EXECUTIVE SUMMARY

OF
DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT

For
EXPANSION OF FORMALDEHYDE MANUFACTURING UNIT IN EXISTING FACILITY FROM 100 TPD TO 200 TPD

AT VILLAGE BHAGWANPUR, KHARWAN ROAD, TEHSIL JAGADHRI, YAMUNANAGAR, HARYANA
By

M/S CHEMWOOD INDUSTRIES

EXECUTIVE SUMMARY

1. INTRODUCTION

M/s Chemwood Industries has established a Formaldehyde manufacturing unit at village Bhagwanpur, Kharwan Road, Tehsil Jagadhri, Yamunanagar, Haryana in 2019 after getting CTE vide application no. HSPCB/Consent/: 313282118YAMCTE5784449 dated 20.12.2018 from Haryana State Pollution Control Board. The unit had started the production of 100 TPD formaldehyde in 2019. Now the company is proposing capacity expansion of Formaldehyde manufacturing from 100 TPD to 200 TPD.

Table No. 0.1: Project details

S. No.	Particulars	Details
1.	Project	**Expansion of Formaldehyde Manufacturing Unit in Existing Facility from 100 TPD to 200 TPD**
	Project Proponent	M/s. Chemwood Industries
2.	Location details	
	Village /Town/Plot No.	Bhagwanpur, Kharwan Road
	Tehsil	Jagadhri
	District	Yamuna Nagar
	State	Haryana
3.	Latitude and Longitude	Latitude- 30°12′25.1″ N & Longitude- 77°22′27.9″ E
4.	Toposheet No.	H43L7 & H43L8
5.	Total Project Area	0.68 ha
6.	Project Cost	Existing: 486 Lakhs Proposed: 214 Lakhs Total: 700 Lakhs
7.	Water requirement	200 KLD Source: Ground Water Permission Status: Application will be submitted to HWRA.
8.	Manpower	Existing: 10 Proposed: 5 Total: 15 Source: Preference will be given to local public
9.	Power requirement & Supply / Source	Existing: 250 KW Proposed: 250 KW Total: 500 KW Source: UHBVN (Uttar Haryana Bijli Vitran Nigam) DG Sets: Existing: 325 KVA Proposed: 650 KVA Total: 500 975 KVA Fuel: HSD from local Vendor
10.	Working Days	Approximately 300 days

