Proceedings of the public hearing conducted on 22.06.2018 in connection with the application filed by M/s Indian Oil Corporation of Ltd., for obtaining Environmental Clearance as required under the EIA notification dated 14.9.2006 for enhancing the petroleum product storage capacity of the terminal from 82,515 KL to 1,99,725 KL located in the revenue estate of Village Kammomajra Khurd, Jind Road, Sangrur.

The following were present to supervise the proceedings:

- S. Upkar Singh,
 Addl. District Commissioner (G),
 Sangrur
- Er. Harjit Singh,
 Environmental Engineer,
 Punjab Pollution Control Board,
 Regional Office, Sangrur.
- Er.Parveen Kumar,
 Asstt. Environmental Engineer,
 Punjab Pollution Control Board,
 Head Office, Patiala

Assistant Environmental Engineer, Punjab Pollution Control Board, Head Office, Patiala welcomed the officers supervising and presiding over the hearing and people from adjoining towns/villages, who came to attend the public hearing of the project in connection with the application filed by M/s Indian Oil Corporation of India Ltd., in the office of the State Environment Impact Assessment Authority (SEIAA), Punjab, for getting Environmental Clearance under EIA Notification no. 1533 (E) dated 14.9.2006 for enhancing the petroleum product storage capacity of the terminal from 82,515 KL to 1,99,725 KL by constructing petroleum product storage tanks 2 X 600 KL for ethanol, 4 X 25,000 KL for HSD, 1 X 12,000 KL for HSD and 1 X 4,010 KL for HSD. He apprised the public present there about the requirement of conducting the public hearing before deciding on the application filed by the company for getting the said clearance for carrying out expansion of the unit. He also brought into the notice of public that the industry has submitted copies of draft rapid EIA report alongwith the executive summary of the same and a copy of each such document was placed in the office of Deputy

Commissioner, Sangrur; Chairman, Zila Parishad, Sangrur, General Manager, District Industrial Centre, Sangrur at Malerkotla, Regional Office of MoEF at Chandigarh and Environment Engineer, Punjab Pollution Control Board, Regional Office, Sangrur for access to the public and other stakeholders. He further brought out that a notice of public hearing was published in two prominent newspapers namely, 'The Tribune' (English Daily) and 'Ajit' (Punjabi Daily) on 19.05.2018 to make the public aware of the date, time & venue of the public hearing and about the places/offices where the public could access the draft EIA report and its executive summary report before the said hearing. Thereafter, he requested the representative/Environmental Consultant of the industry to elaborate about the main features of the project and the draft EIA study report.

The representative from the company Sh. Sukhbir Singh, Senior Manager brought out the details of the proposed plan of the project before the public as under:-

BRIEF COMPANY PROFILE

- Indian Oil Corporation Limited (IOCL) is an Indian state –Controlled Oil and gas company headquartered in Mumbai, Maharashtra.
- Indian Oil Corporation Ltd. was formed in 1964 with the merger of Indian Refineries Ltd. (Estd. 1958).
- Indian Oil Corporation Ltd. (Indian Oil) is India's largest public corporation in terms of revenue and is one of the Maharatna status companies of India.
- A Govt. of India Enterprises involved in Refining and Marketing of Petroleum Products.
- IOCL has been ranked 168th in fortune global 500 rankings of the world's biggest corporations for the year 2015
- IOCL have own refinery with capacity of 80.49 MMTPA for crude oil and petroleum products and 9.5 MMSCMD for gas.
- The Corporation's cross-country pipelines network, for transportation of crude oil to refineries and finished products to high-demand centers, spans over 11,220 km.

 Oil marketing companies have projected an increase in demand of Petroleum Product in future due to increase in it's domestic & industrial use. The demand is likely to increase substantially over the years to come.

NEED AND JUSTIFICATION OF THE PROJECT

Petroleum products have became need of our day to day activities. Along with increase in population the demand for petroleum products is increasing exponentially. After detailed surveys and studies IOCL predicted the expected need of petroleum products which will be catered through Terminals of Pipeline in Punjab. This project will help to cater demand in coming years smoothly. Also, through this project ethanol mixing will be taking place which will be a major step for reduction of pollution in entire Punjab.

