HEALTH, SAFETY & LOSS PREVENTION AUDIT CHECK LIST
AS PER - IS 14489

SR. NO	DESCRIPTION		COMPANY	
			YES	NO
1	**HEALTH & SAFETY POLICY**			
	1.1	Is there a written statement of policy on safety at the site?		
	1.2	Is it being communicated by Management to all the employees?		
	1.3	Is it issued individually to all members of the staff, Contractor's workers etc.?		
	1.4	Is it displayed where employees can read it?		
	1.5	Is it written in a language understood by the majority of the site employees?		
	1.6	Is responsibility for safety spelt out to all levels?		
	1.7	When last was the policy reviewed & updated?		
2	**SAFETY COMMITTEE**			
	2.1	Is there an employee / management Safety Committee?		
	2.2	Is the composition of the committee in compliance with state regulations?		
	2.3	Are there written terms of reference for the Committee?		
	2.4	Does the Committee meet regularly as scheduled?		
	2.5	Is the effectiveness of these meetings measured?		
	2.6	Are minutes kept & reviewed?		
3	**SAFE SYSTEMS OF WORK**			
	3.1	Are written operating procedures established for all key hazardous activities on site?		
	3.2	Are these communicated to all the relevant staff?		
	3.3	Are those procedures reviewed as & when required?		
	3.4	Are these procedures posted near or at locations of hazardous activities?		
	3.5	Do the area supervisor ensure that the operating procedures are rigidly implemented?		
4	**HOUSE KEEPING & STORAGE OF MATERIALS**			
	4.1	Are effective steps taken to maintain plant areas clean?		
	4.2	Are aisles marked off with painted lines & material kept out of aisle width?		
	4.3	The floors are not slippery / damaged / worn?		
	4.4	Are the floors devoid of water puddles?		
	4.5	Are treads & risers of stairway in good condition & of uniform width & height?		
	4.6	Are standard handrails provided to the stairway? Are they in good condition & secure?		
	4.7	Are heavy & bulky objects stored safely & out of aisles etc.?		
	4.8	Are only the minimum required number of containers of material stored in the Plants?		
	4.9	Are they segregated if incompatible?		
	4.10	Is the painting of the factory premises carried out at specified intervals? Is a suitable record maintained in the prescribed register?		

	4.11	Are all floors, stairs, passages & gangways: Properly maintained? Free from obstructions & substances likely to cause persons to slip?		
	4.12	Are there safe means of access to every working place & for maintenance purpose?		
	4.13	Are the pits, sumps & floor openings securely covered or fenced?		
	4.14	Are the work areas, stairways properly illuminated?		
	4.15	Are the emergency exits kept clear? Are the areas outside emergency doors clearly demarcated?		
	4.16	Are all drain covers in good condition & fitting flush?		
5	**MACHINE GUARDING**			
	5.1	Are the moving parts of machinery securely fenced by standard safeguards?		
	5.2	Is guard interlocked with machine motor?		
	5.3	Are these guards always kept in position when the machinery is in motion?		
	5.4	Is the interlocking system regularly checked?		
	5.5	Is the examination, lubrication or adjustment of a machinery carried out while the machine is in motion?		
	5.6	Are the workers suitably trained to carry out such repairs?		
	5.7	Is the name of the worker recorded in the prescribed register?		
	5.8	Are the guard regularly guards regularly examined by a maintenance man?		
	5.9	Are belt change mechanisms in good condition?		
	5.10	Can all machinery be positively isolated for maintenance?		
	5.11	Are all emergency stop buttons effectively & clearly labeled?		
6	**MAINTENANCE OF EQUIPMENT**			
	6.1	**HOIST & LIFT**		
		a) Are they examined by a competent person once in 12 months?		
		b) Are the records maintained?		
		c) Is every hoist way / lift way sufficiently protected by an enclosure fitted with gates?		
		d) Is "Maximum safe working load" stamped or displayed on them?		
		e) Is every hoist / lift provided with an interlocking device?		
		f) Is every hoist / lift provided with efficient automatic device to prevent it from over-running?		
		g) Are the lift & its door made of fire resistant materials?		
	6.2	**LIFTING DEVICES**		
		a) Are they examined by a competent person once in 12 months		
		b) Is every lifting device stamped with the "safe working load" & the date of testing?		
		c) Are the records maintained?		
		d) Do all the operators know how to operate the equipment safely?		
	6.3	**REVOLVING MACHINERY**		
		Has the following been displayed near every grinding machine?		
		a) Maximum safe working peripheral speed.		
		b) Speed of the shaft.		

