Part 11: Environmental, Health, and Safety (EHS)

ICTI Code Requirement: 2e) that protective safety equipment is available and employees are trained in its use; 2f) that safeguards on machinery meet or exceed local laws;

General Environmental Health and Safety (EHS)

11.1 Does the factory have a written EHS management system that includes policies and procedures for environmental, health, safety (EHS) and working conditions?

Factory Guidance

- Management should establish an overall written EHS management system. The system should include site-specific policies and procedures for identifying, evaluating, controlling and documenting environmental, health, safety (EHS), and working condition risks.
- An EHS policy may include some or all of the followings:
  - General Note on the implementation of the -Environmental Health and Safety-(EHS) policy.
  - Implementation of an effective EHS program should lead to a reduction of workplace illness and injury, minimizing the costs associated with workplace accidents.
- The success of an EHS program depends on commitment from all levels and functions within the organization to:
  - Develop an EHS policy
  - Implement program to support policy
  - Measure effectiveness of program
  - Review results and the corrective actions, strive for continual improvement.
  - The object of an EHS program is to develop and implement control actions which, whenever possible, eliminate hazards or isolate people from the hazard. Where this is not possible, work activities should be planned and controlled through administrative means to an extent necessary to prevent injury and illness.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Document Number/Name:/Date of Issue:
11.2 **Is the factory’s EHS policy available to all workers in the local language?**

**Factory Guidance**
- Determine if the written EHS policy has been posted and/or made available to all workers in the local language.

**Audit Checklist**

| ☐ Yes | ☐ No [Non-compliance] |

11.3 **Has the factory designated a qualified EHS coordinator?**

**Factory Guidance**
- To facilitate the EHS process, a qualified EHS coordinator should be appointed, who should be suitably trained with evidence of a local government certificate if available or if not, relevant educational background plus minimum 18 months EHS experience. Consideration should be given to a system of proportionally increasing the number of support staff for the EHS coordinator based on the number of workers.
- The EHS coordinator assists factory management in establishing, developing, and administering the environmental, health, and safety management system.

**Audit Checklist**

| ☐ Yes | ☐ No [Non-compliance] |

**Comment Details:**
Name, position and qualification details of the coordinators:
11.4 Does the factory have an EHS committee/team?

Factory Guidance
- EHS committee/team(s) should be established and comprised of members representing a variety of shifts, functions, and personnel levels. EHS committee should meet on a regularly scheduled basis at least once in every 60 days.
- Plant manager is to attend the meeting at least three times at minimal throughout the year. Minutes of all meetings should be kept.
- EHS team members provide guidance, encourage EHS awareness and interest, and actively promote worker involvement to assist the factory management in implementing, evaluating, and improving the workplace EHS system.
- EHS committee/team(s) should include workers who are responsible for handling and transportation of hazardous waste; these workers should attend each meeting. (Updated on August 1, 2016)

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
EHS committee meeting frequency and the latest meeting date:

Specific Criteria:
- EHS committee meeting at least once in every 60 days?
- Plant manager attended the meeting at least 3 times in a year?

11.5 Does the factory promote workplace EHS awareness?

Factory Guidance
- The workers should be trained on EHS rules, safe operating procedures, EHS activities, and other EHS related information pertinent to their job. Workplace EHS awareness can be achieved through effective communications such as EHS meetings, newsletters, bulletin board postings, etc..

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Detail the EHS promotion activities:
11.6 Is job-specific EHS training/education provided to all workers prior to starting a new job?

Factory Guidance
- Job specific EHS training/education should be provided to all workers prior to starting a new job. Training should include operating machinery in a safe manner, proper use of personal protective equipment, disposal of waste, operating spray equipment, etc..
- Understanding the steps, hazards, and controls of a new job can prevent a worker from potentially injuring themselves or others.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
The most recently trained workers name, department and training date:

11.7 Are all workers given the opportunity to voice EHS opinions/concerns?

Factory Guidance
- The workers should be given the opportunity to voice EHS opinions and concerns. This opportunity can be via suggestion boxes, meetings, surveys, and personal communications. Recommendations received by factory management should be reviewed, considered, properly addressed and feedback should be provided to the EHS committee.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Ways of reporting:
Section 2: Audit Checklist

11.8 Are there controls in place to prevent new components, materials, chemicals, machinery, and products from being introduced into the factory, which have not been reviewed for potential EHS hazards?

