

J-11011/127/2016-IA II (I)
Government of India
Ministry of Environment, Forest and Climate Change
(I.A. Division)

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Dated: 02nd August, 2016

To,

Shri Surinder
CEO
M/s Pioneer Industries Ltd.
A 3-4, Industrial Growth Center,
Defence Road, VPO Ranipur,
Pathankot, Punjab

Subject: Expansion of grain based distillery unit (125 KLPD to 200 KLPD) and expansion of cogeneration power plant (3.65 MW to 9 MW) at A-2, A-3 and A-4, Industrial Growth Center, Village Ranipur, Defence Road, Tehsil and District Pathankot, Punjab by M/s Pioneer Industries Limited – reg. TOR

Ref. No.: Your Proposal no. IA/PB/IND2/52919/2016 ; dated 15th April, 2016.

Sir,

Kindly refer your proposal no IA/PB/IND2/52919/2016 dated 15th April, 2016 along with project documents including Form-I, Pre-feasibility Report and draft 'Terms of Reference' as per the EIA Notification, 2006. It is noted that the proposal is for expansion of grain based distillery unit (125 KLPD to 200 KLPD) and expansion of cogeneration power plant (3.65 MW to 9 MW) at A-2, A-3 and A-4, Industrial Growth Center, Village Ranipur, Defence Road, Tehsil and District Pathankot, Punjab by M/s Pioneer Industries Limited. The following product will be manufactured under proposed project:

S.No.	Existing capacity	Proposed capacity	Total
ENARS	125 KL	75 KL	200 KL
By product			
CO2	80 MT	50 MT	130 MT
Fusel oil	1.5 MT	1 MT	2.5 MT
DDGS	50 MT	30 MT	80 MT
IMFL/country liquor	10000 cases	5000 cases	15000 cases
Electric power	3.65 MW	5.35 MW	9.0 MW

2.0 Draft Terms of Reference (TOR) have been discussed and finalized during 9th Expert Appraisal Committee (Industry-2) meeting held during 27-28th June, 2016 for preparation of EIA/EMP report. The Committee prescribed the following Specific and Additional TOR in addition to Generic TOR provided at Annexure-I (refer to Ministry's website) for preparation of EIA-EMP report:

A. Specific TOR

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1. List of existing distillery units in the study area along with their capacity and sourcing of raw material.
2. Number of working days of the distillery unit.
3. Details of raw materials such as molasses/grains, their source with availability.
4. Details of the use of steam from the boiler.
5. Surface and Ground water quality around proposed spent wash storage lagoon, and compost yard.
6. Plan to reduce spent wash generation within 6-8 KL/KL of alcohol produced.
7. Proposed effluent treatment system for molasses/grain based distillery (spent wash, spent lees, condensate and utilities) as well as domestic sewage and scheme for achieving zero effluent discharge (ZLD).
8. Proposed action to restrict fresh water consumption within 10 KL/KL of alcohol production.
9. Details about capacity of spent wash holding tank, material used, design consideration. No. of peizometers to be proposed around spent wash holding tank.
10. Action plan to control ground water pollution.
11. Details of solid waste management including management of boiler ash, yeast, etc. Details of incinerated spent wash ash generation and its disposal.
12. Details of bio-composting yard (if applicable).
13. Action plan to control odour pollution.
14. Arrangements for installation of continuous online monitoring system (24x7 monitoring device)

B. Additional TOR

- i. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.
- ii. No groundwater to be used for existing and proposed expansion. Freshwater to be drawn from River Ravi.
- iii. Adequate capacities of boilers to be worked out on basis of requirement

3.0 These 'TORs' should be considered for the preparation of EIA/EMP for expansion of grain based distillery unit (125 KLPD to 200 KLPD) and expansion of cogeneration power plant (3.65 MW to 9 MW) at A-2, A-3 and A-4, Industrial Growth Center, Village Ranipur, Defence Road, Tehsil and District Pathankot, Punjab by M/s Pioneer Industries Limited in addition to all the relevant information as per the 'General Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The EIA/EMP as per TORs should be submitted to the Chairman, Punjab Pollution Control Board, for public consultation. The SPCB shall conduct the public hearing/public consultation as per the provisions of EIA notification, 2006.