MAGNITUDE OF OPERATIONS

IOCL proposed to enhance the petroleum product storage capacity of the terminal from 82,515 KL to 1,99,725 KL by constructing petroleum product storage tanks of capacities 2 X 600 KL for ethanol, 4 X 25,000 KL for HSD, 1 X 12,000 KL for HSD and 1 X 4,010 KL for HSD at Indian Oil Corporation Ltd.(MD), Kammomajra Khurd, Jind Road, Sangrur-148001 (Punjab). The cost of the expansion project is estimated around 108 Crores.

DETAILS OF PROPOSED POL STORAGE CAPACITY OF THE TERMINAL

Tank. No.	Product	Class	Proposed Capacity (KL)
	Details		
21	HSD	В	25,000
22	HSD	В	25,000
23	HSD	В	25,000
24	HSD	В	25,000
25	Ethanol	A	600
26	Ethanol	A	600
10	HSD	В	12,000
4	HSD	В	4,010
Total Proposed Capacity			1,17,210 KL
Existing Capacity			82,515 KL
Total Capacity after Expansion 1,99,725 KL			9,725 KL

DETAILS OF EXISTING POL STORAGE CAPACITY OF THE TERMINAL

Sr. No.	T. No.	Product	Class	Capacity (KL)
1	01	MS	Α	5500
2	02	MS	Α	5500
3	03	MS	Α	5500
4	05	SKO	В	3610
5	06	SKO	В	3610
6	07	HSD	В	16300
7	08	HSD	В	16300
8	09	HSD	В	16300
9	11	MS	Α	8250
10	12	HSD	В	20
11	13	ETHANOL	Α	70
12	14	ETHANOL	Α	70
13	18	ETHANOL	Α	130
14	19	SLOPE OIL		20

SALIENT FEATURES OF THE PROJECT

Sr. No.	Particulars	Description	
1	Cost of the Expansion project	Rs. 108 Crore	
2	Total Proposed area	Same as the existing area 103.81 Acre	
3	Water Availability	 Water is being sourced from Bore wells inside the plant premises. Requirement for the Project will be 50 m3 for construction phase and 13.5 m3 for Operational phase from Four Existing bore wells. 	
4	Power Requirement	Power is received from Punjab State Power Corporation Ltd.,. The power requirement will remain same after the proposed expansion. Moreover, 2 DG sets are also available, 2 X 750 kVA will be used in case of emergency only.	
5	Manpower Requirement	No additional man power is required for operation. Total Manpower Requirement of the project will be 160 (25 direct and 135 indirect including contract labour and security personnel).	
6	Utility area	D. G. Set, Transformer RoomWork Shop, Watch Tower, etc	

ENVIRONMENTAL SETTING

Sr. No.	Particulars	Details		
1.	Project Location	Village :Kammomajra Khurd		
		Taluka :Sangrur		
		District : Sangrur		
		Punjab, India		
2.	Co ordinate	Lattitude :30°13′00″N		
		Longitude :75°51′43"E		
4.	Climatic Conditions	Site specific (Nov 16, Dec 1	16, Jan 2017)	
		Temp (°C)- Min 07, Max 3	•	
			elative Humidity (%) - Min- 06, Max-97	
		Rain fall Total (mm)-73.7 i		
5.	Nearest IMD station	Patiala		
6.	General Topography	The topography is Alluvial plain		
7.	Accessibility to site	Sangrur-jind highway		
8.	Nearest Railway Station	Sangrur railway station around 4 Km form Plant.		
9.	Nearest Air Port	Amritsar Airport		
10.	Nearest major city	Nearest town -Sangrur (4.2km)		
	with 2,00,000	District Headquarter – Sangrur (4.2km)		
4.4	population			
11.	Nearest water bodies	Name of the River/	Distance from Project	
		stream/Nala / canal Sirhind choe	site (Km) 5.03	
		Badru Khan Branch	3.75	
		Sheron Distributary	4.03	
		Gujran Distributory	7.45	

BASELINE ENVIRONMENTAL DATA & MITIGATIONS MEASURES

An environmental baseline monitoring was carried out as a part of EIA study during Nov 16-Dec16 –Jan 2017and included as primary and secondary data.