Factory Guidance
- EHS coordinators should identify potentially hazardous materials and/or processes prior to the use of the materials or implementation of the process. Adequate safety controls should be put in place prior to materials or processes being implemented.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Document Number/Name/Date of Issue/Date of Last Assessment:

11.9 Are all chemical containers properly labeled with their respective hazards?

Factory Guidance
- All containers of chemicals coming into the factory should have a label attached with the name of the chemical and an indication of the potential hazard and any specific handling and storage instructions. Labeling can be with symbols or in the local language.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

11.10 Have workers been trained on chemical safety?

Factory Guidance
- A written chemical EHS policy and/or procedure in the local language must be provided to all workers who have the responsibility within the chemical EHS program for the storage, labeling, handling and safe usage of all chemicals which are introduced into the factory. Responsibilities for personnel within the chemical EHS program should be clearly defined and documented. All workers who use or work in areas where chemicals are used or stored should be trained by a person experienced in chemical safety.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
The most recently trained workers name, department and training date:
Section 2: Audit Checklist

11.11 Are up-to-date MSDS available for all chemicals produced, imported, stored and used onsite?

Factory Guidance

- Material Safety Data Sheets (MSDS) must be available in the local language to workers for each hazardous chemical. Workers should be informed that the MSDS are available and where they can be found. Workers should have an understanding of how to interpret the key safety, labeling, and handling points illustrated by the MSDS. [Note: It is recommended that obsolete MSDS should be removed from the current MSDS file but retained elsewhere for 5 years.]
- MSDS example (refer to Appendix III) is provided hereinafter for reference purpose. MSDS are intended to outline the characteristics, chemical components, the potential risks associated with the exposure and the precautions which are necessary in the use, handling and storage of hazardous chemicals. The availability and accessibility of the MSDS implies the availability and accessibility of information that will be understandable to the worker.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Name of the highest consumption chemicals:

11.12 Is a current chemical inventory available for all hazardous chemicals produced, imported, stored and used onsite?

Factory Guidance

- A list of all hazardous chemicals currently being used or stored at the factory including the relevant MSDS should be maintained and available through the EHS coordinator or factory manager.
- The list would be used in evaluating hazards, training workers, hazardous waste disposals, air and water discharge, spill assessment and cleaned-up.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]
Section 2: Audit Checklist

11.13 Are functional emergency eyewash stations and showers provided where corrosive chemicals or high volumes of solvents are handled and used?

Factory Guidance

- Emergency eyewash equipment should be present in all hazardous chemical use areas. Shower unit should be added to the eyewash equipment if corrosive and toxic chemicals are used. Location of eyewash equipment for non-corrosive chemical should be in the workshop or right outside the entrance of the workshop and within 50 meters (165 feet approx.) travel distance of the hazardous chemical use areas. If corrosive chemicals are used, eye wash and shower station must be within 19 meters (62 feet approx.) from use area. Signs identifying the emergency eyewash equipment locations and shower unit locations should be conspicuously posted. This requirement applies to both process operation and laboratory facilities.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Specific Criteria:

- Within the required distance (50 meters for non-corrosive/19 meters for corrosive)?
- Corrosive chemical areas have both eye-washer and shower?

11.14 Are storage and process tanks, piping, and valves containing hazardous chemicals labeled and/or color-coded?

Factory Guidance

- Storage and process tanks, piping used to transfer hazardous substances, and valves used to control the flow of hazardous chemicals should be labeled or color-coded to communicate which substances are present in the system. Color-coding and identification is an important aspect for operations and maintenance. The color-coding system should be consistent throughout the factory and communicated by posting of the color code and what each color identifies. In addition to color-coding, labeling should also be used to identify valves, connections, bleed valves, and other critical parts.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]
Section 2: Audit Checklist

11.15 Are contractors given site specific training on EHS rules?

Factory Guidance

- Contractor personnel should receive training prior to commencing work. The contractors should be informed of any potential hazards at the factory to which they may be exposed. The training should include a review of the site EHS rules, which contractors must obey. Contractors should receive the EHS rules in written format.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Date of latest training:

Health and Safety

11.16 Does the factory have a procedure requiring workers and management to report all accidents and near misses and corresponding corrective/preventive action?

Factory Guidance

- Each accident or near miss requires some degree of investigation including fires, spills, injuries, overexposure to hazardous chemicals, property damage and incidents, which did not result in injury or loss but had the potential to do so under different circumstances. A consistent format should be used to ensure that the proper information is collected and the immediate causes, root causes and necessary system improvements are identified and an action plan has been put in place. Forms should be filled out in their entirety prior to filing. Workers should be reminded of the need to report all incidents. This can be accomplished by posting bulletins, safety meeting reminders, memoranda, etc. Corrective actions should be tracked on a corrective action log and the status of items should be reviewed periodically to ensure timely completion.
- An example (refer to Appendix IV) of an accident/near miss investigation report is provided hereinafter for reference purpose.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Document Number/Name/Date of Issue:
11.17 Are all accidents and near misses investigated?

