# **Executive Summary**

# For Establishment of Distillery unit of 30 KLPD

# By M/s Sadashivrao Mandlik Kagal Taluka SSK Ltd., Post Sadashivnagar, Tehsil Kagal, Dist. Kolhapur, Maharashtra

<u>Prepared By</u> <u>Ultra-Tech Environmental Consultancy and Laboratory</u> (Lab Gazetted by MoEF, Govt. of India) <u>2014-15</u>

# EXECUTIVE SUMMARY

# Introduction

M/s Sadashivrao Mandlik Kagal Taluka SSK Ltd., Post Sadashivnagar, Tehsil Kagal, Dist. Kolhapur, Maharashtra has proposed to establish 30 KLPD Alcohol distillery.

According to the MoEF Notification dated 14<sup>th</sup> September 2006, this project is coming under A category. Therefore this industry has submitted an application to Ministry of Environment and Forest, Government of India and their Authority. Accordingly, their Environmental Appraisal Committees in their meeting has considered the proposal and sanctioned the Terms of Reference.

As per Government laws, to get an Environmental Clearance this industry has submitted a proposal to establish a distillery. Thereafter, this Environmental Impact Assessment report is prepared.

The objective of making this Environmental Impact Assessment report is not merely to get the Environmental Clearance certificate, but to understand what impacts may happen and to plan the preventive measures.

# **PROJECT INFORMATION**

This sugar industry works under the Managing Director, Mr. Prakash J Chitnis.

#### LOCATION

1	Project	Sadashivrao Mandlik Kagal Taluka SSK Ltd, Post Sadashivnagar,
		Tehsil Kagal, Dist. Kolhapur, Maharashtra.
2	Latitude	16°25'38.43"N
3	Longitude	74°17'35.72"E
4	Nearest city	Kagal 30 Km,
5	Highway	Pune- Bengaluru NH 4, 12 Km
6	Airport	Kolhapur 50 Km
7	Railway Stn	Kolhapur 50 Km
9	Geography	This project is on level ground and about 587 m above MSL. The
		climate is moderate.
10	Surroundings	Project is 3.5 km from River Vedganga

# **TECHNICAL INFORMATION**

1	Production	Alcohol 30 KLPD
2	Raw material MT/ month	Molasses 3600, Turky red oil 1.8
3	Electricity	3500 kW
4	Boiler capacity	15 TPH
5	Fuel	Bagasse, Coal, CSW

#### **PROCESS:**

#### Distillery

There are carbohydrates in the sugar factory waste molasses. After diluting the molasses, with the help of yeast, fermentation is done in a tank. Necessary nutrients are supplied. Then we get alcohol by distillation and impure waste is separated.

These three processes can be visualized by simplified way as -



#### WATER

405 cubic meter/ day water is needed for industry. However, part of it will be fulfilled by recycling the treated wastewater.

# **ENVIRONMENTAL STATUS**

In order to evaluate the environmental impact, we have assessed the status of water, air, soil, noise, land-use, flora-fauna, socio-economic position etc.

It is necessary to study the basis of present status of these aspects for environmental impact assessment, and hence we are advised to study this.

#### AIR

In the area of 10 km radius from this site air samples are collected from various villages and also at site and are analysed in laboratory. Results are found for Sulfur-dioxide, Nitrogen oxides and particulate matters 10 and 2.5, CO and HC. All these are found inside the prescribed satisfactory limits.

#### NOISE

In this study area, primary investigation is made to find the noise media levels and for this selection is made of sensitive stations like work places, project area, traffic routes, schools and hospitals. The survey finds that the noise level in general is within the limit.

#### WATER

In this study area of 10 km, study on groundwater and surface water is conducted. For this, many villages and water bodies are selected and samples collected. By using standard methods analysis is made. For this project, we are not extracting any groundwater. On the contrary we shall recharge the groundwater by rain water harvesting.

#### **BIO-DIVERSITY**

Bio-diversity was surveyed in the 10 km study area and the observations on species of plants, animals, birds are included in this Environmental Impact Assessment Report.

#### SOCIAL

Pleasant climate, good water availability, fertile soil, nearness of state highway makes it possible to enter and progress in developing in the sugar, co-generation and various fields. Development is also taking place in aspects like health services, educational complexes, post and telegraph facilities. As a result the standard of living of people and workers of this area can possibly be raised, and for this industrialization can help.

Nationalized and private Banks facilities are available in this area and hence people are taking up in hand new projects. People are thus stabilized.

# **DETAILS OF ENVIRONMENTAL IMPACT:**

#### Air:

**Source:** mixing of gasses and particulate matters from the Boilers and vehicles **Measures:** 

The vehicles and machines we use can be kept well maintained and air emissions can be controlled. During operation phase, on the Boiler ESP of very high efficiency can arrest the emission and the tall stack can properly disperse the air.

#### Noise

Source: production machineries, D G Sets and vehicular traffic.

#### **Measures:**

sturdy foundations to the machineries, all gadgets are well maintained with lubrications, the factory building is closed from all sides, there are ample number of trees that absorb noise and noisy activity is avoided in night.

## Water:

If wastewater is not disposed at proper place and if rain water is not given if a proper direction, pollution aggravation can take place.

#### Measures:

Spent wash from ETP is either used for bio-composing or as a fuel in boiler. This is a 'Zero Liquid Discharge' Unit.

## Non Hazardous Solid Waste:

Based on above working, the summary is per day.

#	Waste	Disposal
1	Canteen	Own garden
2	Colony	Own garden
3	ETP	On Land
4	Office	Sales
5	Packing Sec.	Sales
6	Yeast Sludge	On greening belt
7	Ash	Sales
8	Lube oil	Carts

## Hazardous Waste:

Hazardous Waste will be disposed of as per the rules. Recycle/ re-processing will be done wherever possible.

## **RISK EVALUATION AND MANAGEMENT:**

Emergency Management is designed by predicting possible risks and hazards by using all available facilities.

Design in based on the study of all steps in the processes, storages, fuel handled and chemicals involved.

All workers will be trained for emergency situation. Health check-up of all workers will be done on regular basis.

# CONCLUSION:

After the complete study it is observed that by this project the impact on the environment can be kept minimal and in the project area social, economic, and educational development will be done in good manner. At the same time the standard of living of the people in the neighbourhood should increase.

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