Factory Name: M/s Valens Molecules Private Limited, Unit-IV: Date: 16/07/2020

**Address**: Plot No.24/C, APIIC-APSEZ De-Notified Area

Atchuthapuram No of workers: Regular: 40
Vishakhapatnam District Contactor:100

Pin: 531011, AP

**Inspection Team** 

SJEC Team 1.Mr. L.Jayanthi 2.Mr.Abhiram.J M/s Valens Molecules
1.Mr.N.S.R.K. Prasad
2.Mr.Nanda Kumar

### A. Health and Safety Policy:

No		Requirement	Status of Compliance	
1	a.	Does the factory have a Health & Safety Policy?	Yes, Attachment -I	
	b.	Who has signed the health Safety policy?	Director	
	C.	Whether it is prepared as per guidelines of the Statutory provisions?	Yes	
	d.	When was the safety policy declared and adopted?	2019	
	e.	How many times it has been updated till now? When was the last?	2019	
	f.	Has the health and safety Policy been displayed at conspicuous places?	Yes	
	g.	Is the policy made know to all workers including contract workers, transport workers, suppliers etc.	Yes: Printed in Telugu & English Safety talk is conducted on daily basis.	
	Recommendations if any: Megaphone with voice recorder to be used in Telugu and Hindi for contract labour and contractors visiting			

### **B. Safety Department:**

No	Requirement	Status of Compliance
		No .Plant In-charge takes care of Plant Safety
	Experience	Attachment –II



b.	Strength of the safety department including safety officers and staff if there is a safety Department	NA Attachment –III
C.	Does the head of safety department/ safety officer report to the chief executive ?	Manager-Operations Is In-charge of SAFETY
d.	How often are the safety officers retrained in the latest techniques of total safety management? What is the frequency of retraining?	1.OSEP 2.Chemical Safety • Once in a year
e.	What additional duties the safety officer is required to do?	EHS Site Management
f.	What is the power of safety officer vis-à-vis unsafe condition or unsafe act?	Suspends all of the activities and conduct investigation.
R •	ecommendations if any: EHS Training is the key to address the Unsafe Acts and	l Unsafe conditions.

## C. Safety Committee:

No	Requirement	Status of Compliance
1	<ul> <li>a. Is a safety–committee constituted with the representatives of employees and workers?</li> <li>If yes, Furnish the latest list of safety committee members</li> </ul>	Yes Attachment -IV
	b. Is the tenure of the safety committee as per the statute?	Yes, Two Years
	c. Are meetings of the committee scheduled at least once in 3 months? Furnish minutes of last 3 safety committee meetings	Yes Attachment -V
	d. Are the minutes of the safety committee meetings circulated among the members?	Yes
	e. Are the minutes forwarded to the trade union(s)and chief executive and occupier?	Forwarded to Directors
	f. How are the recommendations of the committee implemented?	By addressing to the concerned HOD's
	g. How are the safety committee members apprised of the latest developments in safety?	EHS Talks, EHS Bulletins.
	Recommendations If Any: 1. Safety Suggestion book to be placed in production, QA/QC 2. One at the Security Main Gate	;Engineering and warehouse

## D. Safety Budget:

l No l	Requirement	Status of Compliance
1 140	requirement	Otatas of Compilation





a.	What is the annual safety budget?	As per needs of the company		
b.	How much percentage is this budget of the total Turnover of the company?	No Limit		
C.	How is the safety budget arrived at?	Annual Plan		
d.	Is the safety budget adequate?	Yes		
e.	What is the pattern of expenditure for the last Five years?	<ul> <li>Company commissioned two year ago.</li> <li>Satisfactory</li> </ul>		
f.	Does this budget get reflected in the annual report of the company ?	Yes		
5	Recommendations If Any: 5 year look ahead budget plan is suggested for EHS Improvements and Maintenance of Fire & Safety systems.			