4.0 You are requested to kindly submit the final EIA/EMP prepared as per TORs and incorporating all the issues raised during Public Hearing / Public Consultation to the Ministry for considering the proposal for environmental clearance **within 3 years as per the MoEF O.M. No. J-11013/41/2006-IA.II (I) dated 8th October, 2014.**

5.0 The consultants involved in the preparation of EIA/EMP report after accreditation with Quality Council of India/ National Accreditation Board of Education and Training (QCI/NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other Organization(s)/Laboratories including their status of approvals etc.

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(Lalit Bokolia)
Additional Director

Copy to:

- 1 The Chairman, Punjab State Pollution Control Board, Nabha Road, Patiala – 147 001, Punjab.
- 2 Additional Principal Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (NZ), Bays No. 24-25, Sector 31 A, Dakshin Marg, Chandigarh – 160030.



(Lalit Bokolia)
Additional Director

Compliance of the Terms of Reference for conduction of Environmental Impact Assessment Study of the proposed expansion of the existing grain-based distillery plant from 125 KLPD to 200 KLPD and cogeneration power plant from 3.0 MW to 9.00 MW along with additional 6000 cases/day of IMFL/IMIL bottling unit at the existing plant located at plot no. A-2(P), A-3 and A-4, Industrial Growth Center, Village Ranipur, Defence Road, Tehsil and District Pathankot, Punjab.

S. No.	Terms of Reference	Compliance
	Standard Terms of Reference	
1.	Executive Summary	Executive Summary is attached in the EIA report.
2.	Introduction	
i.	Details of the EIA Consultant including NABET accreditation	Information about the EIA Consultant including NABET accreditation is given in article 1.2 of Chapter 1.
ii.	Information about the project proponent	Information about the project proponent is given in article 1.1 of Chapter 1.
iii.	Importance and benefits of the project	Benefits of the project have been described in Chapter 8.
3.	Project Description	
i.	Cost of project and time of completion	Details are given in article 2.0 of Chapter 2 and article 5.4.3 of Chapter 5.
ii.	Products with capacities for the proposed project	Product details with capacity are given in article 2.5 of chapter 2
iii.	If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.	Details of existing products with capacities are given in article 2.5 of chapter 2.
iv.	List of raw materials required and their source along with mode of transportation.	Raw Material details and their source details are given in article 2.4 of chapter 2
v.	Other chemicals and materials required with quantities and storage capacities	All the raw material details are given in article 2.4 of chapter 2
vi.	Details of Emission, effluents, hazardous waste generation and their management.	Details of Emission, effluents, hazardous waste generation and their management are given in article 2.10 of chapter 2 and 5.1 of chapter 5.
vii.	Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).	The details are given in article 2.9 and 2.10 of chapter 2.

viii.	Process description along with major equipment and machineries, process flow sheet (quantitative) from raw material to products to be provided.	Process description along with major equipment and machineries are given in article 2.6 of chapter 2. Process flow sheet (quantitative) from raw material to products is submitted in water balance.
ix.	Hazard identification and details of proposed safety systems.	Details of hazard identification and details of proposed safety systems are given in article 7.1 of chapter 7.
x.	Expansion/modernization proposals: Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SE/IAA 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. 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.	Copy of the Environmental Clearance is attached as annexure - 2. Copy of CTO obtained from PPCB and its compliance is attached as annexure – 8.
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.	The location details of the site are given in Chapter 9. Justification of selection of site is given in article 2.1 of Chapter 2.
ii.	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)	Toposheet showing the location of the site of 1 : 50000 scale is enclosed as figure 3.1 in chapter 3.
iii.	Details w.r.t. option analysis for selection of site	Details of the selection of site are given in article 2.1 of Chapter 2.
iv.	Co-ordinates (lat-long) of all four corners of the site.	Co-ordinates (lat-long) of all four corners of the site on a google map is attached as annexure.
v.	Google map-Earth downloaded of the project site.	Google earth map of the site is included as annexure.
vi.	Layout maps indicating existing unit as well as proposed unit indicating storage area,	Layout map indicating existing unit as well as proposed unit indicating