Factory Guidance
- All accidents and near misses should be investigated and documented.
- Employees should be instructed and encouraged to report accidents and near misses.
- Corrective/preventive actions needed to be tracked to completion.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
The type of the most frequent accident, and the corresponding corrective action:

11.18 Have any workers not faced punitive action for reporting accidents?

Factory Guidance
- All accidents should be reported. Workers should be encouraged to promptly report any accidents, and should not be discriminated against, reprimanded, or discouraged for reporting accidents.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

11.19 Is loose clothing, jewelry, and long hair prohibited near moving machinery?

Factory Guidance
- The factory should prohibit persons from working at or near moving machinery while wearing loose clothing, jewelry, or long hair. Gloves, loose shirts, baggy pants, etc. which could become entangled in machinery should not be permitted. Jewelry includes rings, bracelets, necklaces, etc. and should not be permitted. Hair hanging loosely below the neckline should not be permitted.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]
Section 2: Audit Checklist

11.20 Have workers been trained on the subject of machine safeguarding?

Factory Guidance
- All workers should be trained on machine safeguarding when they are hired. Follow-up training should be conducted periodically to ensure continued awareness and implementation of safe practices.
- Training materials and records should be documented.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Awareness of the interviewed workers:

11.21 Are machine safeguards provided and used on operation points, transmission devices, hazardous moving parts, pulleys and belts, and fan blades etc.?

Factory Guidance
- Machine safeguarding should be provided on all machinery to prevent workers from coming into contact with any machine part, function, or process that may cause injury.
- The point of operation is the location on the machine where work is performed on material such as cutting, shaping, molding, trimming, drilling, or punching. These areas should be safeguarded.
- Power transmission apparatus are the components of the mechanical system, which transmit energy to the part of the machine performing the work. These components include flywheels, pulleys, belts, connecting rods, couplings, cams, spindles, chains, cranks and gears. These components should be safeguarded.
- Other hazardous moving parts are the parts of the machine, which move while the machine is in operation. These can include reciprocating, rotating, and transverse moving parts, as well as feed mechanisms and auxiliary parts. These parts should be safeguarded.
- Drive mechanisms such as pulleys and belts that are within seven (7) feet (2.1 meters) from the floor or working surface should be guarded.
- Fan blades within (7) feet (2.1 meters) from the floor should be protected against accidental contact. A guard should be provided with openings no larger than 0.5 inch (12.5 mm).

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

11.22 Are adequate starting/stopping controls provided to each operator and protected from accidental activation?

Factory Guidance
- Starting/stopping controls should be accessible to the operator. If there is more than one operator, separate controls should be provided for each operator’s station. Start buttons should be protected against accidental startup by a ring guard.
Section 2: Audit Checklist

- All starting/stopping controls should be labeled as to its function and appropriately colored. Green should be used for start controls and red for stop controls.
- Emergency stop buttons preferably should be of a palm/mushroom type for easy and quick activation in an emergency. Emergency stop buttons should also be colored red to differentiate the emergency stop button from other controls.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Specific Criteria:
- Starting/stopping controls labeled and/or appropriately colored?
- Emergency stops palm or mushroom type and colored red?

11.23 Are any machines, equipment and fixtures not covered above in safe operating condition, such as cords, plugs, rotating parts and guards, hand tools and portable power tools?

Factory Guidance

- Areas requiring frequent inspection are cords, plugs, rotating parts and guards. All hand tools and portable power tools should be free of defects. Defective tools are to be removed from the work place and repaired or replaced.
- Machinery and equipment should be free of excessive dirt, grease, or oil that could present a hazard. Machinery and equipment can only be safe and effective if it is maintained in proper working condition free of recognizable defects. Preventive maintenance programs that ensure safe operation by checking safety latches, sensors, start and stop controls are recommended.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

11.24 Is adequate overall ventilation provided where chemicals and pollutants (e.g., solvents, solder, and dust) are used?

