



# **Teledyne Technologies Incorporated**

## **Health and Safety Management System Manual**

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**Teledyne Technologies Incorporated**  
**Health and Safety Management System Manual**  
**EXECUTIVE SUMMARY**

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The purpose of the Health and Safety Management System (HSMS) Manual is to set forth the key elements for incorporation into your facility's written HSMS. The HSMS to be developed and implemented, utilizing this Manual, is a set of written policies and procedures to guide the facility in providing a safe and healthy work environment for all employees and to achieve and maintain regulatory compliance through its health and safety management practices. Each Teledyne facility is required to have a written HSMS.

Note: Teledyne businesses and/or sites certified to OHSAS 18001, ISO 45001 or equivalent Health and Safety Management System are considered to be in substantial compliance with the Teledyne HSMS Manual requirements.

The HSMS is designed to be flexible to adapt to each facility. Prior versions of the facility's HSMS may be updated for incorporation into this written HSMS.

In general, the facility HMS is comprised of ten (10) key elements as outlined in Section 1 of this Manual. Policies, procedures and informational tools, as well as assessment of operations for hazards and potential impacts to employee health and safety, will be required. To the extent not already done, the facility and its management will also be required to:

- Create a written organization plan for health and safety management (HSMS §5.2).
- Assign and communicate specific accountability and responsibilities for the facility HSMS and compliance therewith and evaluate performance based on HSMS and facility health and safety compliance (HSMS §5.3).
- Take disciplinary actions for health and safety violations (HSMS §5.3.2).
- Identify health and safety requirements applicable to the facility and the ongoing process for assessing operations to maintain continual compliance with applicable requirements (HSMS §5.4).
- Implement management of change procedures and self-inspections procedures (HSMS §5.4.2).
- Perform and document work place hazard assessments (risk assessments) (HSMS §5.4.3)
- Implement procedures for health and safety incident response, investigation and correction. (HSMS, §5.5).
- Implement awareness and training plan and record keeping requirements (HSMS §5.6).
- Implement health and safety considerations in business planning (HSMS §5.7).
- Integrate health and safety record keeping requirements (HSMS §5.8).
- Perform annual HSMS compliance evaluations (HMS §5.9).
- Perform compliance reviews and audits in conjunction with Teledyne's health and safety compliance program (HSMS §5.9).
- Certify annually to Senior Corporate Management that the Facility is in compliance with HSMS and applicable laws (HSMS §5.9.3).

This Manual should be used in developing and implementing the facility HSMS. Feel free to call the Corporate Environmental, Health and Safety Management Team with any questions. Team membership and contact information is available on the Teledyne EHS Intranet page.

**Teledyne Technologies Incorporated**  
**Health and Safety Management System Manual**  
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## 1. Purpose

The purpose of the Health and Safety Management System (“HSMS”) manual is to provide Teledyne’s Operating Segments and their designated Facilities with a framework to provide a safe and healthy work environment for all employees and to continue to maintain and operate in compliance with applicable local, state and federal health and safety laws, regulations, permits and corporate policies (the “**HSMS requirement**”). This Manual sets forth guidelines for establishing and implementing a written HSMS for those Facilities required to develop and implement the HSMS requirement (“**Facility HSMS**”).

Each Facility General Manager has the primary responsibility to provide the appropriate resources for developing and implementing the written HSMS consistent with this Manual.

At a minimum, each Facility's written HSMS must contain the following elements, each of which is further explained herein:

1. Health and Safety Policy
2. Organization, Personnel, and Oversight
3. Accountability and Responsibility
4. Health and Safety Requirements Identification and Assessment, Prevention and Control
5. Health and Safety Incident and Noncompliance Investigations
6. Health and Safety Training, Awareness and Competency
7. Health and Safety Planning and Organization Decision-Making
8. Maintenance of Records and Documentation
9. Continuing Program Evaluation and Improvement
10. Public Involvement/Community Outreach

The policies contained in this Manual intentionally are general in nature in order to afford the Operating Segments and their Facilities flexibility in developing a written HSMS that will work effectively. As long as the policies articulated in this Manual are met, Operating Segments and their Facilities can develop a written HSMS uniquely suited to the health and safety requirements applicable to the activities at each location. A Facility’s written HSMS may be a combination of related policies, procedures and practices or a single document. However, the connection between the management system elements must be clearly explained. All applicable aspects of the HSMS must be in writing and must include an explanation of how each element meets the policies contained in this Manual.

