

**Secretariat of State Level Expert Appraisal Committee (SEAC) Rajasthan**

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F1 (4)/SEIAA/SEAC-Raj/Sectt/Project / Cat. 5(f).B1 (15235)/ 16-17/6928-6930 Dated:17.05.2017

To,

Mr.Rajpal Chauhan, Technical Director,  
Sharika Life Pvt. Ltd. ,  
L-416, Ashiana Angan, Bhiwadi pin-301019,  
E-mail-rpssharika@gmail.com

**Sub:-** Tor for Proposed Expansion of Bulk Drugs & Chemical Manufacturing Unit With capacity of 480 TPA Schedule 5 (f) B Synthetic organic chemicals industry project at RIICO Area Sotanala, Behror, Distt-Alwar Rajasthan. (13.02.2017) Proposed no. SIA/IND2/18420/2017Ref: Decision taken in the 155<sup>th</sup> meeting of SEAC.

**Consultant:-** Mantras Green Resources Ltd. ADD:- Hall No. 1 , 1st Floor, NICE Sankul,plot No.A9,opp.Nashik Merchant Co-op Bank Ltd,ITI Signal, MIDC Satpur , Nasik-1422007 Email:- info@mantrasresources.com & uksharma@mantrasresources.com

Sir,

Apropos above. Your project proposal was considered in the 155<sup>th</sup> meeting of SEAC held on **05<sup>th</sup> April, 2017** at **Agenda no.4.**

**Observation of the committee-**

Keeping in view the information contained in the documents submitted before the State Expert Appraisal Committee (SEAC), Rajasthan during its 155<sup>th</sup> meeting held on 05.04.2017 the following ToRs (in addition to those proposed by the P.P, however avoiding any duplication) along are prescribed for carrying out One Season EIA as per the EIA notification 2006. (through an Environmental Consultant duly approved by QCI / NABET for this sector) for Project name: Tor for Proposed Expansion Bulk Drugs & Chemical Manufacturing Unit With capacity of 480 TPA Schedule 5 (f) B Synthetic organic chemicals industry project at RIICO Area Sotanala, Behror, Distt-Alwar Rajasthan. (13.02.2017) Proposed no. SIA/IND2/18420/2017

**Project proponent:** - Sharika Life Pvt. Ltd. ; Technical Director, Mr.Rajpal Chauhan Add:- L-416, Ashiana Angan, Bhiwadi pin-301019, E-mail-rpssharika@gmail.com

**Name of Consultants :-** Mantras Green Resources Ltd. ADD:- Hall No. 1 , 1st Floor, NICE Sankul,plot No.A9,opp.Nashik Merchant Co-op Bank Ltd,ITI Signal, MIDC Satpur , Nasik-1422007 Email:- info@mantrasresources.com & uksharma@mantrasresources.com  
EIA study in an area covering a circle of radius of 10 km with project area as the center should be carried out.

**A. STANDARD TERMS OF REFERENCE**

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

2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4) Site Details

- i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.
- ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)
- iii. Details w.r.t. option analysis for selection of site
- iv. Co-ordinates (lat-long) of all four corners of the site.
- v. Google map-Earth downloaded of the project site.
- vi. Land allotment/ Land ownership letter should be submitted.
- vii. 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.
- viii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
- ix. 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)
- x. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
- xi. Geological features and Geo-hydrological status of the study area shall be included.
- xii. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)
- xiii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- xiv. R&R details in respect of land in line with state Government policy.

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

- i. The PP shall obtain prior clearance from forestry and wild life angle including clearance from Standing Committee of the National Board Wild Life as applicable. It is further categorically stated that grant of EC does not necessary implies that forestry and wild life clearance shall be granted to the project and that their proposals for forestry and wild life clearance will be considered by the respective authorities on their merits and Decision taken. The investment made in the project, if any, based on environment clearance so granted, in anticipation of the clearance from forestry and wildlife angle shall be entirely at the cost and risk of the project proponent and Ministry of Environment & Forests shall not be responsible in this regard in any manner.
- ii. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)
- i. 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)
- ii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
- iii. 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.
- iv. 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.
- v. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.