	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.	storage area, plant area, greenbelt area, utilities etc. is attached as annexure.
vii.	Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.	Photographs of the proposed and existing project are attached as annexure 15.
viii.	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)	Landuse break-up of total land of the project site is given in article 2.2 of Chapter 2.
ix.	A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area.	List of major industries within study area (10 km radius) is attached as annexure 9. Land use details of the study area are enclosed as figure 3.2 in chapter 3.
x.	Geological features and Geo-hydrological status of the study area shall be included.	Geological features and Geo-hydrological have been described under article 3.4.1 of chapter 3.
xi.	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)	No nearby river within 5 km. radius of project site.
xii.	Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.	The land documents of the proposed project are attached as annexure 5.
xiii.	R&R details in respect of land in line with state Government policy	No R&R being done for the project.
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)	Not 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)	Satellite imagery showing of the project area added as image 3.3 of the chapter 3
iii.	Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.	Not Applicable
iv.	The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere	Not Applicable

	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.	Not Applicable
vi.	Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board of Wildlife.	Not Applicable
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.	Ground level concentration of pollutants is submitted in article 4.4.2 of chapter 4 and Site specific micro meteorological data is submitted in article 3.1 of chapter 3.
ii.	AAQ data (except monsoon) at 8 locations for PM ₁₀ , PM _{2.5} , SO ₂ , NO _x , 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.	One season site-specific micro-meteorological data, AAQ data (winter season) for PM ₁₀ , PM _{2.5} , SO ₂ and NO _x , water and noise monitoring data is given in chapter 3 of the EIA report.
iii.	Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQOM 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.	Raw data of all AAQ measurement for 12 weeks is submitted in table 3.6 in chapter 3
iv.	Surface water quality of nearby River (60 m upstream and downstream) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.	Surface water quality of river Ravi is submitted in table 3.8 in chapter 3.
v.	Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.	No the site is not located near any polluted stretch identified by CPCB/MoEF&CC.
vi.	Ground water monitoring at minimum at 8 locations shall be included.	Ground water quality analysis data is given in article 3.4 of chapter 3.
vii.	Noise levels monitoring at 8 locations within the study area.	Noise levels monitoring details are given in article 3.3 of Chapter 3.
viii.	Soil Characteristics as per CPCB guidelines	Soil Monitoring results are given in article 3.5 of chapter 3.
ix.	Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to the proposed project, parking arrangements etc.	Traffic study analysis with the existing PCU/hour and the projected addition in PCU/hour due to proposed expansion is given in article 4.1.7

		of chapter 4.
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 area found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.	Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area is given in article 3.6 of chapter 3.
xi.	Socio-economic status of the study area	Socio-economic status of the study area is given in article 3.7 of chapter 3.
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 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.	Ground level concentration of pollutants based on the site specific meteorological features is submitted in article 4.4.2 of chapter 4.
ii.	Water Quality modelling – In case, of discharge of water body	N.A., The industry is using Zero Liquid Discharge concept and would not be discharging any effluent outside the industry.
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 conveyorcum- rail transport shall be examined.	No impact of the transport of the raw materials and end products on the surrounding environment.
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.	Treatment details of the waste water to be generated by proposed project is given in article 5.1.2 of chapter 5.
v.	Details of stack emission and action plan for control of emissions to meet standards.	Details of stack emission and action plan are given in article 5.1.1 of chapter 5.
vi.	Measures for fugitive emission control	Measures to control fugitive emissions are given in article 5.1.5 of chapter 5.