## 2. Scope

The HSMS applies to the full range of business activities that may impact employee health or safety or that are subject to health and safety regulation.

## 3. Applicability

This Manual applies to all TDY operations that conduct operations or processes that impact, or have the potential to impact, employee health and safety.

## 4. Definitions

Key terms used in this Manual and its Appendices have the following meanings:

- **Compliance Mechanism** – Procedure, practice, equipment, or operation controlling an aspect of health and safety compliance.
- **Corporate Health and Safety Management Team** - A multi-disciplined Team, responsible for development and implementation of the HSMS, composed of representatives from the Operating Segments, and corporate environmental, legal, auditing, engineering, and/or management. The Corporate Health and Safety Management Team is also known as the Corporate Environmental Management Team, the Teledyne Environmental Management Team, the Corporate Environmental, Health and Safety Management Team, and the Teledyne Environmental, Health and Safety Management Team.
- **Exposure** – Employee complaints, or known conditions of, excessive noise levels; high frequency sounds; radiation; vapors, fumes, mists, dusts; extreme heat or extreme cold, indoor air pollution, poor air circulation, etc.
- **Health and Safety Incident** – An injury, illness, near miss, property damage or any other health or safety issue that a Health and Safety Manager or Facility Health and Safety Management Team determines (with appropriate consultation with a TDY attorney) may not be in accordance with corporate policy, applicable procedures, federal, state, or local law or regulation in the health and safety area. The characterization of an event as a Health and Safety Incident does not necessarily mean a violation of law has occurred. For purposes of this definition, any notification received from a regulatory agency such as a notice to comply, notice of violation, etc., shall constitute a Health and Safety Incident.
- **Health and Safety Observation** – An employee's observation of a situation, condition, or event which he or she believes may not be in accordance with corporate policy, applicable procedures, or federal, state or local health and safety

law or regulations.

- **Facility** – A physical structure (or structures) supervised by one General Manager.
- **Facility Health and Safety Manager or Facility Health and Safety Management Team** - The person or person(s) assigned the primary responsibility for health and safety issues at a Facility.
- **General Manager** – The senior manager at a Facility.
- **Health Hazard**- A hazard which may produce serious and immediate (acute) health effects or cause long-term (chronic) health problems. All or part of the body may be affected.
- **Illness** - A condition where the employee has symptoms, such as: skin or eye irritation, dermatitis, headaches, dizziness and nausea, allergic reactions, aching pain and numbness in the hands, etc.
- **Injury** - A condition where the employee is suffering from bodily damage such as wounds, cuts, scrapes, punctures, strains, sprains, breaks, etc.
- **MOC** – Management of Change – See HSMS Manual Appendix E.
- **Near Miss** - Situations where injury, illness, exposure or property damage could have occurred, but did not.
- **On-Site Service Provider** – A subcontractor providing a service that affects Facility health and safety compliance.
- **Operating Segment** – One or more Facilities of Teledyne set up as a separate organization for purposes of management control.
- **Property Damage**- Any form of injury or damage caused to the property, either personal or real, due to negligence or intentionally by the person who is not the owner or that can happen naturally.
- **Safety Hazard**- A safety hazard is anything that could endanger the immediate safety of an employee, for example, a pinch point, an electrical connection, a hot part, etc.
- **Senior Corporate Management** – The principal executive officers of Teledyne Technologies Incorporated, including its Chief Executive Officer, Chief Financial Officer, Controller and General Counsel.

- **TDY or Teledyne** - Teledyne Technologies Incorporated and its consolidated subsidiaries.
- **Workplace Assessment-** A process used to identify, evaluate and control the health and safety hazards associated with the various tasks of a particular job. A workplace assessment also provides a method for prioritizing health and safety hazards.