Ambient Air Quality

- Ambient air monitoring was carried out at six (06) locations
- It has been observed that minimum and maximum concentration of PM10 is ranged between 35.1 to 67.0 $\mu g/m^3$. The concentrations of PM2.5 vary from

11.7-25.7 $\mu g/m^3$. SO₂ concentration level ranged from 5.2-11.8 $\mu g/m^3$ and NO₂ concentration ranged from 6 to 20 $\mu g/m^3$ in the study area.CO concentration ranged between 0.071 to 0.158 mg/m³ in the study area

Mitigating Measures for Ambient Air Quality:

The impact on ambient air quality due to fugitive dust generated during construction period is not permanent in nature, and will cease with the completion of construction activity. However, use of tarpaulin for covering the material being transported in trucks, sprinkling of water will control the dust generated and proper maintenance of vehicle will be carried out. With the completion of construction phase, the impact on air quality due to fugitive dust will be minimized and this impact is reversible in nature.

NOISE ENVIRONMENT

NOISE LEVELS

Five (05) locations were identified based on the activities in the village area,
 traffic and sensitive areas like hospitals and schools.

a. Day Time Noise Levels (Leq. day)

Background noise levels were monitored in the villages within the study area. The noise levels at all locations ranged between **48.5 to 55.4** dB (A). Noise levels near industrial area ranged between 56.4 to 58.3 dB (A) during day time which was well within the prescribed limit of 75 dB (A) for industrial area.

b. Night Time Noise Levels (Leq. night)

The night time noise levels at all locations ranged between 28.6dB (A) to 38.7dB (A). Background noise levels near industrial area ranged between 35.5-40.5 dB (A) during night time which was well within the prescribed limit of 70 dB (A) for industrial area.

Mitigating Measures for Noise:

The construction equipment may result in high noise levels, which may affect
the personnel in the work zone. However, use of personal protective
equipment such as earplugs, ear muffs will mitigate any adverse impact of the
noise on working personnel.

The workers engaged in construction activities, in general, are likely to be exposed to an equivalent noise level of 70-75 dB (A). Therefore, use of protective equipment in the form of ear muffs/ earplugs in high noise level areas shall mitigate any adverse impact.

WATER ENVIRONMENT

Water Quality

7 water (surface and groundwater) samples were collected from various sampling locations, Five (05) from groundwater sources and two (02) from surface water sources.

The physico-chemical characteristics of the surface water samples collected and analysed are compared with the IS-10500 standards. The analysis results indicated that the pH ranged between 7.41 to 7.45 which are well within the specified standard of 6.5 to 8.5. The TDS was observed to be 141 to 145 mg/l which is within the permissible limit of 2000 mg/l. The Total Hardness recorded was in the range of 98.0 to 109.48 mg/l as CaCO3 which is also within the permissible limit of 600 mg/l. The nitrate was found to be in the range of 4.83 to 5.39 mg/l. The levels of chloride and sulphate were found to be in the range of 19.5 to 20.56 mg/l and 12.67 to 14.62 mg/l respectively. Heavy metals content (i.e. As, Al, Cd, Cr, Cu, Pb, Fe, Mn, Zn and Hg) were found to be very low and within specified standards. The overall surface water quality was found to be safe for drinking purpose physico-chemically.

LAND ENVIRONMENT

Soil Characteristics

Three soil samples were collected from different locations of the study area. The bulk density of the soil in the study area ranged between 1.09-1.12 g/cc which indicates favorable physical condition for plant growth, the texture of soil in the maximum areas is found to be silty clay. The soil is non toxic wrt heavy metals. Infiltration rate (cm/min) in the study area ranged from19.73 to 23.12. Water Holding Capacity (%) 41.24 to 48.62.

BIOLOGICAL ENVIRONMENT

FLORAL IN THE STUDY AREA

In the faunal diversity total 166 species were recorded from the study area.

