## **SAFETY AUDIT REPORT**

# E. I. D. -Parry (India) Limited SANKLI

ON 23 RD NOVEMBER 2019

V.RAJEDRAN- NELLIKUPPAM
B.RAMARAJ- PUGALLUR

## Acknowledgement

We thank the management of the E. I. D. -Parry (India) Limited, and AVP Technology & safety for giving opportunity to conduct the Safety Audit at Sankli plant.

We also thank the Unit Head, and site team for the facilitation and the co-operation for the success of the Safety Audit during 23<sup>rd</sup> November -2019

#### Contents of the Report

- 1. Note worthy points
- 2. Deviation in Work permit system
- 3. Deviation in Handling and Storage of Hazardous Materials
- 4. Deviation in Materials Handling
- 5. Deviation in Gas cylinder storage
- 6. Deviation in Electrical safety
- 7. Deviation in Fire Prevention and Control
- 8. Deviation in Floors, stairs and other means of access
- 9. Deviation in Machine guarding
- 10. Deviation in PPE Adherence
- 11. Deviation in Ladder safety
- 12. Deviation in Housekeeping
- 13. Deviation in Conveyor safety

#### 1.Note worthy points

S.NO	Observation	Photo
1.	For vehicle Flash back arrester provided by company itself	
2.	For Evaporator tube cleaning activity instead of man cooler common air blower is installed and air duct is provided to all evaporator to avoid injury while shifting the man cooler to the evaporator	
3.	Fall arresting system installed and utilized for loaded vehicle covering work	
4.	All Earth pits are displayed with the inspection detail	

5. LED light set up provided in low head line to avoid hit hazard



6. Fire knock system for identifying cable fault by sensing temperature in the cable



7. Lorry loader operated by hydraulic system



8. Electrical electronic operated extension ladder is provided for height work

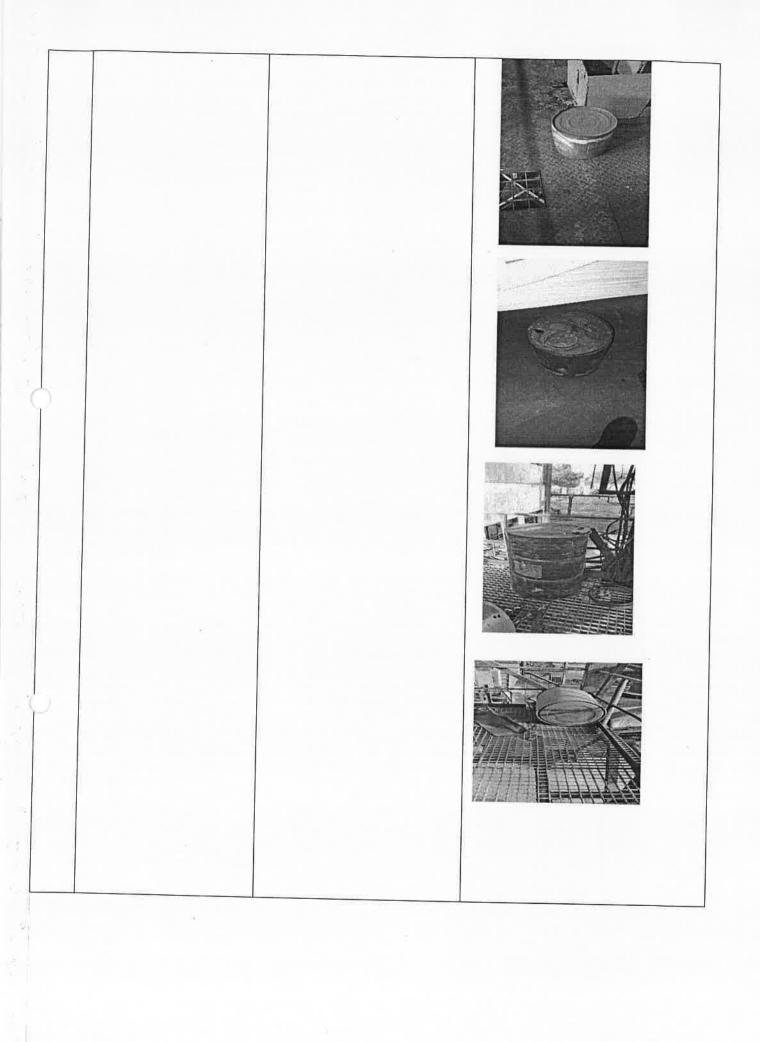


## 2. Deviation in Work permit system

Observation	Recommendation	Photos
Work permit system has not been followed  Work permit system available but not followed in systematic way while doing maintenance job in 1st mill( Electrical isolation not done, electrical person not sign in the permit )	Work permit system to be followed to avoid the accidents	

