad is located at Mauja:- Pachar, Anchal - Rafiganj, District:- Aurangabad of Bihar. The project site having mining lease area is 5.25 ha. Project is located at Plot No.- 1269. The project site having Latitude & Longitude of four coordinates of are Corner A - 24° 47' 07.17" N 84° 39' 01.61" E, Corner B - 24° 47' 04.47" N 84° 39' 01.58" E, Corner C - 24° 47' 04.67" N 84° 39' 24.13" E, Corner D - 24° 47' 07.37" N 84° 39' 24.17" E. The proposed production of the project is 11,20,000 TPA. Total cost of the proposed project is Rs. 41,43,00,000/-.

The Proponent & Consultant presented the proposal before the committee, which after due discussion and consideration directed the project proponent to submit a revised report including the following:-

- Revised toposheet/map showing the area must be enclosed duly signed.
- Procedure of blasting, discloser of proposed blasting agency engaged with mining project.
- Risk assessment and management plan.
- Source of water for dust suppression and other purposes.
- Plan for the catch drain/siltation pond.
- Mine closer plan with total depth of mining.

- The green cover i.e. minimum 33% of the project area consisting of mixture of indigenous and fast growing species of trees, plants and perennial shrubs must be created and maintained. Plantation of (minimum 5 feet tall plants) must be planted in the coming rainy season i.e. (year 2018). Plantation along the side of the mining area & roads and in the open spaces shall be developed to act as sink for air pollutants. The plantation of preferably evergreen species (trees) to complete the requirement of creation of 33% green cover and green belt by making necessary arrangements in cooperation with the nearby farmers/persons owning lands in surrounding area of the mining area.

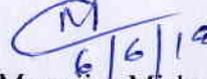
Compliance of (i) requirements sought by Govt. of India, MoEF&CC (Impact Assessment Division) F. No. 22-8/2018-IA.III dated 20.04.2018, and (ii) information in schedule - I should be enclosed. (As Annexure - II)

Sd/-
(Dr. Shardendu)
(Member, SEAC)

Sd/-
(Dr. Samir Kumar Sinha)
(Member, SEAC)

Sd/-
(Dr. Amar Nath Verma)
(Member, SEAC)


(Alok Kumar)
Member Secretary, SEAC


(Murarijee Mishra)
Chairman, SEAC

Annexure:-I

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 equipment's 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&CC/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

Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.

 - i. A toposheet of the study area of radius of 10 km 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)
 - ii. Details w.r.t. option analysis for selection of site
 - iii. Co-ordinates (lat-long) of all four corners of the site.
 - iv. Google map-Earth downloaded of the project site.
 - v. 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.

- vi. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
 - vii. 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)
 - viii. A list of major industries with name and type within study area (10 km radius) shall be incorporated. Land use details of the study area
 - ix. Geological features and Geo-hydrological status of the study area shall be included.
 - x. Details of Drainage of the project upto 5 km 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)
 - xi. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
 - xii. 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 micrometeorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
 - 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.

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- 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. Details of renewal energy (Maximum utilization of solar energy).
 - xii. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
 - xiii. Action plan for post-project environmental monitoring shall be submitted. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management

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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 replacement and periodical examinations give the details of the same. Details regarding last month analysed 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.

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.
 1. Complete process flow diagram describing each unit, its processes and operations in production of sugar, along with material and energy inputs and outputs (material and energy balance).

2. Details on water balance including quantity of effluent generated, recycled & reused. Efforts to minimize effluent also charge and to maintain quality of receiving water body.
3. Details of effluent treatment plant, inlet and treated water quality with specific efficiency of each treatment unit in reduction in respect to fall concerned / regulated environmental parameters.
4. Number of working days of the sugar production unit.
5. Details of the use of steam from the boiler.
6. Details of proposed source-specific pollution control schemes and equipment's to meet the national standards.
7. Collection, storage, handling and transportation of molasses,
8. Collection, storage and handling of bagasse and press mud.
9. Fly ash management plan for coal based and bagasse and action plan
10. Details on water quality parameters such as Temperature, colour, pH, BOD, COD, Total Kjeldhal Nitrogen, Phosphates, Oil & Grease, Total Suspended Solids, Total Coliform bacteria etc.
11. Details on existing ambient air quality and expected, stack and fugitive emissions for PM10, PM2.5, SO2*, NOx*, etc., and evaluation of the adequacy of the proposed pollution control devices to meet standards for point sources and to meet AAQ standards. (as applicable).