		c) Diameter of the pulley.		
		d) Protective face shield		
	6.4	**PRESSURE VESSEL**		
		a) Is every pressure vessel & its assembly checked by a competent person?		
		Externally - Once in 6 months		
		Internally - Once in 12 months		
		Hydraulic test - Once in 4 years		
		Ultrasonic test - Once in 4 years		
		b) Is the maximum safe working pressure & date of examination marked on every pressure vessel?		
		c) Are all alarm & safety trip systems designed to fail safe? Are they working as designed?		
		d) Are all pressure reducing valves & associated relief valves set in accordance specification? Are they tested regularly?		
		e) Are lathes & drills fitted with safety cut-outs?		
		f) Are all tools properly maintained?		
		g) Are all ladders properly identified & maintained?		
		h) Are all safety harnesses properly identified & maintained?		
		i) Is routine planned maintenance of plant & property carried out promptly & properly?		
	6.5	**ELECTRICAL**		
		a) Is hazardous area plant adequately bounded?		
		b) Are buildings fitted with lighting conductors? Is the continuity of earthing / bonding checked regularly?		
		c) Is the resistance to earth<10 Ohms? Is it periodically checked & recorded?		
		d) Are all electric cables/motors protected against accidental mechanical damage?		
		e) Are all cables, switches, fuse distribution boards properly identified?		
		f) Is emergency lighting properly installed? Is it tested at the approved frequency?		
		g) Do adequate safety procedures exists for working on electrical equipment?		
		h) Are all the electrically operated tools provided with (ELCB) Earth Leakage Circuit Breakers?		
		i) Is emergency power provided?		
		j) Has each piece of equipment been considered for adequate earthing?		
		k) Is the equipment fail safe on the event of power failure?		
		l) Are transformers located remote from hazardous areas & protected from fire exposure?		
		m) Are there earth pits for every transformer / electrical sub-station?		
		n) Are the sumps provided near all transformers?		
		o) Are insulated rubber matting provided on the floor for operating HT/LT electrical switch gears?		
7	**MATERIAL HANDLING & STORAGE**			
	7.1	Are the operators trained in handling / dispensing materials?		
	7.2	Are Personal Protective Equipment (PPE) provided during such handling / dispensing?		

	7.3	Are PALLET trucks used for transporting heavy or bulky loads?		
	7.4	Are the fork lift drivers trained regularly?		
	7.5	Where manual handling is necessary have the operators been trained in kinetic handling?		
	7.6	Are the material stacked systematically and as per their compatibility?		
	7.7	Are all containers properly labeled and protected?		
	7.8	Are the aisles free and clear for the movement of men and fork lifts?		
	7.9	**SOLVENT STORAGE**		
		a) Are the solvent tanks properly bonded and provided with emergency venting devices.		
		b) Are the solvent tanks bonded so as to contain 110% contents of the largest tank?		
		c) Are the bunds provided with drain valves?		
		d) Is insert gas blanketing system provided for the solvent tanks?		
		e) Are fire proof cabinets provided for storage of small quantities of flammable liquids?		
		f) Have drainage & spill prevention requirements been met		
		g) Are precautions (Prevention of stable charge) taken during loading / Unloading of a tanker?		
		h) Is a procedure made for such operations?		
	7.10	**CORROSIVE SUBSTANCES**		
		In areas where storage & handling of corrosive Substances like acids, alkalis & other corrosive Substances is carried out, are you complying with the Following provisions		
		a) Flooring of impervious material		
		b) Full protective equipment		
		c) Water facilities		
		d) Cautionary notices		
		e) Eye wash fountains & emergency showers		
		f) Splash guards on flanges of transfer lines		
		g) Devices for handling corrosive substances		
	7.11	**GAS CYLINDERS**		
		a) Do all the gas cylinders have proper colour code & manufacturer's labels?		
		b) Are they stored in a shady place awa ')m heat & sunlight?		
		c) Is the storage area properly ventilated?		
		d) Are all the cylinders provided with protective guards (for the valves)?		
		e) Are all the cylinders used with appropriate regulators?		
		f) Are all the cylinders stored vertically with proper clamping arrangement?		
		g) Are all LPG cylinders stored in a well ventilated place - preferably in a lockable wire cage?		
		h) Are the LPG cylinders stored near other cylinders & flammable material?		
8	**PERMITS**			
	8.1	Does a permit control system exist for		
		a) Welding / hot work		
		b) Confined space entry		
		c) General permit to work		