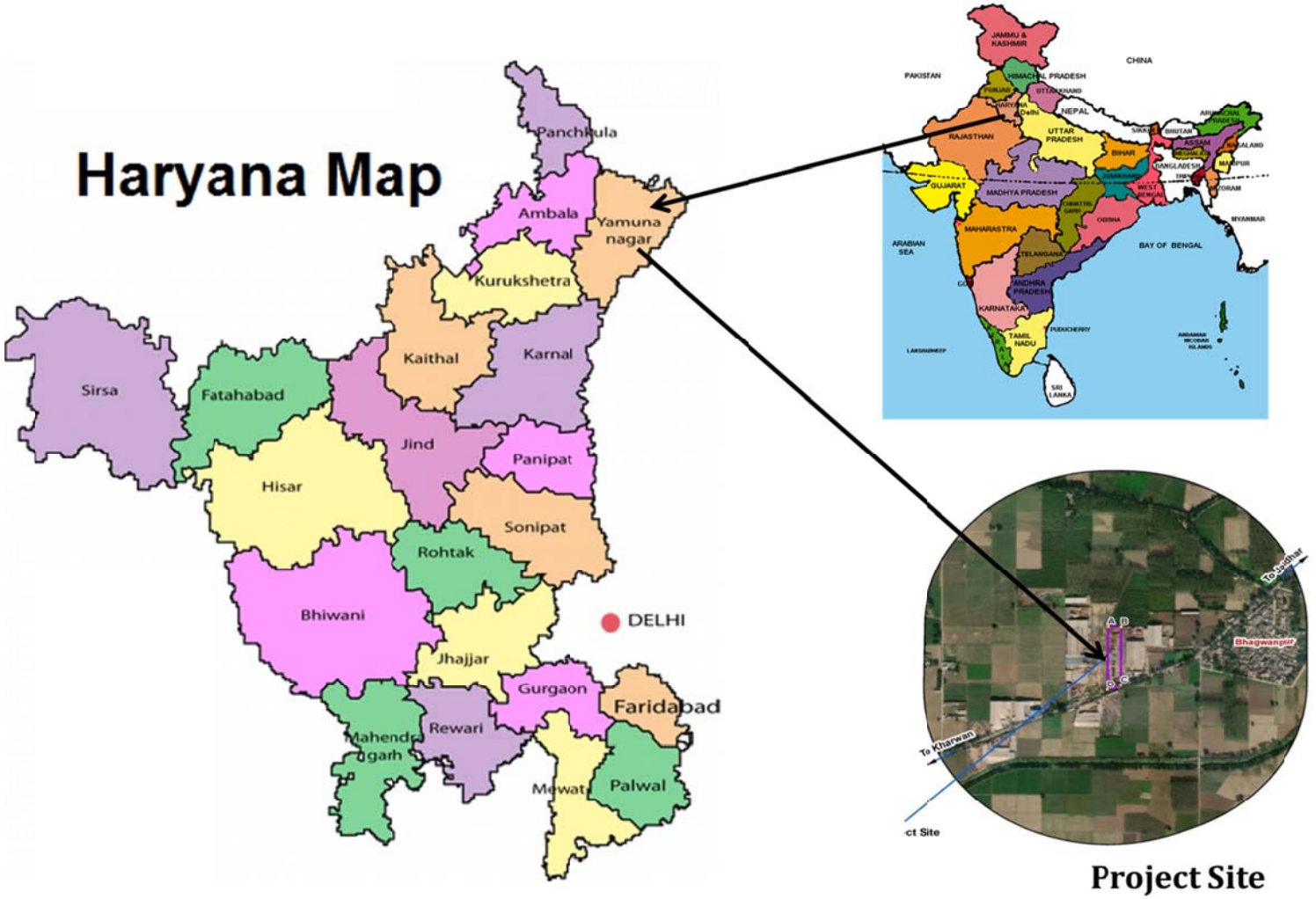

Figure No. 1: Location Map of the Project Site

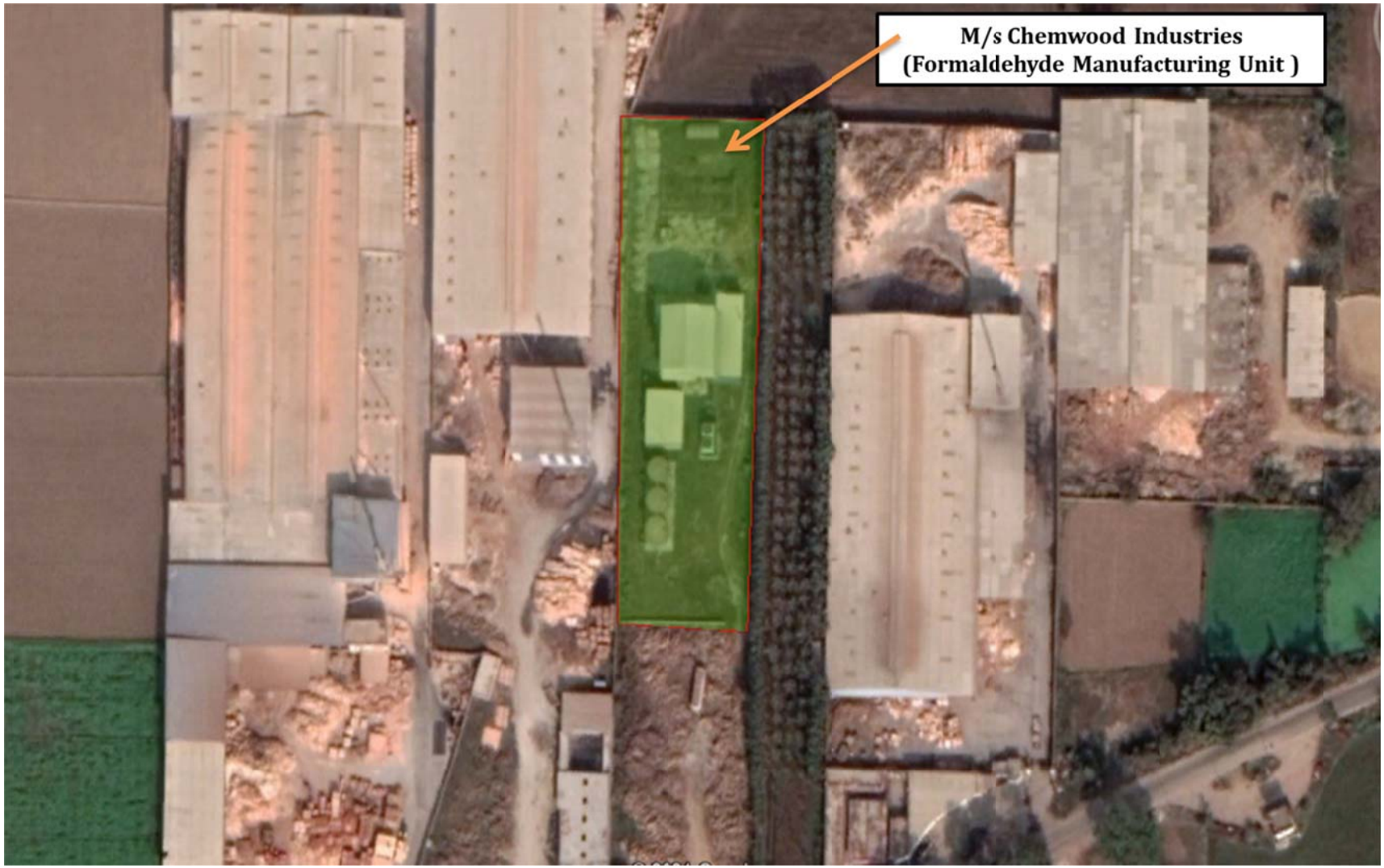

Figure No. 2: Google Map of Project Area

2. ENVIRONMENTAL BASELINE STUDY

Baseline study has been conducted from **1st March to 31st May 2020 covering on non-monsoon season** (Pre- Monsoon). Following observations has been made after study:-

