

**M/s Steam Oil & General Industries**

**M/s Steam Oil & General  
Industries**

**at**

**C-187, UPSIDC, Industrial  
Area, Bulandshahr Road,  
Ghaziabad – 201001**

**Proposed Terms  
of  
References**

**Proposed Term of Reference**

# **M/s Steam Oil & General Industries**

## **Proposed Terms of Reference (TOR)**

### **Objective of EIA study**

The objective is to carry out the Environmental Impact Assessment (EIA) study to identify, predict and evaluation of potential environmental and socio-economic effects which may result from the unit M/s Steam Oil & General Industries of Common Hazardous Waste Treatment, Storage and Disposal Facility (TSDF) for Hazardous waste management and to develop suitable Environment Management Plan (EMP) to mitigate the undesirable effects.

The study is aimed at:

- a) Establishing the existing environmental conditions, identifying potential environmental impacts and identifying areas of significant environmental concerns due to the proposed project;
- b) Prediction of impacts on environment, socio-economic conditions of the people etc. due to the proposed project.
- c) Preparation of Environmental Management Plan (EMP);
- d) Development of post project environmental monitoring programme.

The Environment Impact Assessment (EIA) and Environment Management Plan (EMP) reports shall be prepared for seeking necessary environmental clearances from the Ministry of Environment Forests & Climate Change, Government of India and Pollution Control Board according to the relevant EIA notifications and its subsequent amendments.

The EIA study shall be conducted as per the applicable rules/guidelines of Ministry of Environment and Forests & Climate Change, Govt. of India / Uttar Pradesh Pollution Control Board (UPPCB) including general/sectoral provisions

### **Terms of Reference (TOR) for EIA Study Report**

EIA Study generally shall include requirements of the MOEF&CC, GOI and UPPCB. The EIA study will necessarily include but not get restricted to the following:

The EIA shall include

- a. Literature review,
- b. Field studies
- c. Impact assessment and preparation of the EIA/EMP document covering the disciplines of Meteorology, Air quality, Noise, Water Quality, Land Use, Soils, Water

# **M/s Steam Oil & General Industries**

Use, Demography and Socio-economics, Ecology etc.

## **Stage 'A'**

Establishing the relevant features of the project, those are likely to have an impact on the environment during construction and operational phases. Collect the baseline data for status for air, water, soil, noise, socio economic and ecological conditions.

## **Stage 'B'**

Assessment likely emissions, effluent and solid/Hazardous waste quantities from the proposed facility, and assessment of impacts using scientific tools to delineate post project scenario.

## **Stage 'C'**

Suggesting adequate pollution control measures to offset adverse impacts if any. Prepare the EIA and EMP documents. Defence of the study findings before the regulatory authorities.

Stages A, B & C may have concurrent activities. An outline of the activities to be undertaken for each stage is given below:

### **Stage 'A'**

#### **Study Area**

The study area shall be up to 10 km radial distance from the project with reference to air, water, soil, noise, Socio economic and ecological studies.

#### **Baseline Conditions**

The baseline environmental conditions shall be established using GSI Toposheets, through literature survey and field investigations. In addition to the above, information on the location of towns/cities, national parks, wildlife sanctuaries and ecologically sensitive areas like tropical forests, important lakes, bio-sphere reserves and sanctuaries within impact area shall be furnished.

A review and analysis of the information available with various governmental, educational and other institutions shall be carried out for each discipline. Based upon preliminary review of the available data, detailed field work shall be planned to collect information on the parameters critical to characterize the environment of the area. The baseline environmental studies shall be undertaken in the following parameters.

# **M/s Steam Oil & General Industries**

## **Parameters**

Meteorology, Air quality, Noise, Water Quality, Water Use, various aspects to be covered under different disciplines is as follows:

### **(a) Meteorology**

Following meteorological parameters of the area shall be measured at the project site. In addition, data shall be collected from the nearest IMD observatory also for reference.