Factory Guidance

- Suitable local mechanical exhaust ventilation is essential to prevent a buildup of vapors, which could result in a fire or health hazard wherever flammable liquids such as solvent based paints are stored, used or mixed. In addition to ventilation, control is best achieved through the proper training of workers and confinement of liquids and associated vapors to selected areas, control of potential ignition sources, and protection of the area with an extinguisher system. No-smoking policy should be strictly enforced. Other operations such as soldering, plating and paint mixing may require local ventilation using exhaust air filters. Contaminated air should not be circulated or redirected into another air unit intake. Adequate ventilation and design of drying areas is also essential to control heat accumulation and contact with ignition sources.
Section 2: Audit Checklist

- Flammable liquids such as solvent based paints which are used or mixed for an operation must be closely controlled during all storage, handling, and usage of these liquids. This is the responsibility of the management.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Specific Criteria:
- Supporting provided to prove that the air exchange is sufficient (at least 6 times per hour)?

11.25 Are all workers exposure maintained within acceptable permissible exposure levels?

Factory Guidance
- All workers exposure to hazardous substances should be maintained at or below regulatory standards established in the country where the factory is located where such regulatory standards do not exist, reference may be made to the ACGIH (American Conference of Governmental Industrial Hygienists) exposure limits for relevant chemicals present in the factory processes (refer to Appendix V). If not set out in the country's regulatory standard, a respected sampling and testing method such as those approved by NIOSH or OSHA in the United States or an equivalent standard in a major European Union country should be used. Exposures should be controlled through the use of engineering controls, administrative controls, or personal protective equipment. Periodic monitoring should be conducted to determine if exposures are in fact below established standards. This requirement applies to all areas including production, chemical use areas, laboratories, warehouse, and maintenance. Where practicable, engineering controls should be implemented to reduce worker exposures to hazardous substances below established standards. An example of engineering controls is mechanical exhaust ventilation. Where engineering controls have been determined to be impracticable, administrative controls should be implemented. Administrative controls include job rotation, preventative maintenance programs, regularly scheduled rest breaks, changes to production schedules, etc. Where engineering controls and administrative controls are determined to be impracticable, personal protective equipment (PPE) should be provided and used. PPE should be suitable for the person using it and appropriate for the substance it is designed to protect against.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Date of test and the test lab name:
Section 2: Audit Checklist

11.26 Does the factory have a written procedure for the control of hazardous energy lockout tagout?

Factory Guidance

- The factory should have a written procedure on the subject of hazardous energy control. This procedure should be developed for purposes of protecting workers during machine and equipment servicing and maintenance where the unexpected energization, start-up or release of stored energy could occur and cause injury. Hazards being guarded against include being caught in, being crushed by, being struck by, being thrown from, or contacting live electrical circuits/parts. Energy sources include electrical, mechanical, pneumatic (compressed air), hydraulic, chemical, and thermal. All energy sources should be de-energized and where possible, locks should be placed on switches and valves to ensure that they are not inadvertently switched on during shutdown, and tags used to make clear to all why energy source is locked out (off).

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Document Number/Name/Date of Issue:

11.27 Is training provided to all authorized users, affected workers, or other workers who are impacted by the hazardous energy control procedure?

Factory Guidance

- Workers who perform maintenance and servicing activities (authorized workers) should receive training from a competent person in lock/tag/try procedures and practices prior to conducting any work. Persons who normally operate machines and equipment being services (affected workers) and persons who may be in the area of locked/tagged equipment (other workers) should also receive training. All workers should receive an overview of the relevant lockout/tag out program for their areas so that they are able to recognize when energy controls are being implemented, understand the purpose of the procedures and the importance of not attempting to start up or use the machine/equipment that has been locked out. Check training records of authorized workers on file to verify that training is current and not more than 1 year old. Determine if they have been adequately trained by a competent person on the subject of lockout/tag out.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
The most recently trained workers name, department and training date:
Section 2: Audit Checklist

11.28 Are sufficient lockout and tag out isolation devices available?

Factory Guidance

- A sufficient number of isolation devices should be made available to persons performing lockout/tag out, such as locks, tags, group lock boxes, circuit breaker lockouts, valve lockouts, and lock hasps. This equipment should be maintained and kept in a readily available location. Each maintenance worker working on a piece of equipment should have their own personal lock for locking out that equipment.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
List the equipment with lockout & tag out:

11.29 Is the energy to equipment and machinery locked out prior to service or maintenance?

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Awareness of the interviewed maintenance staff towards the lockout & tag out procedure:

11.30 Has a hazard assessment been completed which identifies the personal protective equipment (PPE) required for each operation?