- Trees: Total 52 species were found in the study area
- **Shrubs (small trees):** Total 47 species were enumerated from the study area.
- **Herbs:** In the study area 32 species were observed.
- **Grasses:** 23 species were enlisted from the study area
- **Climbers and Twiners:** Total 11 species of climbers/ twiners were recorded in the study area.
- Parasitic/Epiphytic Plants: 1 species of found in the study area

FAUNA IN THE STUDY AREA

This 10 km radial study area is basically industrial area situated near city and agricultural land is 5 km away from the core. In the faunal diversity total 43 species were recorded from the study area. The class wise species status as Aves (24), Mammals (08), Herpatofauna (05) and 06 species of butterflies were documented.

MITIGATING MEASURES

In order to mitigate the adverse impact likely to arise in social, cultural and economical aspects in the surrounding region and the proposed project is expected to contribute towards enlistment of local people and improvement in quality of life.

- > Supporting community health screenings, especially those addressing potential health impacts related to the industrial activities
- > Establishing vocational training programs for the local workforce to promote development of skills required by the project activity

ENVIRONMENTAL MANAGEMENT CELL (EMC)

Environment Management Cell (EMC) will be responsible for implementation of EMP. EMC consists of Plant Manager, HSSE Officer and technician.

Corporate Social Responsibility (CSR)

1. Toilet Block for boys and girls separately in government Primary school in Kammomajra in 2016-17

- 2. Drinking water R/O filtration in Kammo Majra Primary School in 2016-17
- Construction of toilet blocks for in Government Girls Senior Secondary school,
 Sunam
- 4. Proposed for construction of one class room in Government Primary school in Village Sibian in 2018-19.

Thereafter, Assistant Environmental Engineer brought into the notice of public present at the venue of hearing that as per the provisions of EIA notification dated 14.9.2006, as amended from time to time, the persons present at the venue may seek any information or clarifications on the project from the project promoter. It was also brought into the notice of the persons present there that the information or clarifications sought by them and reply given by the project proponent will be recorded in the proceedings of the hearing, which will be sent to the Ministry of Environment, Forests & Climate Change for further consideration. Accordingly, he requested the persons present in the hearing to seek information or clarifications on the project one by one after telling their name, father name and village name.

Thereupon, the detail of the information/ clarifications sought by the persons present at the venue of hearing and the reply given by the project proponent is as under:

Sr. No	Name of the person	statement / information	Reply of the query / statement / information / clarification given by the project proponent
1.	Sh. Balwinder Singh S/o Piara Singh (Former Sarpanch) Village Kamomajra Khurd, Sangrur	it was stated that RO system has been installed at village Kamomajra but,	The representatives of the company informed that RO system has been installed by Divisional office of M/s IOCL in Village Kammomajra as per information available to them. However, they assured to obtain information regarding when the RO system was installed in village Kamomajra and whether now the same is in

company

2) If an emergency occurs in the adjoining village due to project expansion or there is a war like emergency, then what arrangements has been by the IOCL made to control it so that people save their lives?

operational condition or not?

The representative of the

informed

that

reply to this question can be given in two parts:-First part relates to the onsite emergency which may occurs within the project site due to some miss-happening such Fire, Blasting, Gas leakages etc. In response to this, he informed that full arrangements have been made to control the emergencies like situations i.e. preparation of onsite and offsite emergency plans, firefighting facilities such as fire extinguishers, water sprinkler system, foam fighting system, fire hydrant piping network, personal protective basic medical equipment, Besides facilities. above measures, Mock drills have been conducted time to time to handle the onsite emergency situations wherein participation of the local village people has also been ensured.

Second part relates to emergency which may arise from the war like conditions for which unit has not much information to handle it. However, the government has arranged Arial Safety which the army does not share with them. He will also make efforts to meet the Army official to give them a special training to

control emergency situations arising from the war like conditions. If the Army officials agree to provide a special training, they will make the necessary arrangements for the said training.