## E. Information, Instructions, &Training:

No	Requirement	Status of Compliance
1	a. Are the displays for safety information / Instructions at different locations in the factory arranged? (Main Gate/ Ware House/ Utilities / Production Blocks-Entrances& work Spots / Tank Farm / Drum Shed)  b. Are the MSDS of all chemicals (Raw Materials / Intermediates /	Yes Yes Yes Yes Attachment -VI Yes.
	Finished Products) made available and accessible to all workers?	Conducted *SDS *Chemical Safety Awareness Training by T.P
	<ul> <li>c. Has the information prescribed under Rule 61(SB)C(1) of AP Factory rules been compiled and made known to workers individually through supply of booklets/ leaflets in the language understood by majority of workers?</li> <li>Recommendations if any: To improve by printing safety car</li> </ul>	Yes, Attachment -VI
2	a. Is there any training department?	Yes, GMP
	b. Is there any programme of induction training? If so, mention the duration of induction training for each category of workers.	Yes. One Day Safety induction & Indoctrination





	c. Whether the assessment of the trainee worker is done or not?	Yes, By feed- back sheet Attachment-VII
	d. What infrastructural facilities with audio-visual support are available for training?	Yes
	e. Whether the training programmes are conducted in the local language?	Yes ( In Telugu and English)
	Recommendations if any: Pre & Post Training test to be introduced.	
3	<ul> <li>Are all the workers including contract/casual workers trained and what is the frequency of such training?</li> </ul>	Yes, Daily 10 minutes for contract / causal workers.
	b. Are there any pre determined modules for different category of workers including illiterate or semi literate workers based on the hazards and risks associated with their work places available in the factory)? If so, are they adequate in terms of number of sessions/hours? (enclose the copies)	Yes, contractor Safety Module  To be implemented
	<ul> <li>c. Are there safety supervisors as prescribed under Sec 41- C</li> <li>&amp; Rule 61 (SC) Fof Factories Act appointed in the factory? If so furnish the details.</li> </ul>	No. NA Attachment -VIII
	d. Do the trained supervisors train their own Employees in safety and health aspects?	Yes. During shift safety talk
	e. Is the retraining performed whenever new hazards/process changes are followed/introduced?	Yes
	f. How are the senior management personnel trained in safety and health?	Every Quarter as per annual safety training schedule 2 hours per class.
	g. How many employees have been trained in safety in the last five years? Give break up with details.	Two years. Attachment-IX
	h. How many man-days/hours are used in training the employees?	Every month Two hours in a day in GMP class
	<ol> <li>How do you ensure that the training is put to use by the employees trained in safety and health.</li> </ol>	Site counselling and feedback from HODs
	<ul> <li>j. What is the training plan for the next two years? Give details.</li> </ul>	
	k. What documentation system has been established regarding safety and health training?	Attachment-XI
	<ul> <li>Recommendations if any:</li> <li>Behavioural Based Safety to be continued every year</li> <li>Chemical Safety to be imparted &amp; Emergency Evacuation</li> </ul>	on to be continued
	Charles and the particular and an arrangement of the particular and th	

### F. Safety Communication / Motivation / Promotion:

S.No	Requirement	Status of Compliance



al No
last five years? No
actory? Yes
1. Slogan on safety competition
2. Essay writing on chemical
Hazards
3. Fire hose laying & Fire fighting
4. Fire extinguishers Operation
5. Skit on Safety
Questionnaire Answering
SCBA wearing (Donning)
Attachment:XII
Attacilinent.An
nization? No
and health subjects? No
made available to the Display of EHS Banners & EHS Bulletins
ed in your factory? Poster and sign boards
ty Day/week or Yes ?
March 4 <sup>th</sup> ,2020
on schemes? Give Yes. Best safety employee.
a y

## G. Accident / Near Miss reporting:

S.No	Requirement	Status of Compliance
1	<ul> <li>Is there any system of classifying and analyzing the near- miss incidents &amp;accidents? Give the details.</li> </ul>	Yes
	b. Is the data for the last three years for reportable and non-reportable accidents available?	Yes One year. Attachment: XIII
	<ul> <li>Are all near-miss incidents and accidents reported and investigated?</li> </ul>	Yes
	d. For how many years are the investigation reports retained?	One year





e.	By whom the accident statistics and data aremaintained?	No, to be implement
f.	What nature of injuries occurred during the lastthree years?	Attachment-XIV No injuries from last two years
R •	ecommendations if any: Databank to be maintained	1. **

## H. Safety Inspections:

No	Requirement	Status of Compliance
1	<ul><li>a. Is there any system of internal inspection?</li><li>Who does the inspections?</li></ul>	Yes. Safety and Production
	b. What type of safety inspections are carried out and what are their frequency?	Daily Plant visits     Monthly Safety Check     Lists.
	c. Are the check-lists prepared for theseInspection (Ex: House Keeping, Fire Safety etc)	s Yes
	d. To whom the recommendations are submitted	Plant Head
	Recommendations if any: Annual EHS Inspection plan to be incorporated in the corporate plan.	