Factory Guidance

- A hazard assessment should be conducted of each operation and the correct Personal protective equipment (PPE) for each operation should be listed. Personal protective equipment should be selected based on the hazard assessment of each operation.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
List 3 major risks and the corresponding PPE:
Section 2: Audit Checklist

11.31 Is required personal protective equipment provided to workers and visitors according to the hazard assessment?

Factory Guidance

- Personal protective equipment should be provided where necessary at no cost to workers. The following provides some examples of what conditions warrant the use of various types of personal protective equipment:
- Eye/Face Protection: Eye/face protection should be provided where there is a potential for injury from flying objects, liquids, injurious radiation, or a combination of these hazards. The type of eye protection will depend upon the hazard. Types of eye protection include safety glasses, goggles, face shields, and shaded lenses for injurious radiation.
- Foot Protection: Foot protection (safety shoes) should be provided where foot injuries could occur from impact of falling or rolling objects, objects piercing the sole. Protective boots should be provided where feet are exposed to liquids, other contaminants, hazardous chemicals, or where worker’s feet are exposed to electrical hazards.
- Hearing Protection: Hearing protection should be provided where hearing loss from high noise exposures could occur. Hearing protection when properly used should reduce the worker’s noise exposure to less than 85 decibels (dBA). Types of hearing protection include earmuffs and earplugs.
- Hand Protection: Appropriately rated gloves should be provided for their applicable use to adequately protect workers against contact with chemicals, lacerations, burns, punctures, and extreme hot or cold temperatures.
- Head Protection: Head protection (hardhats) should be provided to protect against injury from impact and penetration from falling and flying objects and limited electric shock burn.
- Protective Clothing: Protective clothing should be provided to workers to prevent exposures to chemicals, lacerations, punctures, cold, and burns.
- Respiratory Protection: Respiratory protection should be provided where the potential for inhalation exposure to harmful types or quantities of airborne contaminants could occur. Airborne contaminants include particulates (dusts), vapors, gases, aerosols, and fumes (metal particles). Types of respirators include air purifying and air-supplying. Proper selection of a respirator should include the identification and evaluation of the contaminant, and the determination of the appropriate respirator. All respiratory protection should be approved by the regulatory or research testing authority for the type of contaminant exposure. Workers with any type of respiratory conditions should not be assigned to areas where respirators are required.
- PPE Provided to Visitors: Visitors should also be provided with appropriate personal protective equipment when entering or working in areas where signage indicates that PPE is required.
- Workers should be observed to ensure that personal protective equipment is being properly used in accordance with the factory’s procedures. Determine if workers are utilizing personal protective equipment in areas of the factory where it is specifically required. If workers are observed not wearing PPE where they should be required to, determine if they have access to personal protective equipment and/or if supervisors or managers are not enforcing the use of personal protective equipment.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]
11.32 Have applicable workers been trained on the proper use, cleaning and storage of personal protective equipment?

Factory Guidance
- Workers should be trained on the proper use, cleaning and storage of the personal protective equipment that is provided. The types of personal protective equipment that should be evaluated and used where appropriate include eye/face protection, foot protection, hearing protection, hand protection, head protection, protective clothing, and respiratory protection. Training should include proper fitting of all equipment. Annual PPE refresher training should be conducted to ensure continued awareness on the subject. Training records should be available to verify all trainings that have been conducted. Workers who wear respirators should be encouraged to undergo medical evaluation in the use, care and fit testing and have hearing test annually for those on a protection program.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Awareness of the interviewed workers using PPE:

11.33 Is appropriate signage posted in all areas where personal protective equipment must be worn?

Factory Guidance
- Signage should be visible in the general area and/or at workstations indicating where and what type of personal protective equipment is required for that area.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Areas where the signage posted:
11.34 Have all crane/hoist operators received job-specific safety training?

Factory Guidance

- Only trained workers should operate cranes or hoists. A qualified person should provide training and it should include a review of the general crane, sling, and hoist operating rules.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Number of qualified workers and the latest qualification date:

11.35 Are inspections conducted on cranes, hoists, slings, and lifts?

Factory Guidance

- Prior to initial use, all new and/or altered cranes, hoists and lifts should be inspected by a competent person to ensure they are in safe operating condition. Periodic inspection should be made of external and/or internal components for signs of defects, wear, or abuse as well as cleaning and lubrication of gears and motors, etc. Cranes, slings, hoists and lifts which are damaged or defective, should be removed from service and marked so that they will not be used until repaired or replaced. [Note: Each day before being used, the sling and all fastenings and attachments should be visually inspected for damage and defects. Additional inspections should be performed as conditions warrant.]

