

## EXECUTIVE SUMMARY

An Executive summary of the Environmental Impact on Proposed Modernization and addition of product at our existing unit, Bangalore

### 1. Site Details:

- Located at No49, 13th mile Mysore Road - SH 17 Kambipura, Bangalore 560074, Bangalore South District, Karnataka.
- Total Estimated cost of the Project is 12 Crores.
- Total Land available for the project is 40462.18Sq.M.
- Existing BUA : 10432 Sq.M
- Additional BUA : 2500Sq.M
- Total B U A :12932 Sq.M
- Green Area available : 11511 Sq.M
- The unit is located about 20 KM from Bangalore

Existing production capacity	Extra Neutral Alcohol (Bought out) secondary distillation- 9231LPD Malt & Grape spirit -289LPD Bottling of IML - 5770 cases/day Extra Neutral Alcohol - 9231LPD ( Remains unchanged) Malt & Grape spirit -2596 LPD Jaggery spirit - 385 LPD
Proposed product with capacity	Bottling of IML -9616 CPD

## 2. SUMMATION:

### Air Environment:

Sl No	Location	Max PM <sub>10</sub>	Min PM <sub>10</sub>	Mean PM <sub>10</sub>	Max PM <sub>2.5</sub>	Min PM <sub>2.5</sub>	Mean PM <sub>2.5</sub>
01	Rajarajeshwari dental college	110	74	89.78	72	21	45.73
02	Near ISRO	97	74	81.34	48	26	37.13
03	Dodda Aladamara	113	70	83.78	71	24	36.56
04	Anchepalya	119	75	95.78	76	19	51.08
05	Kambipura	96	70	77.47	52	24	31.26
06	Rajarajeshwari medical college	90	70	79.13	47	24	30.73
07	Kumbalgodu	121	70	82.43	80	24	34.60
08	Kengeri Arch	99	67	77.26	58	22	29.47

**Note: All values are expressed in microgram/cubic meter**

Sl No	Location	Max SO <sub>2</sub>	Min SO <sub>2</sub>	Mean SO <sub>2</sub>	Max NO <sub>x</sub>	Min NO <sub>x</sub>	Mean NO <sub>x</sub>
01	Rajarajeshwari dental college	13	6	8.26	19	12	14.91
02	Near ISRO	11	5	7.48	19	11	14.91
03	Dodda Aladamara	12	5	7.86	21	12	15.97
04	Anchepalya	13	6	8.91	22	11	17.04
05	Kambipura	12	7	9.0	24	13	17.47
06	Rajarajeshwari medical college	10	6	7.75	19	13	15.43
07	Kumbalgodu	15	6	9.04	23	14	17.26
08	Kengeri Arch	2	6	8.82	20	14	17.39

**Note: All values are expressed in microgram/cubic meter**

**Noise Environment:**

The Noise levels were monitored at 6 different locations at the study area

And were recorded as mean levels of 38.6 to 111.4 dB (A)

**Water Environment:**

Ground water quality

pH is 8.25, turbidity is 0.8 NTU, Conductivity is 2250 mmhos/cm. .

Calcium carbonates is 771 Total Dissolved Solids is 771 Calcium as Ca is 188, Chlorides as Cl is 534, Sulphates as  $SO_4$  is 86 Nitrates as  $NO_3$  is 27 mg /L

Ground water sample was analyzed for bacteriological tests for Total Coliform and E Coli and it was found absent.

**Land Environment:**

The nature of the soil varies from SILTY CLAYEY SAND to SILTY SANDYCLAY.

The soil sample Bulk density is 1.98 - 2.06 gm/cm<sup>3</sup>, Porosity and water holding capacity of soil sample is 51 % and 42.08 %

The soil sample pH is 7.33 and electrical conductivity is 0.46 ms/cm.

Nitrogen Organic is 124.65 Kg/HA Phosphorus Total 8.25 Kg/HA, Potassium 82.71 Kg/HA and Organic Carbon 0.89%

Exchangeable Sodium is 0.2% to 2.6%. CEC 21-216 meq/kg.

Heavy metals found in the soil sample are given below.

Zn (1.9- 25.4 mg/kg), Cd (0.1 - 4.1 mg/kg) ,Ni (1.5- 136.0 mg/kg)

According to remote sensing the Land Use Patterns are, for Agriculture 42.66 %, plants and trees surrounding land is 18.12% and Residential land is about 16.82 %.

### **Ecological Environment:**

There are no notable rare, endemic and endangered species of either flora and fauna existing in the area since the land around the study area is industrially developed and agricultural activities along with Horticultural activity is prevalent. Another notable feature is that there are many Nurseries located in the study area. No schedule-1 fauna is found in the study area hence the question of Wild life conservation plan is not applicable.

The main crops are

Fodder grass

Ragi

Dry rain fed crops like

Maize

Jowar

Groundnuts

Horticultural crops are

Sapota

Guava

Lime

Coconuts

Tamarind

Flora

Neem                      eucalyptus

Jackfruit                Silver oak

Mango                    banyan

Jamun                    ashoka

Acacia                    Species of Ficus

### **Socio Economic Environment:**

Observing from the Demographic description of the study area it is inferred that the total number of people present at that area is about 2, 31,291.00.

House working people Number is 23,207.00

(Gender wise 841 women for 1000 men)

Educated People: Men 57.29 %, Women 37.29%

Schedule Cast number: 32,486.00, Schedule Tribes number: 4,106.00

Total number of non-working people is higher than (53.22%) main working people (41.14%) and other working people are 5.64%.

Cough cold, viral fever. Diabetes, Hypertension, and Tuberculosis etc., are some of the occupational health hazards found at that area.

Education is found to be satisfactory also average economic condition is found good in that area.

### **3. Impact Evaluation:**

#### **Air Environment:**

The Detected PM from the chimney is  $48 \text{ mg/m}^3$

According to annual production, expected flow rate is  $878 \text{ m}^3/\text{hr}$ .

Sulphur dioxide (SO<sub>2</sub>) and Nitric oxide (NO<sub>x</sub>) are < 0.5 and Nil respectively.

#### **Water Environment:**

The required water consumption taken from Bore well and is about  $191 \text{ m}^3/\text{day}$ .

Sewage generation along with Effluents from the production is about  $90 \text{ m}^3/\text{day}$  and is treated in Combined ETP Sewage Treatment Plant of capacity  $90 \text{ m}^3$ , which is used for Flushing and Toilets, Gardening, and other purpose.

#### **Bio Environment:**

Bannerghatta National Park is about 48 km away from the project site and its construction activity will not affect the flora and fauna of the national park directly.

#### **Socio Economic Environment:**

The proposed Apartment project would result in improvement of the life style of the surrounding people.

The proposed project creates Employment opportunities.

#### **4. Environmental Management Plan;**

During the construction Period, the construction activity obviously results in fugitive Dust. Covering polythene sheets to a particular height controls this Fugitive Dust.

Workers are given basic fundamental facilities.

Keeping the equipments in good condition noise pollution is controlled.

During the Operation Period, Ultra Pure Sulphur content Diesel is used for the DG Sets.

Chimney height shall be maintained about 35.0 m above the Ground level.

Generators are enclosed with acoustic chamber to control noise pollution.

Wastewater generated from the unit activity shall be treated by combined ETP.

Green belt development shall be made at the vacant land.