Parameters	Baseline Status	Standard
Ambient Air Quality		
PM_{10}	60.1 µg/m³ and 92.1 µg/m³	100 µg/m³
$PM_{2.5}$	32.5 µg/m³ and 55.8 µg/m³	60 µg/m³
SO_2	9.1 µg/m³ and 19.3 µg/m³	80 µg/m³
NO_x	16.2 µg/m³ and 32.1 µg/m³	80 µg/m³
CO	0.57 mg/m³ and 0.98 mg/m³	2 mg/m³
Noise Level Monitoring		
Day Time (6:00 a.m. to 10:00 p.m.)	48.7 to 72.5 dB(A)	75 (Ind.) 55 (Resi.)
Night Time (10:00 p.m. to 6:00 a.m.)	39.7 to 61.9 dB (A).	70 (Ind) 45 (Resi).
Soil Quality and Characteristics		
pH	7.45 to 7.81	-
Organic Matter	0.34%-0.51%.	-
Nitrogen	183 Kg/ha. to 241 Kg/ha.	-
Phosphorus	15.16 Kg/ha. to 24.55 Kg/ha	-
Potassium	164 Kg/ha. to 242 Kg/ha.)	-
Ground Water		
pH	7.56 to 7.88	6.5-8.5
Total Hardness	214 to 281.48 mg/l	≤200 mg/L
Total Dissolved Solids	314 to 368 mg/l	≤500 mg/L
Fluoride	0.48 to 0.74 mg/l	≤ 1.0 mg/L
Surface Water		
pH	7.51 to 7.72.	**6.5-8.5**
Total Hardness	221.0 to 315.21 mg/l	≤200 mg/L
Total Dissolved Solids	460 to 571.0 mg/l	≤500 mg/L
The concentrations were found to be within permissible limits.(Compared with IS 10500:2012)		

3. MITIGATION MEASURES FOR CONTROL OF POLLUTION

1.1.1 Air Pollution Control

- All the exhaust gas emissions are channelized all through the process and reused for various purposes like heating & remained chemical utilization.
- Remaining gas will be exhausted through a chimney.
- 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 has been 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 (AGL) shall be provided.
- Green belt will be developed on 37.62 % 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

1.1.2 Waste Water Treatment

- There is no waste water discharge from the plant. Zero discharge effluent concept adopted in unit
- Fresh water requirement of the project is meeting through ground water through tubewell. Application for the same will be submitted to the concerned authority.
- Domestic wastewater is treated in Septic tank followed by soak pits.
- Rain water harvesting arrangement has been already developed.

1.1.3 Noise Pollution Control

- Green belt development (plantation of dense trees across the boundary) will help in reducing noise levels in the plant as a result of attenuation of noise generated due to plant operations, and transportation.
- Personal protective equipments like ear plugs and ear muffs will be provided to employees working in the noise prone areas.
- Time to time oiling and servicing and O and M of machineries will be done.
- Acoustic enclosure for heavy machines/equipment/D.G. already provided.

1.1.4 Land Pollution Control

- The plant implemented zero level discharge concepts. The treated water recycled in the process. Hence no effluent generation.
- No toxic /waste water will be disposed directly on land.
- Vegetation will be done on uncovered soil.

1.1.5 Odour Management

- Scrubber has been installed for scrubbing the residual Formaldehyde from the main product stream.
- Temperature will be kept under control during operation phase.
- Greenbelt will be developed.
- Good housekeeping is being maintained.

1.1.6 Solid & Hazardous Waste Generation and Disposal

- No Haz. Waste generation from the process.
- Used Oil is being sold to authorized recycler.
- Domestic solid waste is stored in separated collection bins provided in the unit. The same is sent to waste management agency in regular interval.

All the Solid & hazardous waste generated, are being collected, stored separately and disposed of as per the guidelines issued by CPCB & Haryana State Pollution Control Board and the condition given in the CTO letter.

4. **ENVIRONMENTAL MANAGEMENT PLAN (EMP) COST**

   The total capital investment on environmental control measures is envisaged to be about Rs 42.90 Lakhs out of a total project cost of Rs. 7.0 Crore. Details are given in Table-10.2. Cost towards social development work is 7.0 Lakhs

5. **POST PROJECT ENVIRONMENTAL MONITORING PARAMETER AND FREQUENCY**

   Environmental Monitoring Plan has been prepared and being implemented in the unit which includes Air Quality Monitoring, Stack Emission monitoring, Noise Level Monitoring, Water and Waste water analysis etc. The report of the same is being submitted to the HSPCB on regular basis.

6. **CONCLUSION**

M/s Chemwood Industries has committed to implement all the pollution control measures to protect the surrounding environment. The project can definitely improve the regional, state and national economy. Industrial growth is an indication of socio economic development. The project has been developed complying with the condition of CTE and being operated as per CTO conditions given by HSPCB.