vii.	<p>Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.</p>	<p>Details of solid wastes management and hazardous waste management are given in article 5.1.3 and 5.1.4 of chapter 5.</p>
viii.	<p>Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.</p>	<p>Details of flyash management are given in article 5.1.3 of chapter 5.</p>
ix.	<p>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.</p>	<p>Green area details are given in article 5.2 of chapter 5.</p>
x.	<p>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.</p>	<p>Rain water harvesting details are given in article 5.3 of chapter 5</p>
xi.	<p>Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.</p>	<p>Details of cost of the project, on pollution control measures and recurring cost are given in article 5.4.3 of chapter 5.</p>
xii.	<p>Action plan for post-project environmental monitoring shall be submitted</p>	<p>Post-project environmental monitoring details are given in chapter 6.</p>
xiii.	<p>Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.</p>	<p>Articles 7.2 and 7.3 details the Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control.</p>
8.	<p>Occupational Health</p>	
i.	<p>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,</p>	<p>Details of Occupational & Safety Hazards are given article 7.1 of chapter 7</p>
ii.	<p>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 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</p>	<p>Details given in article 7.1 of chapter 7.</p>

	exposure and department wise.	
iii.	Annual report of health status of workers with special reference to Occupational Health and Safety.	Details given in article 7.1 of chapter 7.
iv.	Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.	Details given in article 7.1 of chapter 7.
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.	The Corporate Environment Policy is detailed in article 8.1 of Chapter 8.
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.	No, Not Applicable
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.	Hierarchical order for the implementation of CER is detailed in annexure - 12.
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.	Noncompliance reporting mechanism is detailed in article 8.1.2 of Chapter 8.
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.	Details regarding infrastructure facilities during construction phase and operation phase are given in article 4.1 of chapter 4.
11.	Enterprise Social Commitment (ESC)	Adequate funds (upto 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details are given in article 8.2 of chapter 8.
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.	No litigation pending against the project.
13.	A tabular chart with index for point wise compliance of above TOR.	Point wise compliance of TOR is made.

14.	SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR INDUCTION / ARC FURNACE / COUPLA FURNACE OF 5TPH OR MORE CAPACITY	
i.	List of existing distillery units in the study area along with their capacity and sourcing of raw material.	There are no existing distilleries in the study area.
ii.	Number of working days of the distillery unit.	Details are given in article 2.0 of Chapter 2.
iii.	Details of raw materials such as grains, their source with availability.	Details of raw materials and their source and availability are given in article 2.3 of Chapter 2.
iv.	Details of the use of steam from the boiler.	Details of steam utilization are given in annexure - 14
v.	Plan to reduce spent wash generation within 6-8KL/KL of alcohol produced.	Details of spent wash generation are given in figure 2.2 (Water Balance) of Chapter 2.
vi.	Proposed effluent treatment system for grain-based distillery (spent wash, spent lees, condensate and utilities) as well as domestics sewage and scheme for achieving zero effluent discharge (ZLD).	Details of the effluent treatment system are given in article 5.1.2 of Chapter 5.
vii.	Proposed action to restrict fresh water consumption within 10KL/KL of alcohol production.	Details of the overall fresh water consumption are given in article 2.10 of Chapter 2.
viii.	Details about capacity of spent wash holding tank, material used, design consideration. No. of piezometers to be proposed around spent wash holding tank.	Details of spent wash holding lagoon are attached as annexure. Ground water monitoring including piezometers are given in Chapter 6.
ix.	Action plan to control ground water pollution.	Action plan for control of ground water pollution are given in article 5.1.2 of Chapter 5.
x.	Details of solid waste management including management of boiler ash, yeast, etc.	Solid wastes management details are given in article 5.1.3 of Chapter 5.
xi.	Commitment to install dryer	Commitment to install a drier is given in process details at article 2.5.9 of Chapter 2.
xii.	Action plan to control odor pollution	Action plan to control fugitive emissions and odor are given in article 5.1.5 of Chapter 5.
xiii.	Arrangements for installation of continuous online monitoring system	Details are given in Chapter 6.