The project proponent inform that a project (category A project) is under consideration of GoI, MoEF&CC for Environment Clearance, and in respect wherof the baseline data (for EIA Report) has been generated during Nov 2017 to Jan 2018, the same may please be allowed to be used in the instant case also. Since the distillery is situated adjacent to Harinagar Sugar Mill, the SEAC felt that there is no objection in doing so.

A M

Annexure:-II

परिशिष्ट-क

5 हेक्टेयर से अधिक क्षेत्रफल के minor minerals की पर्यावरणिक अनुमति के लिए मापदण्ड अनुसार निर्धारित बिन्दु।

क्र०सं०	निर्धारित बिन्दु	हाँ/नहीं	जानकारी विवरण
			<ul style="list-style-type: none"> • क्र० 1 से 9 तक यदि हाँ है तो विवरण दें अन्यथा नहीं। • क्र० 10 से 14 तक जानकारी देना अनिवार्य है।
1	क्या 10 कि०मी० की परिधि में कोई संरक्षित क्षेत्र/अभ्यारण स्थित है?		
2	क्या 10 कि०मी० की परिधि में कोई घोषित जैवविविधता (Bio-Diversity) क्षेत्र स्थित है?		
3	क्या 500 मीटर की दूरी के अंदर कोई Water bodies स्थित है?		
4	क्या 500 मीटर की दूरी के अंदर कोई जलीय निकाय (Dam/Reservoir) स्थित है?		
5	क्या 500 मीटर की दूरी के अंदर कोई नदी (River) स्थित है?		
6	क्या 500 मीटर की दूरी के अंदर कोई शैक्षणिक संस्थान (Educational Institute) स्थित है?		
7	क्या 500 मीटर की दूरी के अंदर कोई चिकित्सालय (Hospital) स्थित है?		
8	क्या 10 कि०मी० की परिधि में कोई अंतर्राज्यीय (Interstate) सीमा है?		
9	क्या 500 मीटर की दूरी के अंदर कोई राष्ट्रीय धरोहर/पुरातात्विक (Monuments/Archaeological) महत्व के स्थल स्थित है?		
10	500 मीटर परिधि के अंदर स्थित खनन-पट्टों का ब्यौरा।		
11	प्रस्तावित खनिज का अनुमानित उत्पादन		
12	नदी से रेत खनन के प्रकरण में (अ) नदी किनारे से खनन परिसर की दूरी क्या है?		
13	क्या प्रस्तावित परियोजना के कारण जलागम (Water intake) या जल बहाव क्षेत्र में परिवर्तन होगा? (यदि हाँ तो परिवर्तन का विवरण दें)		
14	खनिज उत्खनन प्रक्रिया के दौरान उपयोग में आनेवाली मशीनों के नाम		

मैं पुत्र/पुत्री/पत्नि/श्री/श्रीमति शपथ पूर्वक सत्यापित करता/करती हूँ कि बिन्दु 1 से 14 तक में दी गई समस्त जानकारी मेरे निजी ज्ञान तथा जानकारी के आधार पर सत्य एवं सही है। यदि इसमें कोई त्रुटि पाई जाती है तो इसकी समस्त जिम्मेदारी अधोहस्ताक्षरकर्ता की होगी तथा यदि इस आधार पर मेरी पर्यावरणिक अनापत्ति (EC) निरस्त होती है तो मुझे कोई आपत्ति नहीं होगी।

हस्ताक्षर आवेदनकर्ता
पूर्णनाम एवं सहित।

Introduction

Chapter 1

The first part of the book is devoted to the study of the

properties of the function $f(x)$ and its

derivatives. We shall see that the function

is continuous and differentiable in the

interval (a, b) and that its

derivative is given by the formula

$f'(x) = \lim_{h \rightarrow 0} \frac{f(x+h) - f(x)}{h}$

and that the function is concave up

in the interval (a, b) and that

its maximum value is attained at

$x = c$ where $f'(c) = 0$ and

$f''(c) < 0$. We shall also see

that the function is concave down

in the interval (a, b) and that

its minimum value is attained at

$x = d$ where $f'(d) = 0$ and

$f''(d) > 0$. We shall also see

that the function is concave up

in the interval (a, b) and that

its maximum value is attained at

$x = e$ where $f'(e) = 0$ and

$f''(e) < 0$. We shall also see

that the function is concave down

in the interval (a, b) and that

its minimum value is attained at

$x = f$ where $f'(f) = 0$ and

$f''(f) > 0$. We shall also see