## 5. HSMS Program Elements

### 5.1. HSMS Policy

**It is the policy of Teledyne to provide a safe and healthy work environment for all employees and to continue to maintain and operate our businesses in full compliance with applicable Health and Safety laws, regulations, permits and our corporate Health and Safety Management System. It is also our policy to promptly evaluate and resolve any suspected instances of unsafe or unhealthy working conditions or non-compliance with applicable requirements.**

**Each employee has responsibility for maintaining a safe and healthy workplace. The performance of all work assignments without incident is of utmost importance. Employees must immediately report any suspect unsafe or unhealthy condition, accident or near miss situation to their immediate supervisor or the site Health and Safety Manager.**

**We shall take an active role in discovering and implementing new means to prevent harm to our employees by continuous improvement in our health and safety performance. Teledyne is committed to providing adequate personnel and other resources to maintain a safe and healthy workplace; comply with applicable health and safety laws, regulations and permits; and implement, maintain and improve our Health and Safety Management System.**

#### 5.1.1. Health and Safety Objectives

In the conduct of its business Teledyne's Operating Segments and Facilities will seek to satisfy the following health and safety objectives:

- 5.1.1.1. Comply with applicable health and safety laws and regulations. Compliance is a minimum obligation, and, where economically and commercially feasible, compliance with more stringent voluntary standards should be achieved.
- 5.1.1.2. Provide adequate control of the health and safety risks arising from work activities.

- 5.1.1.3. Consult with employees on matters affecting health and safety.
- 5.1.1.4. Provide and maintain safe and healthy working conditions and a safe facility.
- 5.1.1.5. Provide information, instruction and supervision to employees.
- 5.1.1.6. Prevent accidents and work-related injury and illness
- 5.1.1.7. Review and continuously improve the facility Health and Safety program
- 5.1.1.8. Make health and safety concerns (including staffing, budgets, recognition of liabilities, technological alternatives, etc) a part of business operating and planning decisions.
- 5.1.1.9. Assign adequate personnel and other resources to health and safety compliance.
- 5.1.1.10. Provide information to interested parties on health and safety program performance.
- 5.1.1.11. Educate, train, and motivate our employees to conduct their activities in a safe, healthy and responsible manner.

#### 5.1.2. Policy Implementation.

Operating Segments/Facilities of Teledyne shall implement this policy through adoption and application of written policies, programs, and procedures developed for their particular circumstances.

#### 5.1.3. Policy Communication.

Teledyne, with the assistance of its Operating Segments/Facilities, shall communicate the health and safety policy to all employees, as the efforts of all employees are required to support the policy. Teledyne also is committed to communicate this policy publicly, via its website or otherwise.

### 5.2. Organization, Personnel and Oversight of the HSMS

#### 5.2.1. HSMS Organization, Implementation and Maintenance

Overall responsibility for the maintenance of these guidelines, and for monitoring Corporate HSMS activities rests with the Corporate Health and Safety Management Team. This team is under the direction of the Teledyne General Counsel's office.

Overall responsibility for implementation and compliance with a Facility HSMS rests with the senior operating executive and the General Manager of the Facility.

At the Facility level, each Teledyne entity must have a written organization plan for health and safety management. Each Facility shall also prepare written policies and procedures that implement the objectives and mandates set forth in this Manual.

At a minimum, the health and safety organization plan must identify the Facility Health and Safety Manager or Facility Health and Safety Management Team, and the Facility health and safety contacts. The relationship between individuals with primary health and safety responsibilities to the overall management structure at the Facility and Operating Segment must also be shown. The Health and Safety Manager, or a member of the Facility Health and Safety Management Team, must report directly to the Facility General Manager or have a clearly defined means of effectively communicating health and safety issues to the Facility General Manager.

The Corporate office will maintain an organization chart that defines the structure and personnel of the Teledyne HSMS.

#### 5.2.2. Duties, Roles, Responsibilities and Authority

Either a Facility Health and Safety Manager or a Facility Health and Safety Management Team must directly or indirectly oversee the HSMS at each Facility. The responsibility of the Facility Health and Safety Manager/Team is to administer the HSMS Facility-wide. If a team approach is used, one member must be designated as primarily accountable for team activities. The individual(s) who have the major responsibility for administering the HSMS should possess demonstrated communication skills and an understanding of the underlying fundamentals of Health and Safety issues and technology. Though the Facility Health and Safety Manager (or the Facility Health and Safety Management Team) has overall responsibility for developing and implementing the HSMS, such Manager or Team is not solely responsible for Health and Safety compliance. The efforts of all employees are required in achieving and maintaining Health and Safety compliance.