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Date of last inspection and inspection department:
Section 2: Audit Checklist

11.36 Are capacity limits clearly marked on cranes, slings, hoists and lifts?

Factory Guidance
- The maximum load limits should be conspicuously marked on all cranes, slings, hoists and lifts and the factory should ensure that those maximum loads are followed. Hoist hooks should be equipped with a safety latch to prevent the accidental release of the load. [Note: Marking is required on all crane beams as it is possible to have more than one moving rail in the system in the same section of the traverse rail effectively loading the section of the rails with the sum of the two cranes and their loads.]

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Maximum load limits of cranes, slings, hoists and lifts:

11.37 Are stairs provided with standard handrails and mid-rails?

Factory Guidance
- Every open-sided flight of stairs in excess of 3 feet (one meter) should be equipped with adequate and safe stair railings, which comply with local laws. Such railings may consist of a top rail, intermediate rail, and adequate support.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

11.38 Are open stairs, platforms, and elevated floors guarded by railings on open sides or are personal fall protection devices and equipment provided?

Factory Guidance
- Every open-sided floor or platform 1 meter (3 feet approx) or more above adjacent floor or ground level should be guarded by adequate railing on all open sides except where there is entrance to a ramp, stairway, or fixed ladder. Open sides of all platforms, stairs, and floors require adequate railings. Loading dock when not in use and above 1 meter (3 feet approx) in height should have a barrier (chain) to prevent falls from the loading dock. Fall protection should be provided when work is performed that exposes workers to a fall of greater than 1.8 meters (6 feet approx). Examples of tasks typically requiring fall protection include work near unprotected roof edges, mezzanines, roof or floor openings, open platforms, etc..
Section 2: Audit Checklist

- Fall protection can be by guardrail systems, safety net systems, or personal fall arrest systems (body harnesses, lifelines). Full body harnesses should be used in place of back belts which are unsafe for this use. Adequate anchorage points which will be able to support the force of a falling worker should be identified and used to secure the fall protection equipment and devices. Inspections of this equipment should be performed periodically and prior to each use to ensure it is proper working condition. Workers should receive training in the proper use of this equipment and the facilities fall protection safe work procedures.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

11.39 Are elevated work platforms (i.e., baskets) secured to the lifting device (i.e., forklift, high lift, etc.)?

Factory Guidance
- Prior to elevating personnel in a work platform, the platform (i.e., baskets) should be secured to the lifting mechanism (forklift, raymond lift) so that the platform cannot become free of the lifting mechanism and fall to the floor. A chain or locking mechanism should be used. Adherence to forklift lifting capacities based on load weights and working heights should be followed. [Note: Work platforms should be lowered to floor level before the forklift travels. Additionally, mechanical-lifting devices should be inspected by a competent maintenance person at least annually.]

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
List of the cargo lift and their latest annual inspection date, valid date and inspection agency:

11.40 Have authorized forklift operators received forklift safety training?

Factory Guidance
- Only trained workers should be authorized to operate a forklift or other powered industrial vehicle. Training records should be available to verify all training that has been conducted. Where there is a government requirement for operators to be certified, the operator should possess a certification card.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Operator qualification ID and valid date:
Section 2: Audit Checklist

11.41 Are forklifts inspected daily and maintained at least once a year?

Factory Guidance

- A daily visual and functional inspection of each forklift must be carried out and documentation of these inspections should be available.
- A mechanical inspection program should be implemented. Forklifts should be maintained at least annually. [Note: Equipment defects should be corrected to ensure safe operation. Defective equipment should be removed from operation areas until fault is rectified.]

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

11.42 Are all ladders used in good condition?

Factory Guidance

- Ladders should be visually inspected prior to use for any damage or defects. Ladders that are either damaged or defective should be removed from service. The damaged or defective ladder should be marked or tagged so that it will not be used until it has been repaired or replaced.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

11.43 Are floor and roof openings covered or protected to prevent falls?

Factory Guidance

- Skylight floor openings should be guarded by a skylight screen or fixed railing on all exposed sides. Manhole floor openings should be guarded by a cover of sufficient strength and construction.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]
Section 2: Audit Checklist

11.44 Does the factory have a written procedure for entry into confined space areas?

Factory Guidance
- The factory should have a written policy and/or procedure on the subject of confined space entry. Examples of confined spaces are: compressed air tanks, fuel or solvent storage tanks, silos, catch basins. A written permit should be issued by the EHS person responsible for the confined space program. The entry procedures should include provisions for energy and hazardous materials source isolation, testing of confined space atmosphere (oxygen, LEL, toxic air contaminants), ventilation, communications, entry and egress, and emergency rescue. [Note: Every effort should be made to avoid placing workers in confined spaces. Where work is required, a procedure for the specific area should be developed.]