## I. General Working Conditions:

No	Requirement	Status of Compliance
1	Housekeeping	
	a. Are there any working conditions which make the floors slippery? If so, what measures are taken to make them safe?	Continual efforts for Housekeeping
	b. Are all the passages, floors and the stairways in good condition?	Yes
	c. Is there a system to deal with the spillage?	Yes
	d. Are there sufficient disposable bins clearly marked and whether these are suitably located?	Yes
	e. Are drip trays positioned wherever necessary?	No. To be arranged.
	f. Are there adequate localized extraction andscrubbing facilities for dust, fumes and gases? Please specify.	Yes
	g. Whether walkways are clearly marked andfree from obstruction?	Yes



	h. Is there any inter-departmental competition for good housekeeping?	NO
	i. Are the good housekeeping practices and standards elaborated and made them known to the workers?	Yes As per procedure.
	Recommendations if any: Housekeeping to be incorporated i	n the EHS Policy
2	Ventilation	
	a. Whether natural ventilation is adequate or not?	No , yes adequate
	b. Whether dust/fumes/ vapours are generated in the process? Give details.	Chemical vapours fumes
	c. Is there any exhaust dilution ventilation system in any section of the plant?	Yes
	d. Whether any ventilation study has been carried out in the section(s)?	Yes
	e. Are periodic/preventive maintenance of ventilation system carried out and record is maintained?	Yes, monthly once
	f. Does any ventilation system re circulate the exhausted air in work areas?	All Pharma clean rooms
	g. Is the work environment assessed and monitored?	Yes
Recommendations if any:  SDS and BPR recommendations to be strictly followed  Illumination		
63:	a. Was there any study carried out for the assessment	-
	of illumination level ?	
	<ul><li>of illumination level?</li><li>b. Is the level of lighting provided is sufficient and suitable for the works to be carried on?</li></ul>	Yes
	of illumination level?  b. Is the level of lighting provided is sufficient and suitable for	Yes yes as per requirement to be replaced

### J. Hazard & Risk Control:

No	Requirement	Status of Compliance
1	a. Has the HARA report been got prepared and submitted to statutory authorities along with the compliance on recommendations?	Planned during 2020
	b. When was the latest revision of HARA report done?	As per 1.a





	<ul> <li>Are there any new chemicals / products/ facilities added into premises which require the further revision of HARA? If so furnish details.</li> </ul>	No
2	a. Have the HAZOP studies been carried on for all the products that are being produced on campaign basis and recommendations complied? If so, furnish details	Planned during 2020
	b. Have the reports been submitted to statutory authorities concerned?	<ul><li>OSEP submitted</li><li>HARA in September 2020</li></ul>
	Recommendations if any: RISK ASSESSMENT Studies must be followed on top pri	iority.

### K. Safe Operating Procedures:

No	Requirement	Status of Compliance
1	a. Are written safe operating procedures available for all operations?	Yes Attachment- XV
	b. Whether the written safe operating procedures displayed or made available and explained in the local language to the workers?	· •
	c. Whether the safe operating procedures are prepared jointly by the plant and safety departments?	Yes
	<ul> <li>d. What system is used to ensure that the existing safe operating procedures are updated? Give details.</li> </ul>	Yes, OHSAS and Factories act
2	Whether contractor's workers are permitted on Process/operations? Give details.	No
	b. If so, are these contractor workers educated and trained adequately?	Yes. Training is ongoing process due to frequent change in contractor team members.
3	a. Have the workers been informed of the consequences of failure to observe the safe operating procedures?	Yes. Oral talks
	Recommendations if any: A Pre-voice recorder / T.V Screen with videos in telugu to be planned.	