		d) Scaffolding (Working at Height)		
		e) Electrical		
		f) Excavations		
	8.2	Are they strictly being adhered to?		
	8.3	Is there a clear definition of levels of authority?		
	8.4	Are the contractors briefed on work permit procedure?		
	8.5	How is it ensured that contractors do not violate laid down safety procedures		
	8.6	Are the work permits sent to Safety Department after completion of job?		
9	**UNSAFE ACTS**			
	9.1	Are regular safety inspection carried out to identify unsafe acts?		
	9.2	Are the workers involved in such inspections?		
	9.3	Is there a scheme for awarding operators identifying such hazards?		
	9.4	Are such hazards discussed / reviewed regularly by Managers for corrective action?		
10	**FIRE EVACUATION**			
	10.1	Is there a comprehensive written fire evacuation Procedure?		
	10.2	Are regular drills held by each department?		
	10.3	Are there sufficient emergency exits?		
	10.4	Are they well marked?		
	10.5	Is the factory equipped with public Address system?		
	10.6	Is it tested regularly?		
	10.7	Are all personnel conversant with the action to be taken in the event of a fire?		
11	**FIRE PREVENTION**			
	11.1	Does the plant have a written procedure relative to the control, handling, storage & use of flammable? If yes, is it followed?		
	11.2	Are all storage facilities in compliance with fire regulations?		
	11.3	Are there adequate number of fire fighters on site at all times?		
	11.4	How many hours of training does each member receive per year?		
	11.5	Are there adequate number of fire extinguishers of the right type at the right locations?		
	11.6	Are these regularly tested & refilled? Are the records maintained?		
	11.7	Are employees familiar with the proper procedure for the use of fire extinguishers?		
	11.8	Are water supplies adequate considering pressure, volumes & quantity in regard to fire protection needs of the factory?		
	11.9	Should any services fail during an emergency (eg power, water) , do suitable alternatives exist?		
	11.10	If fire detection systems are installed, are they correctly maintained & recorded?		
	11.11	Are plant fire prevention/protection inspection reports reviewed by Management on regular basis?		
	11.12	Is the fire protection system approved by Insurance & TAC ?		
	11.13	Is the factory equipped with a fire alarm system?		
	11.14	Is it tested regularly?		
	11.15	Is it audible in all parts of the factory?		
	11.16	Are "No Smoking" areas clearly defined?		

	11.17	Are solvent pipe lines clearly marked?		
	11.18	Are there any dripping taps on solvent lines?		
	11.19	Are anti-static devices fitted where necessary?		
12	**EMERGENCY & DISASTER CONTROL**			
	12.1	Is there a written "On Site Emergency Plan & Disaster Control measures" procedures for Emergencies such as leakage of gas, spillage of Chemical & big fire?		
	12.2	Is it communicated to the workers, general public & all regulatory authorities?		
	12.3	How often is it rehearsed?		
	12.4	Are responsibilities defined for all emergencies?		
	12.5	Are practices held with local authorities?		
	12.6	Are plant personnel instructed in Bomb Threat Procedures?		
13	**CONTROL OF FLAMMABLE / EXPLOSIVE MATERIALS**			
	13.1	Are all work areas & storage areas controlled so as to prevent accumulation of excess flammable & explosive Materials?		
	13.2	Is the inventory of such material kept to the minimum requirement? (As specified in the notification)		
	13.3	Are the hazardous areas classified?		
	13.4	Are there sufficient extraction points?		
	13.5	Is the extraction efficient?		
	13.6	Are they vapour concentrations monitored regularly & controlled?		
	13.7	Are all dust explosion hazards identified & controlled?		
14	**CONTROL OF EXPOSURE**			
	14.1	Are the gas, vapour, dust exposures controlled by proper exhausts, dust extraction systems, scrubbers etc.?		
	14.2	Are these systems regularly checked for the efficiency?		
	14.3	Are the fumes, dust exhausted to a safe point?		
	14.4	Is any routine maintenance work carried out on these systems?		
	14.5	Are the records maintained?		
	14.6	Is there a written emergency procedure for controlling sudden release of gases, vapours, dust etc.?		
15	**NOISE ASSESSMENT & CONTROL**			
	15.1	Are the noise levels monitored regularly at the work place & along the boundary lines?		
	15.2	Are the noise levels controlled to less than 90 dB (A) by engineering design wherever practicable?		
	15.3	Are appropriate "High Noise" boards displaced in high noise areas?		
	15.4	Is use of ear plugs/ear muffs enforced in high noise areas?		
	15.5	Are audio metery tests carried out on persons working in high noise areas?		
16	**PERSONAL PROTECTIVE EQUIPMENT (PPE)**			
	16.1	Are locations of safety equipment clearly marked?		
	16.2	Have personnel been provided with :		
		Hard hats		
		Eye protection		
		Safety shoes		
		Safety gloves / aprons / gumboots / face shields,		
	16.3	Is equipment used properly & as intended?		
	16.4	Is there a written maintenance programme for PPE?		