On this, Upkar Sh. Singh, ADC (G) has suggested the representative of the after company that survey preparing of a nearby 29 villages at their own level to identify the anticipated emergency conditions and action plan shall be made for the disaster management and same will be implemented in the villages jointly with the help of village people. In addition to this, a seminar on the subject of Disaster Management should organized with the help of village Sarpanchs for the village people. The company representative replied that they will complete both the aforesaid task the at earliest.

3) Whether expansion of the project will create more job opportunities? In the possibilities of jobs, it has been demanded that new jobs be given to the eligible candidates of the nearest villages The representative of the company informed that the people working in the plant will work in the proposed project. This expansion will not generate any direct new job opportunities. However, indirect employment may be generated and this area will be developed which cannot be presented in figures at this time. However, it has been assured that in future whenever there is any new

			opportunities of job, the candidates of the nearest villages will be given preference according to the merit.
2.	Sh. Kamalpreet Singh S/o Karnail Singh (Sarpanch) village Kammomajra, Sangrur	1) There is no job for the young educated & graduated persons of our village. They have to do small works to earn their livelihoods. Further, with the establishment of M/s IOCL, the youth of the nearby villages have not got employment so, it has been demanded that candidate of the nearby villages should be offered jobs according to their qualifications. If our demand was not accepted, then we have strong objection for the expansion of unit. The Government during the election has also promised that they will generate employments for the youth but the promise has not been fulfilled	The representative of the company replied that this public hearing has been called for expansion of proposed POL storage capacity as already explained that no new employment will be created from the expansion of the project. But in future, due to any new expansion, if any new employment generates then priority will be given to the youth of nearest village as per their qualification.
		2) With the establishment of the company, the pond of village kammomajra has been filled up with water and they have piped out the water towards other side. The village has not benefited from the establishment of the company. Adoption of one or two villages for the company is not a big deal. After adopting the village, company is required to work for the development of the village. They can upgrade their village school	The representative of the company informed that after making resolution passed from the village panchayat, they give their suggestion to them so that company can give preference to their suggestions to put the same in the CSR activities.

		and install solar lights in their village.	
3.	Sh. Gurcharan Singh S/o Sohan Singh, Village Kammomajra Khurd, Sangrur.	1) He told that there is no sewerage system or cremation ground in his village. He requested that company should make some efforts for the development of the village.	The representative of the company informed that company has made some budget reserved for CSR activities. The company will have to spent this budget for the development of village. It would be appropriate to mention here that the Government of India have given priority to installation of solar lights to save energy and construction toilets under Swachh Bharat Abhiyaan. They can give resolution passed from village panchayat for installation of solar lights & construction of toilets in their village school. The company will take appropriate action on it.
		2) When the company was being established during year 1993-94, at that time we objected for environmental damage to be caused by the air pollution generated from the project. Village Road had also been damage by the company. The company was also requested to give employment to the youth of the village. But nothing has been done in this regard yet.	company replied that company will definitely do CSR activities for the development of the villages. S. Upkar Singh,(G) asked

	or installation of solar street lights in their village then send it to the company so that the appropriate decision can be taken.
and lights have already been installed in their village. Therefore, they	consider the matter and

Asstt. Environmental Engineer, Punjab Pollution Control Board, Head office, Patiala further requested the persons present at the venue of hearing that if anyone else wants to seek any information/ clarification on the proposed project, but no one came forward. Thereafter, he requested the persons present in the hearing to confirm, by raising their hands, as to whether they are in favour of expansion plan of the Company at this site. In response to this, about 60-70 % of the persons present at the venue of public hearing raised their hands in favour of expansion plan of the Company. This public hearing was attended by 81 persons.

No information / clarifications / comments / views / suggestions / objections on the project have been received from the public in writing to the Board, so far.

The hearing ended with vote of thanks to the Supervisor-Cum-Presiding Officer and the public present in the hearing.

(Parveen Kumar)
Asstt. Env. Engineer,
PPCB, Head Office, Patiala

(Harjit Singh) Env. Engineer PPCB,RO, Sangrur

(**Upkar Singh**), **PCS**, Addl. District Commissioner (G), Sangrur