### L. Emergency Management:

No	Requirement	Status of Compliance
1	a. Has the On Site Emergency plan been prepared as per	Yes
	the guidelines under the statutory provisions?	Attachment-XVI
	b. Has it been made known to all the employees?	Yes
	If yes, steps taken	
	c. Are the possible / identified emergencies are reviewed	Yes



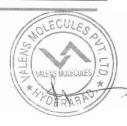


	every year?	
d.	If yes, has the On Site Emergency plan been revised? Furnish the details of recent revision	2018
e.	Does the onsite emergency plan contain arrangements for summoning outside help for rescue, fire fighting and arrangement for making available urgent medical needs?	Yes ·
2 a.	Whether the chart depicting plant – layout with emergency Escape routes and assembly points displayed conspicuously at the site? If Yes, Specify the spot(s)	Yes
b,	Details of communication facility arranged (Both within & Outside the factory)	Fire alarm System MCP, under completion phase of the project
c.	Has the Emergency Control Centre been provided and equipped with protective & rescue equipment? If yes, furnish the details of location and equipment provided as per the attached annexure	YES. Security Main Gate with SCBA and stretcher
d.	Has emergency power back up for all critical equipments, floors, staircase, fire hydrant system etcbeen provided?	Yes
e.	Doses distinctive and recognizable warning arrangements made to caution all persons inside the plant to enable safe evacuation of persons?	Auto Glow boards for emergency exists arranged.
	Whether mock drills organized for on-site emergency plan once in 3 months? If Yes, furnish the dates of few recent drills  Recommendations if any: 100% STAFF TO BE TRAINED O	Details in annexure Attachment-XVII

## M. Maintenance and Condition Monitoring:

No	Requirement	Status of Compliance
1	Whether the preventive maintenance schedules for all equipments, instruments etc have been developed?	Yes
2	Have all the parts of plant, equipment and machinery, failure of which can rise to emergency situation, been identified, examined and tested once in 2 years as per the test procedure evolved by the competent person?	Yes
	If Yes, furnish full details	
3	Have all parts of hoists and lifting machinery including their lifting tackles thoroughly been examined by a competent person at least once in every period of 6 months / 12 months respectively?  If yes, the details of equipment, last testing date, by whom etc	Yes, As per schedule examined.
	shall be furnished	
4	Have all the pressure plants including pressure vessels having pressure greater than atmospheric pressure been	Yes.





	examined and tested as per the prescribed periodicity by the competent person? If yes, the details of equipment, last testing date, by whom etc shall be furnished	No pressure vessels
5	Have all instruments and safety devices used in the process been tested before taking into use and after carrying out any repair to them and examined once in a month, by a competent person. If yes, the details of last testing date, by whom etc shall be furnished	Yes, maintenance persons has been performed Monthly once report to be maintained.
6	Are the storage containers of corrosive chemicals being examined once in a year? If Yes, the details of record maintained.	Yes, Thickness test to be implement from third party yearly once.
7	Are the safety belts being tested once in 6 months by competent person?  Are the suitable and sufficient crawler boards or duck ladders provided for work on fragile roofs?	Yes. Full body harness are bought once in 6months with test details.
	Recommendations if any:  Full body harness log to be maintained	

## N. Work Permit System:

No	Requireme	nt	Status of Compliance
1	a. Which are the maintenance	Confined space entry	Yes
	works that are covered by work Permit System?	Work at height & Fragile roofs	Yes
		Hot works	Yes
		Unloading of solvent	Yes
		Line breaking	Yes
		Cleaning of empty containers	Yes
	b. Are there any other works covered by Work Permit System? Specify if Any		No
	c. Is the isolation of plant, machiner forming part of permit system?	y, equipment is done	Yes
	d. Is the system being followed satis	sfactory?	Yes
2	Is the physical fitness of workers permit to work system being checkens.	• •	Yes
	b. Are they provided with ade resurrection and first aid?	quate PPE for rescue,	
3	Is Lock out and Tag out procedure (LOTO) in place for positive isolation of energy during maintenance works?		Only Tag out
	Recommendations if any: LOTO to be strictly implemented and logged		1



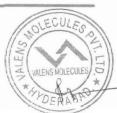
## O. Process Safety:

1	Are suitable safety valve and/ or rapture disc of adequate size and capacity to all the reactors provided based on vent size calculations? If yes, furnish the relevant data	Yes Attachment-XIX
	Are the vents of these relief systems connected to suitably designed Dump tanks?	Yes
2	Have all reaction vessels been provided with a pressure gauge having the appropriate range and Temperature Gauge?	Yes
3	Whether independent safety relief valves are provided to jacket of each reactor proposed for heating through steam, to prevent steam entry with excess pressure?	Yes
4	Is Vacuum breaking being done with nitrogen only for those operations carried under vacuum is provided?	Yes
5	<ul> <li>Whether suitable provisions such as automatic and remote control arrangements have been made for the controlling the effects of dangerous chemical reactions?</li> </ul>	-
	<ul> <li>In the event of failure of such control arrangements, are automatic flooding or blanketing or other effective arrangements provided to come into operation?</li> </ul>	<ul> <li>Sprinklers arrangement to be provided.</li> </ul>
	<ul> <li>Are automatic audio visual warning devices provided to the reactors if necessary by integrating with process correction systems?</li> </ul>	-
	<ul> <li>Is the process heating arrangements in equipment designed to automatically control and cut off the heating below the predetermined safe limit?</li> </ul>	Yes
	<ul> <li>If yes, are such systems being checked daily and tested once in a month?</li> </ul>	Plan is in place
6	Have all the reactors in which exothermic/ runaway reactions /distillations carried on, been isolated or installed in separate sheds?	No critical exothermic reactions.BPR and supervisory care is in place
7	Are the workers engaged in sampling operations adequately informed about safe procedures?	Yes. Only chemists.
8	Have adequate precautions been taken to prevent the mixing of effluents from different processes to avoid formation of dangerous gases?	Yes
9	Are the electrical appliances are provided based on the hazardous area classification?	Yes
	Recommendations if any: HAC Drawings to be displayed	

P. Fire Safety:

	No	Subject	Recommendations
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1	Are the pipes being used for transferring of chemicals from reactors to centrifuges etc. electrically conductive? If Yes, furnish material of construction	Yes. With earthling and bonding arrangement
2	Have the network of lightening arresters covering all the installations, buildings, storage tanks etc which handle flammable substances, been provided to protect from lightening?	Yes
3	Are the vents of centrifuges, reactor condensers, and tray driers extended to outside the building?	Yes
4	Is earthling provided to GLRs by using tantalum plugs?	Earthling is available.
5	Are the spark arresters to all vehicles entering premises being provided?	Yes
6	Whether the earthling facility with crocodile clamp for solvent tankers, before they are taken for unloading?	Yes
7	Whether the Anti – static pads provided at all the entrances of each production block?	Yes.
8	Whether earthling and bonding provided for all solvent pipelines, vessels and tanks?	Yes
9	Is earthling and bonding for solvent drums/ barrels including the piping system in use for the transfer provided?	Yes
10	Is the continuity of earthling and bonding periodically measured in the operations of solvent handlings?  If so, the details of record maintained	Yes
11	Whether the Nitrogen blanketing for solvent storage tanks, reactors are provided.	Yes
12	Have all steps like flow regulation of materials, wearing cotton cloths by the workers, avoiding free fall of materials in to reactors, using antistatic containers and foot wear etc in order to prevent the static charge been taken?	Yes
13	Whether flash back arresters to the vents are provided?	Yes
14	Have all the industrial Gas cylinders are stored under a shade and secured with a chain in vertical position?	Yes
15	Whether Non-sparking tools and appliances are used for work in solvent area?	NO
16	Are flameproof lights, motors, fittings provided in hazardous areas?	Yes
17	Are wheels of trolleys, Ladders etc are of conductive type?	Yes
18	Is it being ensured that the shoes being worn by the persons inside the plant free from any metal on them?	Yes