	16.5	Is training given relating to the use of PPE?		
	16.6	Is the use of PPE strictly enforced?		
17	**OCCUPATION HYGIENE MONITORING & RECORD KEEPING**			
	17.1	Are the monitoring of dust, vapor, noise in work place areas carried out regularly?		
	17.2	Are the records maintained?		
	17.3	Are the results communicated to staff?		
	17.4	Are the reports reviewed for corrective action?		
	17.5	Are the policies & procedures on Occupational Health drawn?		
	17.6	Are the staff trained/instructed in the use of these procedure		
	17.7	Are proper working practices enforced?		
	17.8	Are appropriate hazard information provided at all work places		
	17.9	Are these information explained to the operators?		
	17.10	Are the operators working in hazardous areas subjected to any health checks?		
18	**OCCUPATIONAL HEALTH CENTRE (OHC)**			
	18.1	Is the OHC manned by adequate number of physicians, nurses & compounders as specified by the regulatory authorities?		
	18.2	Are all the facilities as prescribed available at the OHC?		
	18.3	Do occupational health staff visit work areas routinely & discuss work related health problems?		
	18.4	Are any work related health problems referred to Occupational health staff?		
	18.5	Are they involved in any decision making?		
	18.6	Are satisfactory health records maintained : Pre-employment medicals		
		Work related diseases		
		Sickness & absence		
		Accidents / Injuries		
19	**FIRST AID**			
	19.1	Are there adequate number of First Aiders available at the site?		
	19.2	Are they trained regularly? Do they play any active role during all emergencies?		
	19.3	Are there adequate First Aid appliances provided as specified by the regulatory authorities?		
	19.4	Are they fully equipped?		
	19.5	Are there suitable notices displayed on or near the First Aid boxes, detailing the names of the First Aiders?		
	19.6	Are the First Aid boxes regularly checked & properly maintained		
20	**ERGONOMICS**			
	20.1	Are users requirements incorporated into workplace / process design or working methods?		
	20.2	Are simplified methods of operation considered during modification / new projects?		
	20.3	Are the site safety personnel consulted during any plant modification / new Projects / ordering new machinery etc.?		
21	**ENVIRONMENTAL PROTECTION POLICIES & STANDARDS**			
	21.1	Is there a written environmental protection policy?		
	21.2	Does it provide methods of control & designation of responsibilities? Are the results of such monitoring reviewed by respective managers for effective control?		
	21.5	Do the monitoring results comply with consent limits?		

22	**EMISSIONS TO ATMOSPHERE**		
	22.1 Are all potential discharges to atmosphere properly controlled?		
	22.2 How frequent such emissions are monitored?		
	22.3 Do the results meet the limits specified by the regulatory authorities?		
	22.4 Are scrubber emissions checked & monitored regularly?		
	22.5 Is the ambient air inside the factory monitored?		
23	**EFFLUENT DISCHARGES**		
	23.1 Has the factory installed an effluent treatment plant?		
	23.2 How frequent are such discharges monitored?		
	23.3 Do the results meet the limits specified by the regulatory authorities?		
	23.4 Are the process discharges drained directly to storm water drains?		
	23.5 Has a procedure been made detailing suitable measures to control Foreseeable spillages?		
24	**WASTE MANAGEMENT**		
	24.1 Do procedure exist for the safe disposal of solid waste?		
	24.2 Has a consent been obtained from the regulatory authorities for the safe disposal of waste?		
	24.3 Has the factory installed an incinerator for the disposal of waste?		
	24.4 Is there a strategy / plan either to reduce / recycle / recover the solid waste?		
25	**CAPITAL PROJECTS & NEW PROCESSES**		
	25.1 Are Health, Safety & Environmental (EHS) issues considered at the design stage?		
	25.2 Are either the corporate or site Health & Safety Managers consulted for EHS issue before the implementation of the project?		
	25.3 Is HAZOP study carried out at the design stage for new products/ processes?		
	25.4 Do Health & Safety Managers from a part of the HAZOP team?		
	25.5 Are the occupational exposure limits & Substance Information sheets of all substances available before the implementation of the project?		
	25.6 Are the hazards/risks associated with the new products / processes informed to the staff well in advance?		
26	**CONTROL OF CONTRACTORS**		
	26.1 Is there a written site procedure for the control of contractors?		
	26.2 Are contractors suitably trained regarding site operations & the use of work permits?		
	26.3 Do site Engineering & Safety departments hold regular meetings with the contractors before & after their engagement?		
	26.4 Do site Engineering & Safety departments ensure that the contractors do not violate the safety norms spelled in the work-permit?		
	26.5 What punishment is meted out to contractors violating safety? Penalty & termination Service		
27	**SAFETY TRAINING**		
	27.1 Is there a plan for training Managers / Supervisors?		