1. Temperature (Dry & Wet)
2. Barometric pressure
3. Relative humidity
4. Wind speed and direction, and

### **(b) Air Quality**

Ambient Air Quality shall be monitored at requisite number of locations considering the prevailing meteorological conditions, topography, nearby villages etc. The parameters for monitoring shall be PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub> and CO.

### **(c) Noise**

Noise monitoring survey shall be carried out to characterize the noise environment in the study area. The noise level shall be measured using high level precision sound level meter at suggested number of locations. Attenuation model shall be developed to predict the noise level in the surrounding areas.

### **(d) Water**

Surface water samples and Ground water samples within proposed project site shall be collected and analyzed for physical, chemical & biological parameters.

### **(e) Land Environment**

Information on ecologically sensitive locations within the study area will be collected.

Reserve and protected forests that falls in the study area and its direction and distance from the project site will be noted.

Land use pattern of the area / block to be collected from revenue records. Various physiographic landforms as per SOI map will be provided. Satellite Imagery of the area to establish latest landforms of the study area and core zone will be procured from Google Earth / Wikimapia. Characterization of Soil, Cropping pattern, Vegetation covers etc.

## **M/s Steam Oil & General Industries**

### **(f) Socio Economics**

- Data on demography, traditional skills, sources of livelihood within the study area.
- Socio-economic profile of the people
- Human settlement, sources of livelihood
- Data relating to historically, culturally and ecologically important places in core as well as buffer areas

### **(g) Biological Environment**

Biological Environment shall include;

- Terrestrial and aquatic flora & fauna.
- The listing of flora and fauna will be carried out by referring to the published documents of Forest / Wildlife Department and observations recorded by the Scientists during the field visits.

### **(h) Risk Assessment and Disaster Management Plan**

Risk assessment shall include the following:

- Identification and type of risk associated with proposed project & transportation.
- Occupational health hazards. Disaster management plan and emergency response system to deal with risk.

### **Stage 'B'**

#### **Assessment of Environmental impacts of the project**

With the knowledge of baseline conditions in the study area and proposed project activities, impact on the environment shall be discussed in detail covering flue gas emissions, discharge of liquid effluents and particulates emission during construction, noise & solid waste generation etc. Detailed projections and air dispersion modelling shall be made by using AERMOD 8.5 to reflect influence of the proposed project on different environmental components. The projections shall identify critical environmental conditions due to operation of the project. It shall also to be established as to whether these critical conditions shall be further degraded with the proposed project and what additional environmental conditions are likely to become critical.

Both short term and long term impacts on sensitive areas if any such as habitat of endangered species of wildlife or plants, sites of historical and cultural monuments shall be determined. Important centres with concentrated population in the study area shall be established. Assessment of potential damage to terrestrial and aquatic flora and fauna due to flue gas emissions, discharge of effluents, noise pollution, ash disposal, and change in land use pattern, habitat degradation and

## **M/s Steam Oil & General Industries**

fragmentation, anthropogenic activities from the proposed project and delineation of guidelines to minimize adverse impacts is to be done. Assessment of economic benefits arising out of the project shall be done.

### **Stage 'C'**

#### **Environmental Management Plan**

At this stage, it may become apparent that certain mitigation measures are necessary to offset the impacts from the proposed project. Environmental management plan and pollution control measures shall be necessary to meet the requirements of the regulatory agencies. Environmental Management Plan shall consist of mitigation measures for item-wise activity to be undertaken for construction and operation of the facility for its entire life cycle to minimize adverse environmental impacts. It shall also delineate the environmental monitoring plan for compliance of various environmental regulations.

The EMP shall include the following aspects but not restricted to them:

1. Delineation of mitigation measures for all the identified significant impacts;
2. Green Belt plan
3. EMP Implementation schedule with costs;
4. Budget support in the project cost
5. Post project monitoring plan