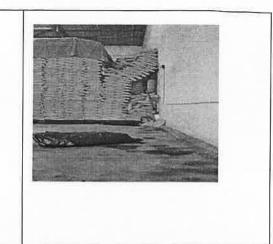
## 3. Deviation in Storage of Hazardous Materials: General Observations

S. No	Observation	Recommendation	Photos
1.	Empty paint tins scattered in many places  a) Paint tins in the mill area b) Process area paint tins scattered	As per Hazardous Waste (Management & Handling) Rules, 1989 under the Environment (Protection) Act, 1986  The occupier generating hazardous waste has obligation to take all practical steps to ensure that such wastes are properly handled and disposed off without any adverse effect, which may result from such wastes. The occupier shall also be responsible for proper collection, transportation, treatment, and storage and disposal of these wastes either by himself or through the operator of a facility.  Empty paint tins are properly collected and disposed	



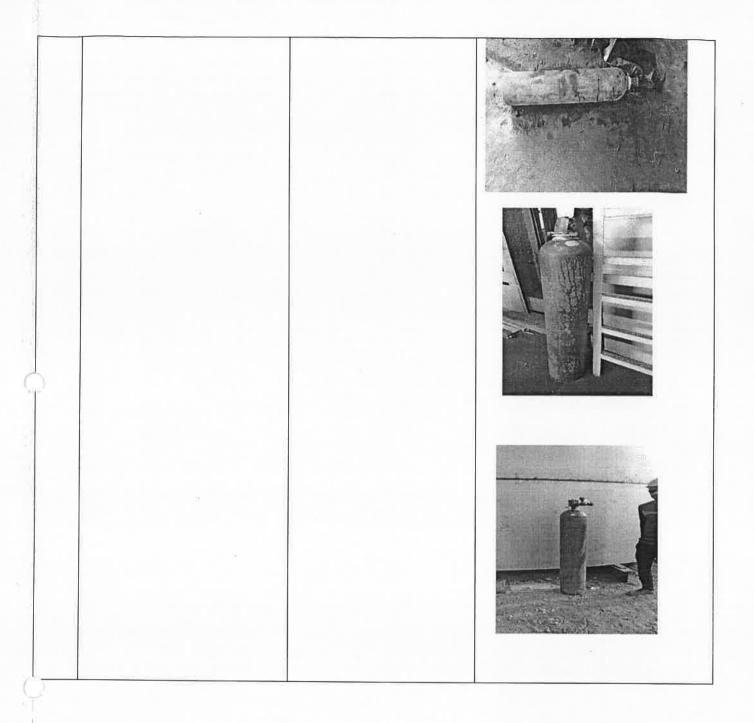
## 4. Deviation in Materials Handling

S.No	Observation	Recommendation	Photos
S.No	Project materials lifted with damaged belt  Materials in the Hard ware store stacked in the path way  a) Ear marking found good most of the materials stacked in the path way b) Iron rod stacked over the rack found unsafe  c) Material like tube cleaning shaft stacked in the path way found unsafe  d) In sugar ware house sugar bag lot found collapsed	Recommendation  Under Section 29(2) of The factories Act 1948 As per rule TNFR -1950 Rule 55A  Every lifting machine and lifting tackle in use in a factory shall be thoroughly examined by a competent person and particulars of examination shall be entered in a register in the prescribed Form No. 37 or a report in the prescribed Form No. 37 shall be filled.  As per OSHA materials handling regulation (29 CFR 1910.176) that covers that "storage of materials shall not create a hazard." this means that containers should be placed carefully "stacked, blocked, interlocked and limited in height so that they are stable and secure against sliding or collapse."	Photos



#### 5. Deviation in Gas cylinder storage

S. No Observation	Recommendation	Photos
1.  Lose un tied cylinders found many places	As per Gas cylinder Rules 2004 (18.) Handling and use: -  (1) Cylinders shall be adequately supported during handling. (3) The cylinders shall be handled carefully and not be allowed to fall upon one another or otherwise subjected to any undue shock.  (4) Sliding, dropping or playing with cylinders is prohibited.  (5) Liquefied petroleum gas cylinders and cylinders containing liquefiable gases shall always be kept in an upright position and shall be so placed that they cannot be knocked over.  (6) Cylinders used in horizontal position shall be so secured that they cannot roll.	



