EXECUTIVE SUMMARY

Introduction

M/S Banke Bihari Overseas Pvt. Ltd. has an existing formaldehyde manufacturing unit at Sampla-Beri Road, Ismaila, 11-B, District Rohtak, Haryana.

The existing plant was established on the basis of CTE Obtained from HSPCB dated 023.03.2019. Further, the unit came into operation phase after obtaining CTO in July 2019. Currently the plant is not in the operational stage. Now looking to the market requirement; company is proposing capacity expansion of Formaldehyde manufacturing from 80 TPD to 250 TPD

The said project/activity is covered under category "**A**" (located outside Notified Industrial Area) of item **5(f) "Synthetic Organic Chemicals"** of the Schedule to the EIA Notification, 2006, and requires prior EC from Expert Appraisal Committee, MoEF&CC.

Basic Details of the Project

S.No.	Particulars	Details		
1.	**Nature and size of the Project**	Capacity Expansion of Formaldehyde Manufacturing Unit in Existing Facility from 80 TPD to 250 TPD at Sampla-Beri Road, Ismaila, 11-B, District Rohtak, Haryana		
2.	**Location details**			
	Village /Town/Plot No.	Ismaila		
	District	Rohtak		
	State	Haryana		
3.	**Area Details**			
	Total Project Area	Total area available is 0.54 Hectare. No additional land is required for proposed expansion. Green belt is developed in an area of 0.18 Hectare (Approximately 33.33% of total land area).		
4.	**Cost Details**			
	Project Cost	**Existing**	**Estimated cost for proposed expansion**	**Total**
		Rs. 4.41 Crores	Rs. 4.59 Crores	Rs. 9.00 Crores
	EMP Budget	Rs. 0.40 Crores		
	Cost of OH&S	Rs. 0.07 Crores		
5.	**Basic Requirements of the Project**			
	Fresh Water (m3/day)	**Existing**	**For Expansion**	**Total**
		60 KLD	430 KLD	490 KLD

		Source: HWRA
	Power	**Existing** | **For Expansion** | **Total** 140 KW | 290 KW | 430 KW **Source:** UHBVN (Uttar Haryana Bijli Vitran Nigam) **DG sets as backup:** 250 KVA (existing) 250 KVA (proposed)
	Boiler	**Existing** | **Proposed expansion** | **Total** | **Fuel** 1 boiler of 900 Kg/Hr Capacity | - | 1 boiler of 900 Kg/Hr Capacity | HSD Fired
	Fuel	HSD
	Manpower	**Existing** | **For Expansion** | **Total** 5 | 7 | 12

Production Capacity

Product	Existing Capacity	Proposed Expansion Capacity	Total Capacity after expansion
Formaldehyde	80 TPD	170 TPD	250 TPD

Raw Material Detail

The major raw material is Methanol which comes in road tankers from Kandla Port, Gujarat & stored in underground M.S tanks. Methanol requirement for the existing unit is 40 TPD and after expansion, total 125 TPD will be required.

Raw Material	Existing Requirement	Proposed Requirement	Total Requirement
Methanol	40 TPD	85 TPD	125 TPD

Project Benefits

- The setting up of the proposed plant will help in providing employment in priority to local people.
- There will be an increase in indirect employment and earnings of the small time shop owners like tea vendors, transporters, etc.

- The Project proponent has planned to contribute in socio-economic development of the area and will organize Blood donation camps, Education Programs, Health camps, Health awareness programs etc. and will continue to do so.
- The easy availability of infrastructure, manpower, raw materials will reduce the production cost as well as demand supply gap.
- The development of greenbelt in and around the plant premises will improve on the aesthetics of the area. Moreover, it will help in reducing the noise levels within the plant boundary.

Mitigation Measures for Control of Pollution

Air Pollution Control Measures

- Online Stack Monitoring System as an air pollution control measures to control the emission of particulate matter, the flue gas emission will remain well within gaseous emission norms prescribed by the CPCB.
- Scrubber will be installed for scrubbing the residual Formaldehyde from the main product stream which also controls the odour problem.
- To control the air emissions from D.G. Set, stack height of 6.0 m shall be provided.
- Green belt will be developed on 33.33% area of the total project area which will help in attenuating the pollutants emitted by the plant.
- Adequate measures for control of fugitive dust emissions will be taken.

Waste Water Treatment

There will be no waste water discharge from the plant. Zero Liquid Discharge (ZLD) concepts to be adopted. Domestic waste water after treatment (in septic tank) will be fully utilized with the facility for cleaning, flushing, water sprinkling and other non portable domestic purpose.

Noise Pollution Control

- Vibrating pads & acoustic enclosure will be provided to noise generating equipment to control noise level within norms.
- Latest technology and utmost care will be taken at the time of equipment/machinery installation.
- Lubrication of moving/rotating part or component of machineries will be done on regular basis.
- The operators working in the high-noise areas will be provided with ear-muffs or plugs.

- Acoustic enclosures and silencers will be provided to the equipment wherever necessary
- Proper green belt will be developed to reduce the noise level.
- Thus, it is envisaged that there will not be any adverse impacts of noise. The greenbelt developed within the premises will have significant beneficial impacts on reduction of noise within the periphery and outside the boundary.

Land Pollution Control

- The plant will implement zero level discharge concepts. The treated water will be recycled in the process. Therefore, there will not be any negative impact on soil.
- No toxic /waste water will be disposed directly on land.
- Other hazardous solid wastes will be sent to authorized recycler or vender.
- It is envisaged that there will not be any major impacts on land environment during the operation phase as most of the effluent generated shall be reused in the process.

Solid & Hazardous Waste Generation and Disposal

- Used Oil generated will be sold to authorised recycler.
- Solid waste from evaporator will be sent to TSDF.

All the Solid & hazardous waste generated, will be collected, stored separately and disposed off as per the guidelines issued by CPCB & Haryana State Pollution Control Board.

Environmental Management Plan (EMP)

The total capital investment on environmental control measures is envisaged to be about **Rs 0.40 Crores** out of a total expansion project cost of **Rs 9.0 Crores.** Details are given in below table:

S.No.	Component	Budget in Rs (Lakhs)	Recurring Cost (per year)
1	Stack with Online Monitoring System	9	1
2	Air Pollution Control- Wet Scrubber	7	1
3	Evaporator	7	0.5
4	Rain Water Harvesting Pit	2	0.2
5	Green Belt Development	2	0.3
6	Occupational Health and Safety	7	0.2
7	Environment Monitoring	1	1

Total	**40 Lakhs ~0.40 Crores**	**4.2 Lakhs**

National Parks or Wild Life Sanctuary

There is no Wild Life Sanctuary or National Park within 10 km radius of the Project Site hence no NBWL Clearance required. No forest land involved within the project site.

Demography & Socio-Economic Environment

- Improvement of infrastructure, transportation, health care and education facility.
- Direct and indirect employment will be generated like business, contract works and development work like roads, etc. and other welfare amenities such as medical facilities, conveyance, free education, drinking water supply etc.
- The impact of employment opportunities will not be significant due to low level of education and skills in the area which will result in sourcing skilled work force from outside the immediate area.
- Skill based training to local employed people will be given by project proponent.
- The interaction and intermingling of all these people will improve the understanding of various cultures and will definitely improve and strengthen friendliness, brotherhood and unity among them.