At minimum duties, roles, responsibilities, and authorities shall include the following tasks:

##### 5.2.2.1. Corporate Health and Safety Management Team

###### 5.2.2.1.1. Develop, implement and maintain a written HSMS Manual.

- 5.2.2.1.2. Verify each Facility has identified and dedicated adequate human and financial resources necessary for development, implementation and maintenance of the Facility HSMS.
- 5.2.2.1.3. Verify each Facility has retained a competent individual(s) to act as the Facility Health and Safety Manager or Facility Health and Safety Management Team.
- 5.2.2.1.4. Verify that Facilities have implemented the appropriate policies, practices, procedures and activities to achieve and maintain compliance with the HSMS.
- 5.2.2.1.5. Provide Health and Safety guidance to Facility personnel responsible for HSMS compliance.
- 5.2.2.1.6. Report to Senior Corporate Management on Facility compliance with HSMS policies and procedures.
- 5.2.2.1.7. Report to the Audit Committee of the Board of Directors of Teledyne the results of audits conducted pursuant to Section 5.9.2.

5.2.2.2. Facility Health and Safety Manager or Health and Safety Management Team

- 5.2.2.2.1. Administer the Facility HSMS.
- 5.2.2.2.2. Develop, review and/or approve Facility HSMS policies, practices, and procedures.
- 5.2.2.2.3. Identify appropriate human and financial resources to implement and maintain the HSMS.
- 5.2.2.2.4. Verify that the appropriate policies, practices, procedures and activities are in place to achieve and maintain compliance.
- 5.2.2.2.5. Provide direction and technical support to Facility personnel responsible for HSMS compliance.
- 5.2.2.2.6. Communicate HSMS related information to affected Facility employees.
- 5.2.2.2.7. Stay abreast of Health and Safety regulations relevant to Facility operations.
- 5.2.2.2.8. Work with Facility personnel to develop and implement adequate and timely training programs for employees, contractors, and other third party consultants where appropriate.
- 5.2.2.2.9. Be accountable and responsible for the enforcement of HSMS requirements.

5.2.2.3. All Employees

- 5.2.2.3.1. Follow Facility HSMS policies, practices and procedures.
- 5.2.2.3.2. Report to the Facility Health and Safety Manager, Facility Health and Safety Management Team or supervisor all unsafe

- conditions, accidents, near misses and exceptions to known HSMS requirements.
- 5.2.2.3.3. Perform job in a healthy, safe and compliant manner.
- 5.2.2.3.4. Be responsible and held accountable for compliance with HSMS requirements applicable to job.
- 5.2.2.3.5. Suggest improvements in the HSMS and in Health and Safety activities.

### 5.2.3. Communications

The Facility Health and Safety Manager or the Facility Health and Safety Management Team shall develop a plan to, or define effective mechanisms, that:

- 5.2.3.1. Advise senior Facility management and the Corporate Health and Safety Management Team of Health and Safety issues and problems.
- 5.2.3.2. Communicate specific instructions to employees with key HSMS related responsibilities.
- 5.2.3.3. Disseminate Health and Safety information to specific departments or the general employee population.
- 5.2.3.4. Communicate or flow down corporate Health and Safety requirements to vendors, contractors, customers, or other third parties.
- 5.2.3.5. Facilitate feedback from Facility personnel and external parties related to Health and Safety deficiencies or concerns, and to respond to those concerns in a timely manner.

Mechanisms to accomplish these objectives may include, but are not limited to, staff meeting presentations, safety committees, training sessions, newsletters, e-mails, desk instructions, standard disclosures and disclaimers, and the like. Related guidance may be found in other elements of this Manual.

## 5.3. Accountability and Responsibility

### 5.3.1. Accountability and Responsibility

The Teledyne Chief Executive Officer is accountable and responsible for direction and control of the Health and Safety performance of the corporation. In turn, each Operating Segment Senior Operating Executive and each General Manager is accountable and responsible for their operations. The assigned Health and Safety Manager or Facility Health and Safety Management Team is accountable and responsible for the operation of the Facility HSMS. All employees are accountable and responsible for their actions. On-site service providers and contractors are accountable and responsible for their actions and compliance with the HSMS as it applies to their respective contracted operations or services.

Specific accountability and responsibility must be assigned in the following areas:

- 5.3.1.1. Developing Health and Safety Compliance Mechanisms;
- 5.3.1.2. Assuring that Compliance Mechanisms are properly operating;
- 5.3.1.3. Appropriate reporting to regulatory agencies; and
- 5.3.1.4. Follow-up on identified problems and corrective actions.

Assignments of accountability and responsibility should be documented. Such documentation can include organizational charts, job descriptions, or functional descriptions in Facility operating procedures. These assignments should also be communicated to all employees and on-site service providers and contractors to ensure that they are clearly understood.