#### 6. Deviation in Electrical safety

#### Cables and panels maintenance

- 1) The cables shall be provided with as suitable gland and terminated with the Terminal box. The cables shall be dressed properly.
- 2) The cables shall be maintained without joint. If need be a standard cable joint device shall be used.
- 3) The control panel is to be maintained in closed condition restricting the insect entry

S.	Observation	Recommendation	Photos
No			*
1.	Near vacuum crystalfizer lose cables to be corrected	Cables to be laid properly	
2.	Near co –gen ground floor lose cables to be corrected	Cables to be laid properly	
*			
3.	Near boiler area Distribution box to be found open to be corrected	DB to be covered properly	

	T .		
4.	Near project area power distribution box found open to be corrected	DB to be covered properly	
5.	XLR area motor earthing to be corrected		
6.	Welding machine cables found damaged, eathing to be corrected		
7.	Project area welding machine cables laid unsafe	Cables to be laid properly	
8.	bushes in the switch yard area found unsafe	Bushes to be cleaned	
	ir ·		

#### 7. Deviation in Fire Prevention and Control

	Observation	Recommendation	
1.	In work shop unwanted materials stored in fire bucket	<<	
2.	Most of the Fire bucket filled with sand has become hard because not maintained properly	As per the TNFR -1950 Rule 61 (g) All water buckets and pump type extinguishers shall be filled with clean water. All and buckets shall be filled with clean dry and fine sand.	
3.	Near Project area fire bucket used for civil work		
).			
	120		10

4. Fire hose boxes are not maintained properly and it is difficult to access

As per the TNFR -1950 Rule 61 –All firefighting equipment shall be placed in a position and shall be readily and easily accessible for immediate use. Generally, these equipment shall be placed as near as possible to the exits or stair landing of normal routes of escape.

All first-aid fire fighting equipments shall be subjected to routine maintenance, inspection, and testing to be carried out by properly trained persons. Periodicity of the routine maintenance, inspection and test shall conform to the relevant Indian Standards









Fire extinguishers periodical checking (inspection and refilling ) not done in distillery area

Fire NOC is not getting for Distillery operation

6.

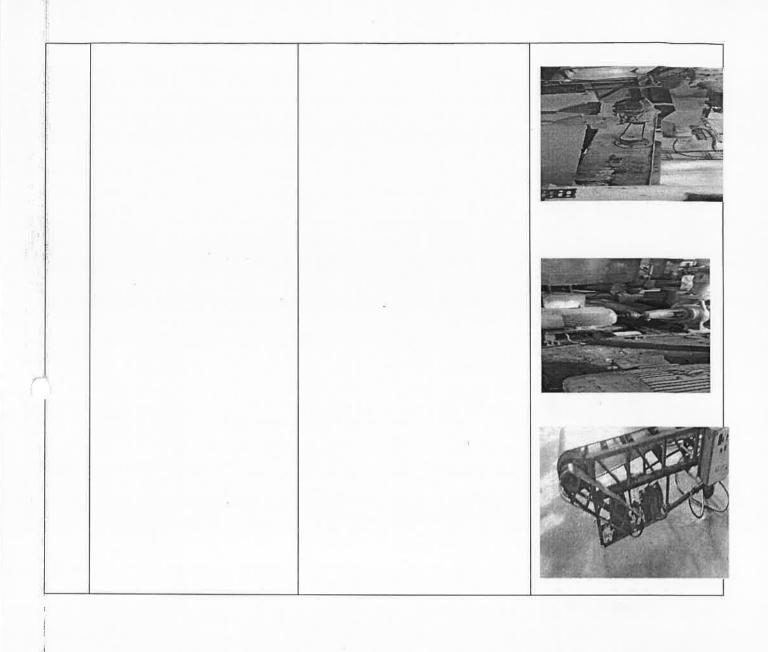
As per the Andhra Pradesh Fire service Act-1999 – section 13(2) The Director general or any member of the service duly authorized by him in their behalf shall within sixty days of receipt of such applications on being satisfied about the provisions of fire prevention and safety measures as stipulated in the National Building codes of India 1983 for time being in force regulating such purpose or activity shall issue a no objection certificate with such condition may be considered necessary and if it not so satisfied reject the same for reason to be recorded in writing