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Document Number/Name/Date of Issue:

11.45 Have workers who enter confined spaces been trained on confined space entry requirements?

Factory Guidance
- Only trained workers should be permitted to enter confined space areas, or to assist another worker with work in a confined space area. Training records should be available to verify all training that has been conducted.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
The most recently trained workers name, department and training date:
11.46 Are confined spaces identified and secured from unauthorized entry?

Factory Guidance

- Confined spaces are typical found in the following areas: Storage tanks, Process vessels, Diked tank farms, Boilers, Ovens, Silos, Underground trenches and Enclosed conveyors.
- Recognized safety practices provide that a confined space entry process must be followed to assure the safety of workers who must work in these spaces. All confined spaces must be identified by a posted sign stating “Confined Spaces - Follow established entry procedure,” in local language and also secured or locked to prevent unauthorized entry. Where possible, work inside confined spaces should be avoided.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

11.47 Are there “Stop” signs, mirrors, and speed limit signs posted in areas where vehicle and pedestrian traffic may be present?

Factory Guidance

- “Stop” signs, mirrors, and speed limit signs should be posted where vehicle and pedestrian traffic cross and line of sight is blocked so that driver/pedestrian may not have sufficient time to react.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

11.48 Are trailers/containers secured from movement prior to entry for loading and unloading?

Factory Guidance

- Prior to entering trailers, the trailers must have their wheels locked to prevent movement away from the dock. Dock-locks may be used to restrain trailers.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]
Section 2: Audit Checklist

Environmental

11.49 Is hazardous waste stored properly with appropriate warning label and at least weekly inspection?

Factory Guidance

- Hazardous waste should be properly contained and stored. Review existing hazardous waste storage area to ensure drums of waste are stored with lids, rings, and/or bungs in place. Make sure that lids, rings, and/or bungs fitted will protect against spills if the drum is tipped over. In the case of organic solvents, it prevents evaporation. It also prevents rain from entering drums. Inspections of drums should be conducted and drums should be free of leaks and major dents. All waste drums should have “hazardous waste” label in addition to appropriate hazard warning label(s). Inspection of the waste storage areas should be conducted at least weekly. The storage area should also have appropriate clean-up equipment, a fire extinguisher, and the area should be posted with sign. Wastes should be stored to ensure that incompatible materials are not stored together. Areas where hazardous wastes are generated, accumulated, or stored should be inspected periodically to check for leaking or deterioration of containers and the containment system caused by corrosion and other factors.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

11.50 Is hazardous waste management training provided to all workers who handle or transport hazardous waste?

Factory Guidance

- Workers who handle or transport hazardous waste should be trained in the proper methods of collecting, storing and disposing of the wastes.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Awareness of the interviewed workers:
Section 2: Audit Checklist

11.51 Is all hazardous waste disposed of through qualified collector at permitted facilities?

Factory Guidance

- Local laws may require certain types of hazardous wastes to be disposed of at special facilities. If that is the case, hazardous and toxic industrial wastes should be properly disposed of at permitted (government licensed, etc.) facilities where available. If such government licensed facilities are not available, hazardous wastes should be disposed of in accordance with the local laws. Documentation (manifests) for all shipments of hazardous waste is kept onsite in accordance with the local regulations.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Name of collector, contract period and the latest manifest date:

11.52 Are indoor and outdoor hazardous wastes stored in a safety place and properly managed?

Factory Guidance

- A safe and well managed indoor and outdoor hazardous waste storage areas should have the below:
  - A solid impermeable base, free of gaps or cracks: Underlying the containers should be a base that is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the detected material is removed.
  - Containment pits, slanted floors, or other form of containment to allow easy removal of liquids resulting from leaks or spills: The base should be sloped or the containment system designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are protected from contact with accumulated liquids.
  - The capacity to contain 110% of the single largest container: The containment system must have sufficient capacity to contain 110% of the volume of the largest container. Spilled or leaked waste and accumulated precipitation should be removed from the sump or collection area in as timely a manner as possible to prevent overflow of the collection system.
  - Separation of incompatible wastes that may react: Incompatible waste should be stored in separate containers to prevent a reaction. Separate containers with incompatible wastes should not be stored adjacent to one another or in the same area where they can mix and react if a leak or spill occurs. Containers of incompatible wastes should be stored separately or have containment between the containers to prevent mixing.
  - Proper signage indicating the types of wastes stored: Hazardous waste storage areas should have visible signage posted in a conspicuous location. The signage should identify the area as a “Hazardous Waste Storage” area and indicate the hazard type(s) of waste present such as flammables, corrosives, etc.
Section 2: Audit Checklist

- Emergency spill response equipment in close proximity: Spill containment supplies should be present to properly clean up any leaked or spilled waste. These supplies should include absorbent materials (such as absorbent socks, pillows, pads, clay, and cat litter), shovels, brooms, boots, gloves, face shield, etc..