19	Is smoking prohibited and cautionary notices displayed to that extent?	Yes			
20	In at extent?  Is fire/smoke detection arrangements provided at all strategic locations and connected with alarm systems?	Yes			
21	Are process, storages, equipments and plants involving serious explosion and flash fire hazards are located in segregated buildings?	Yes			
22	Are plant and equipment having serious fire hazard isolated?	Yes			
23	Automatic fire extinguishing appliances, fire resisting dampers electrically interlocked with heat sensitive/smoke detectors for ventilation ducts, provided?	<ul><li>DCP in warehouse</li><li>Flooding in PB1</li></ul>			
24	Is Gas cutting operations being done with relevant precautions like cylinder handling, PPE, Flash back arrester, gauges in good condition etc? If Yes, furnish details	Yes			
25	Is a second and emergency stair case in addition to regular staircase provided for all floors of the building?	Yes			
26	Is travel distance to the exit is less than 22.5m in factories where high hazard materials are stored or used?	Yes			
27	Whether fire extinguishers are installed with a height not more than 750 mm from the floor to its bottom?	Yes			
28	Whether the preventive maintenance schedules for fire extinguishers followed?	ules for fire Yes			
29	Fire hydrant system with 7 kgs /cm2 pressure and 4,500 lts discharge per minute is provided?	To be establish			
30	Fire water storage sufficient for 100 minutes of fire fighting, 50% of which should be the dead stock is provided?	Yes			
31	a. Are there dedicated sprinkler systems provided to solvent storage tanks, ware houses, production blocks?	No , To be planned			
	b. If the material are water reactive or usage of water is not suggested, are there any DCP flooding systems provided?	Yes			
32	Have suitable fire fighting personal protective appliances like gumboots, helmets, respiratory protection etc been provided?	Yes			
33	Have proper roads all around the plant been provided to enable access for the fire tender and fire-fighting equipment?	Yes			
34	Are the fire fighting systems in the factory are in proportion to the fire load potential in the factory?	NO. To be upgraded.			
	Recommendations if any: Fire load study to be taken up.				

## Q. Storage and Handling:

No	Subject	Recommendations
1	Whether the containers for handling/storage of chemicals are	Yes



	of adequate strength, with adequate labelling and colour coding arrangements indicating the contents and their hazards and safe handling methods?			
2	Whether the Standby arrangements have been provided equal to biggest container to transfer the toxic substances if any defect develops in any of the container?	Efforts are made for safe handling		
3	Whether the PPFRP and HDPE storage tanks (non-metallic material) are properly anchored and provided with independently (without resting on the tanks) supported access and working platforms?	Yes.		
4	Whether the bund walls are provided around all Bulk storage tanks, process storage tanks, receivers etc containing flammable, toxic and corrosive chemicals?	Yes. Not adequate		
5	Whether substantial wire mesh covering all glass vessels, vents of glass vessels, flow meters etc to protect persons working nearby in the event of breakage of glass, are provided?	No. To be planned		
6	Is adequate number of spill mopping kits provided at easily accessible locations?	Yes		
7	Is flooring of storage areas compatible with chemicals being stored?	Yes		
8	Is the compatibility between different chemicals being stored at one location verified and suitable measures being taken to avoid the contact? If yes, measures taken shall be explained	Yes, chemicals are segregated as per compatibility chart.		
9	<ul> <li>a) Are the pipelines carrying flammable or explosive substances protected from mechanical damage?</li> <li>b) Are these pipelines being examined by a responsible person once in a week to detect any defect or accumulation of material?</li> <li>c) If Yes, details of the record being maintained for the defects and repairs conducted.</li> </ul>	Yes. Log to be followed.		
10	Are the catch pits provided below the joints of pipelines carrying toxic substances?	NO. To be reviewed.		
11	Are adequate arrangements receptacles with tightly fitting cover provided for depositing of waste material soiled with toxic substances?	Yes		
12	Is the flooring at storage /handling of corrosive material resistant for their corrosive action?	Yes		
13	Are the cautionary notices displayed for actions to be taken in case human exposure to corrosive chemicals?	Yes		
14	Whether the body showers and eyewash fountains close to the place of corrosive operation provided?	Yes		
15	Are the precautions for road safety being taken for safe movement of vehicles inside the factory? If Yes, furnish details.	Yes		