#### 8. Deviation in Floors, stairs and other means of access

S. No	Observation	Recommendation	Photos
1.	Near Distillery project area buried pits are not barricaded, it is found as unsafe condition	As Per The Factories Act 1948- sec-33 –in every factory sump tank ,pit or opening in the ground or floor which by reason of its depth shall be securely covered or securely fenced	
2.	Near Distillery project area channel found open condition		
3.	Floor opening near SK evaporator found unsafe	As Per The Factories Act 1948- sec-33 –in every factory sump tank ,pit or opening in the ground or floor which by reason of its depth shall be securely covered or securely fenced	

#### 9. Deviation in Machine guarding

S.No	Observation	Recommendation	Photos
1.	Most of the machine gua found non standard, so motor extension rod gua running machinery are n guarded,	me section 21 –in every factory every moving parts of prime mover and ever	ry Is
	a) Mini Mill in cane guard not fixed b) Rotory drum cha guard guard not	yard	
	c) XIr motor extens cover not provid d) Molasses pump a not in standard e) Work shop grind machine guard fo	ion rod ed guard ing	
	f) Co gen feed wate pump coupling g not fixed etc.,		
	g) Conveyor chain g not standard	guard is	
	54		
	×	×	

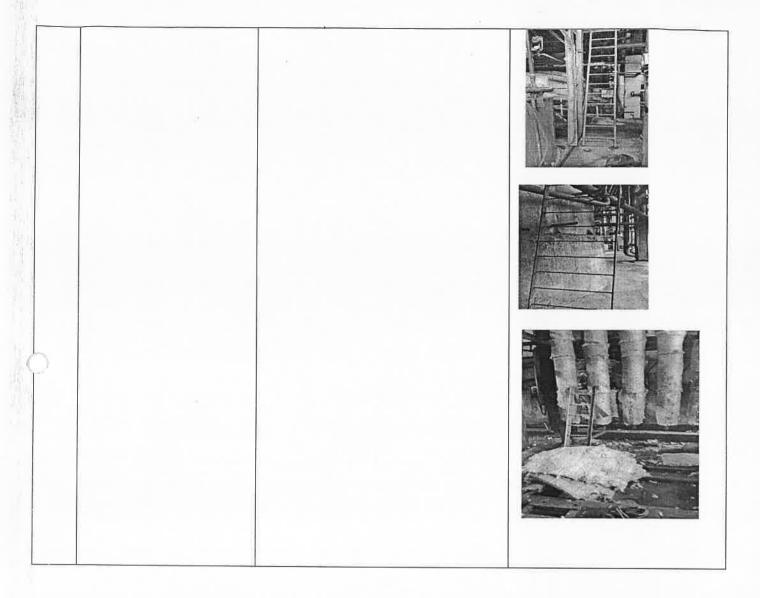


#### 10. Deviation in PPE Adherence

S. No	Observation	Recommendation	Photos
1.	Some Employees not adhering safety helmet and safety shoes and not wearing goggles while doing cutting work	Training to be provided for all the employees and to educate why safety is required.	

### 11. Deviation in Ladder safety

S.No	Observation	Recommendation	Photos
1.	Most of the ladders not provided with hand rail and some ladder are made by using non standard items.  cable tray used instead of ladder for insulation work	Access ladder to be provides as per Indian standard 3696 –part -2-1991	



**12. Deviation in House Keeping :** Poor Housekeeping affects all the aspects of safety and can result in both minor and major accident hence Good housekeeping is to be ensured

S.No	Observation	Recommendation	Photos
1.	Many unwanted materials kept in walkway.  Scrap materials accumulated near last mill	Walkway to be kept clean.	



3.Conveyor safety

Observ	ation	Recommendation	Photos

Conveyor safety 1. Some of the conveyor found without pull cord switch arrangement

2.	So2 gas line stacked near burner area	
3.	Scaffold material stored near Vacuum filter	
4.	Pan floor area plat form found slippery condition	
5.	Total co –gen plant housekeeping found very poor condition  All side of boiler all the combustible materials such as bagasse, wood, insulation material etc., accumulated	