6) Environmental Status

- i. Determination of atmospheric inversion level at the project site and site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
- 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. The PP would provide proposal for four no. of peizometric wells at suitable locations in the industrial area and quarterly monitoring of these wells water would be started before allotment of plots to the industries.
- vi. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.
- vii. Ground water monitoring at minimum at 8 locations shall be included.
- viii. Noise levels monitoring at 8 locations within the study area.
- ix. Soil Characteristic as per CPCB guidelines.
- x. 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 Modeling 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 modeling 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 modeling - in case of discharge in water body
- iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum-rail transport shall be examined.
- iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.
- v. Details of stack emission and action plan for control of emissions to meet standards.

- vi. Measures for fugitive emission control
- vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
- ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
- x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
- xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
- xii. Action plan for post-project environmental monitoring shall be submitted.
- xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control(HAZOP Study). 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, Eudiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.
- iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,

- iv. Details of the facilities provided for the labourers like shelter, health facility, safe drinking water, sanitation facility, fuel/LPG for cooking, education for their children, crèche, recreation etc. should be separately given along with budgetary provision and commitment thereof.
- v. 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
- v. The Socio economic survey of the population in local surrounding area, to assess their felt needs may be carried out in pre and post project implementation period. Based upon the findings of this survey, plans for addressing the issues according to felt need pertaining to social upliftment, habitat, drinking water, sanitation, health, educational, employment, livelihood activities etc. for the benefit to the society, may be prepared and financial provision for the same may be kept in the project. The socio-economic influence to the local community shall be elaborated including CSR activities. Details in this regard may be provided in the EIA/EMP report. The PP may explore to initiate CSR activities in the area along with EIA studies as per annexure.

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 for Socio-economic development activities need to be elaborated upon.

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

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

**B. SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR SYNTHETIC ORGANIC CHEMICALS INDUSTRY (DYES & DYE INTERMEDIATES; BULK DRUGS AND INTERMEDIATES EXCLUDING DRUG FORMULATIONS; SYNTHETIC RUBBERS; BASIC ORGANIC CHEMICALS, OTHER SYNTHETIC ORGANIC CHEMICALS AND CHEMICAL INTERMEDIATES)**

1. Details on solvents to be used, measures for solvent recovery and for emissions control.
2. Details of process emissions from the proposed unit and its arrangement to control.
3. Ambient air quality data should include VOC , SO<sub>2</sub> and NO<sub>x</sub>, other process-specific pollutants\*like including NH<sub>3</sub>\*, chlorine\*, HCl\*, HBr\*, H<sub>2</sub>S\*, HF\*,etc.,(\*-as applicable)
4. Work zone monitoring arrangements for hazardous chemicals.
5. Detailed effluent treatment scheme including segregation of effluent streams for units adopting 'Zero' liquid discharge.
6. Specification and detail of pollution control equipments at all stages of manufacturing should be given.
7. Action plan for odour control to be submitted.
8. A copy of the Memorandum of Understanding signed with cement manufacturers indicating clearly that they co-process organic solid/hazardous waste generated, in case waste is proposed to be used for this purpose.
9. Authorization/Membership for the disposal of liquid effluent in CETP and solid/hazardous waste in TSDF, if any.
10. Action plan for utilization of MEE/dryers salts.
11. Material Safety Data Sheet for all the Chemicals are being used/will be used.
12. Details of incinerator/s (if any) if to be installed.
13. Risk assessment for storage and handling of hazardous chemicals/solvents(HAZOP Study). Action plan for handling & safety system to be incorporated.
14. Arrangements for ensuring health and safety of workers engaged in handling of toxic materials.

In the final EIA /EMP report , compliance of TORs should be reported point wise in a statement of three columns as indicated below:-

S. No	Items in the letter of the TORs	Reply / Response by the PP
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Yours faithfully,

**(T. S. Ranawat)**  
Secretary,  
SEAC,Rajasthan