Audit Checklist

| ☐ Yes / ☐ No [Non-compliance] |

11.53 Does the factory have an industrial process waste water discharge permit?

Factory Guidance

- Local laws may require a discharge permit or certificate for certain types of factory processes. If the factory discharges any industrial process waste water, they should have evaluated whether or not a water discharge permit or certificate is required. If they have a permit, they should ensure that they are in compliance with the requirements of the permit. [Note: If the factory fails to comply with major provisions of this section, the factory will have a reasonable period of time to develop a plan to comply with this section as part of the corrective action plan and a reasonable period of time to implement this corrective action plan. It is acknowledged that significant actions and expenditures may be required in connection with this section that will take longer to implement than other aspects of a corrective action plan.] However, compliance over time is necessary.

Audit Checklist

| ☐ Yes / ☐ No [Non-compliance] |

Comment Details:
Name of the permit issuing authority and the issue date:
11.54 Does the factory have air discharge permits if required by the local environmental agency?

Factory Guidance

- The facilities that emit chemical vapors to the atmosphere should evaluate those discharge points and determine if they meet the requirements of the local laws and should have obtained an annual test report. If local laws require proper permits, these permits should be available. It is suggested that each location maintains a record of all openings and that the openings are numbered. The factory should understand the amount of emissions, which are sent through the stack or vent. [Note: If the factory fails to comply with all major provisions of this section, the factory will have a reasonable period of time to develop a plan to comply with this section as part of the corrective action plan and a reasonable period of time to implement this corrective action plan. It is acknowledged that significant actions and expenditures may be required in connection with this section that will take longer to implement than other aspects of a corrective action plan.] However, compliance over time is necessary.

Audit Checklist

□ Yes / □ No [Non-compliance]

Comment Details:
Name of the permit issuing authority and the issue date:

11.55 Are air pollution control systems properly maintained and operated?

Factory Guidance

- Air pollution control systems such as spray painting filtering system should be maintained, clean and in safe proper working conditions. Filters should be changed periodically to ensure that contaminants are adequately collected and the controls are operating efficiently. Local regulations may require that periodic tests (air flow measurements) are performed to determine if controls are operating correctly and efficiently.

Audit Checklist

□ Yes / □ No [Non-compliance]

Comment Details:
The effectiveness of the system:
Section 2: Audit Checklist

11.56 Does the factory have a domestic waste water discharge permit if required by the local environmental agency?

Factory Guidance

- In connection with the discharge of sewage, the factory should clean out any septic system as frequently as appropriate consistent with the number of workers and the size of the septic system. If current sewage disposal practice does not comply with local law, a corrective action plan should be developed and implemented when community infrastructure is available to deal with the factory’s sewage disposal. [Note: The factory should have a regularly scheduled maintenance program for cleaning any septic system.]

Audit Checklist

☐ Yes / ☐ No [Non-compliance]

Comment Details:
Cleaning frequency and agency name:

11.57 Is secondary containment provided for all storage tanks if required by local regulations or are procedures or systems in place to identify leaking from underground storage tanks?

Factory Guidance

- Secondary containment for underground storage tanks is provided by using a double wall tank. Sensors are placed between the walls to detect leaking of the inner tank. If leaking is detected the tank should be removed and replaced. Berms or spill containment pallets/platforms should be placed under above ground storage tanks if not in a room or area with impervious floors. Inventory procedures or monitoring systems should be in place to identify potential leaks in underground storage tanks. Logs should be maintained to monitor when material is added or removed from a tank and to keep track of usage. Discrepancies in the usage log should be investigated to determine if material is leaking from the tank system.

- Below ground storage tanks should be professionally inspected periodically. Pressure testing should be performed to check the integrity of the underground tanks and piping. Above ground tanks can be visually inspected. Records of testing and inspections should be maintained.

- Tanks that are leaking or in poor condition should not be in use. They should be emptied of any remaining hazardous material and closed until repaired or replaced. Signs should be posted indicating they are not safe to use.

Audit Checklist

☐ Yes / ☐ No [Non-compliance]