Recommendations if any: Catch pits to be provided for PB1 & PB2

R. Equipment Safety:

	ipment Sarety :		
No	Subject	Recommendations	
1	Whether thermal lagging for all steam pipe lines are provided?	Yes	
2	Whether guards provided to gauge glasses of boiler(s)?	Yes	
3	Have all hoist / lift way sufficiently protected by an enclosure fitted with gates to prevent any person from being trapped?	Yes	
4	Whether interlocking to covers of centrifuges with their power supply is provided?	Yes	
5	Are all the electrical installations used appropriate to the hazard prevalent in that area and confirm to relevant ISI specifications?	Yes	
6	<ul> <li>a) Is plant or part of the plant, equipment constructed and maintained to enable the quick isolation with appropriate indication?</li> <li>b) Are such isolation facilities being checked once in month?</li> <li>c) Has the layout plan indicating isolation facilities been made available with security, maintenance and safety personnel?</li> </ul>	Yes	
	Centrifuges:  a. Are the lids provided with limit switches?  b. Are arrangements made to collect MLs (non acidic) from centrifuges in SS containers closed and provided with vent line?  c. Is nitrogen blanketing arranged?	Yes Yes	
	d. Are the vibration sensors provided? <u>Driers:</u>	Yes	
	<ul> <li>Are the driers fixed with explosion relief panels of adequate size and capacity?</li> </ul>	Yes	
	<b>b.</b> Are Automatic temperature control arrangements (like solenoid valve in steam line or water line) provided to limit	Yes	
	temperature below predetermined safe limits?  c. Is safety ventilation system provided to dilute flammable mixture in air to limit the concentration to 25% of LEL?  d. Is the exhaust ducts of safety ventilation system designed to	Yes	
	discharge flammable mixture away from work room?  e. Is automatic pre ventilation provided to purge the driers before activation of heating system?  f. Are arrangements made to prevent dripping of combustible substances on electric heaters or burner flame?	Yes	
9	a) Are the secure guards made with weld mesh provided for all the V-belt drives, chain drives, gear drives and couplings of the machinery in the factory?	Yes	



b) Have the arrangements been made to them like mechanical
or electrical interlocking in order to ensure that they are in their
 respective place while the machinery is in motion?
Recommendations if any: Touch pad to be provided at Ware House and Crystallizers

## S. Electrical Safety:

No Subject		Recommendations		
1	Are suitably located efficient means provided for protection from excess current to every part of systems?	Yes		
2	Has adequate working space and means of access, free from danger, been provided for all electrical apparatus which have to be worked or attended by any person?	Yes		
3	Has every electrical circuit been provided with suitable automatic circuit breaker to interrupt the current in the event of over current, Earth leak, short circuit etc, before it exceeds the safe limit?	Yes		
4	Yes			
5	Are the safety precautions like 3 pin plugs, earthling of metallic bodies, proper cable jointers etc are satisfactory?	Yes		
6	a) Are rubber mats provided at all panel / switch boards?     b) Are they being examined periodically by an authorized person and record of such examinations available for inspection?	Yes		
7	Are instructions, both in English and Telugu, displayed towards treatment of persons in case of an electrical shock?	Yes		
8	Is the arc welding operations being done with all the relevant precautions like ensuring the return lead of suitable rating from job to machine, local fume extraction system, and wearing PPE and ensuring dry conditions at all times etc? If Yes, Furnish details	Yes		
	Recommendations if any: ELECTRICALLY TESTED TOOLS TO BE COLOR CODED.			

## T. Personal Protective Appliances:

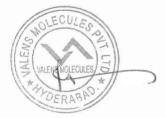
No	Subject	Recommendations
1	a. Has the need for usage of appropriate personnel protective appliances been identified for all activities having interface between hazard and worker?	Yes



	b. Have the PPE been provided as identified to all the workers including contract /casual workers?	Yes		
2	Are the safety department and the workersconsulted in the selection of PPE?	Yes		
3	Is the usage of appropriate PPE by the workers supervised?	Yes		
4	What is the system of replacement/issue of PPE?  Based on damage / time line			
5	What are the arrangements for safe custody?	Issue through		
6	Who is responsible for inspection and maintenance?  Department Safety personnel			
	Recommendations if any:	•		
	Awareness sessions to be continued apart from TBT and counselling			

Additional Recommendations If Any:

S.No	Subject	Recommendations
		All the highlighted issues will be considered on top priority with time bound action plan within 90 days.



Signature of Occupier



Signature(s) of Auditors