	27.2	What is the type & frequency of training?		
	27.3	Is there a program for training new employees?		
	27.4	Are the records maintained?		
	27.5	Are course materials prepared for certain key topics?		
	27.6	Are safe systems of work incorporated in operating procedures?		
	27.7	Are these highlighted in the course of training?		
	27.8	Are refresher sessions held for employees?		
	27.9	Are employees trained when new equipment or processes are introduced or when procedures have been revised or updated?		
	27.10	Is specific training given to employees handling hazardous substances?		
	27.11	Is safety training given for all specified operations such as :		
		Grinding wheels		
		Scaffolding		
		Welding		
	27.12	Is retraining given to these specialist craftsmen to review correct procedures?		
	27.13	Have any of the training programs been evaluated?		
28	**INTERNAL SELF INSPECTION**			
	28.1	Are effective & regular safety inspections carried out by all departments?		
	28.2	Do workers form a part of the inspection team?		
	28.3	Have the departments developed their own check lists for maintaining safe conditions & checking unsafe practices?		
	28.4	Are the unsafe conditions or unsafe practices observed during the inspection corrected promptly?		
	28.5	In case of delay, are they followed up effectively by supervisors /managers until the recommended work is satisfactorily completed?		
	28.6	Are written program drawn outlining frequency of inspections, assigning responsibilities etc.?		
	28.7	Are the inspection reports effectively followed up by senior managers?		
	28.8	Are employees encouraged for making suggestions for prevention of accidents?		
	28.9	Is a suggestion scheme in operation?		
29	**SAFETY PROMOTION & PUBLICITY**			
	29.1	Are safety posters displaced all over the factory?		
	29.2	Are new posters displaced every year?		
	29.3	Are all safety messages displaced on departmental notice boards?		
	29.4	Does the factory publish regularly' In-house' safety bulletin		
	29.5	Is it distributed to all the employees?		
	29.6	Are safety films screened for the benefit of the employees?		
	29.7	Does the factory conduct safety competitions among the employees?		
	29.8	Does the factory arrange lectures by eminent specialists on health & safety so as to enlighten the employees on matters of safety?		
30	**EMPLOYEE / SUPERVISOR SAFETY CONTROL**			
	30.1	Do supervisors discuss safety problems / accident prevention with employees		

	30.2	Does each employee report to his supervisor unsafe conditions which he encounters in his work?		
	30.3	If they do, how often? Weekly / Monthly?		
	30.4	Are the discussions held individually or in groups?		
31	**ACCIDENT INVESTIGATION & REPORTING**			
	31.1	Are proper investigations held for accidents / dangerous occurrences?		
	31.2	Are they properly reported?		
	31.3	Are reportable accidents/incidents notified to the appropriate authorities?		
	31.4	Is the cause of accident determined & corrective measures initiated Immediately ? Is there a follow-up?		
	31.5	Are the accident reports reviewed regularly by the Dept. manager?		
	31.6	Is effective analysis by both cause & location maintained on medical & first-aid cases?		
	31.7	Are these accident analysis, results used to pin point accident causes for Prevention of similar accidents?		
	31.8	Are such incidents highlighted to the employees?		
	31.9	Do you encourage your operators to report all dangerous incidents?		
32	**SECURITY**			
	32.1	Is the number of guards provided adequate for conditions & need		
	32.2	Are they contract or permanent personnel?		
	32.3	Does the selection of guards assure proper personnel based upon qualifications for the job?		
	32.4	Is there a mechanism for reviewing the efficiency of the security systems?		
	32.5	Is there a program in effect to prevent pilferage, sabotage, theft or other significant losses to the site?		
	32.6	Is there a procedure for reporting losses due to theft?		
	32.7	Are investigations conducted to determine causes of losses		
	32.8	Is there a material gate pass system in effect & adequately monitored?		
	32.9	Are visitors closely supervised?		