Accountability shall be part of annual performance evaluations of applicable employees, including the Operating Segment senior operating executive, the General Manager and the assigned Health and Safety Manager or Facility Health and Safety Management Team.

#### 5.3.2. Rewards and Penalties

Management and other employees with accountability and responsibility for a Facility HSMS shall be evaluated, in part, for their Health and Safety performance in their annual performance evaluations. Performance reviews for these employees must consider the status of annual objectives related to HSMS compliance. Management and other employees shall be subject to disciplinary actions (including termination of employment) if they violate Health and Safety regulations and procedures. Each Facility shall develop a disciplinary action plan. The plan shall identify categories of violations and the associated disciplinary action. Facilities may integrate this plan into existing disciplinary action plans or procedures.

Each on-site service provider and on-site contractor with accountability and responsibility for HSMS compliance and Health and Safety performance shall be evaluated for their Health and Safety performance. Substandard performance will be grounds for dismissal or contract revocation. Performance shall be reviewed as necessary but at least during contract or purchase order renewal. Purchase Orders to service providers and contractors must not relieve them of their accountability for their actions and the enforcement provisions of laws and regulations that apply to their services or actions.

#### 5.4. Health and Safety Requirements and Assessment, Prevention and Control

This section sets forth the steps to be taken by the Facility to identify (1) the regulatory requirements that are applicable to each Facility, and (2) the process for assessing operations and maintaining continual compliance with applicable regulatory

requirements, including how to deal with changes to those operations and regulatory requirements and (3) hazard assessment, prevention and control.

Steps in this process include:

#### 5.4.1. Assessment of Regulatory Applicability

- 5.4.1.1. Conduct an assessment of operations that includes a documented inventory of the specific operations and work practices which occur at the facility;
- 5.4.1.2. Identify the laws and regulations applicable to these processes identified in 5.4.1.1 above. Appendix G contains a summary of federal health and safety statutes and regulations
- 5.4.1.3. Identify licenses, registrations, permits and other authorizations required for operation of the Facility;
- 5.4.1.4. Determine whether the Facility complies with applicable regulations and permits. The method of compliance must be identified.
- 5.4.1.5. Develop procedures that (i) assign responsibility and accountability to appropriate Facility personnel for compliance with applicable health and safety requirements and (ii) communicate applicable job responsibilities to Facility personnel. Procedures should also ensure that contractors or service providers who are identified as persons that are responsible for compliance must enter into appropriate written agreements that define those responsibilities in accordance with TDY's health and safety policy and this Manual.

#### 5.4.2. Maintenance of Compliance Mechanisms

Each facility shall develop procedures to ensure (i) operations are compliant, (ii) changes to operations are compliant, and (iii) Compliance Mechanisms are operating as designed. These procedures include:

##### 5.4.2.1. Management of Change (MOC)

Implement a practice that evaluates the health and safety impacts of proposed changes in the following change categories:

- Raw Materials;
- Products;

- Processes;
- Facilities (including equipment and maintenance activities);
- Personnel;
- Corporate or Facility requirements; and
- Federal, state, and local regulations.

The objective of this element is the systematic and periodic review of those changes that have a potential health and safety impact. In the context of this HSMS, MOC applies to changes, including temporary changes that occur at operating facilities. It requires the development of procedures and practices, which require appropriate evaluation of the health and safety impacts of proposed changes prior to approving or implementing those changes. This objective should be accomplished by requiring health and safety management review and written sign-off of all proposed changes satisfying one or more criteria (i.e. triggers) as outlined in Appendix E of this Manual. For more efficient resource use, MOC procedures should also address the discontinuation of processes, relaxation of regulations, and other changes that might imply that certain controls are no longer necessary.

The requirement to monitor changes in applicable local, state or federal regulations should be part of a general MOC overview process, and should also be the responsibility of the Facility Health and Safety Manager or Facility Health and Safety Management Team. The manager or team shall identify sources of regulatory update information and periodically review these sources for changes to applicable health and safety requirements.

Examples of regulatory update sources include, but are not limited to:

- Federal, state, and local web based services, mailing lists, newsletters, etc.
- Health and safety training/regulatory update seminars;
- 3<sup>rd</sup> party regulatory update service providers; and
- The Corporate Health and Safety Management Team.

Changes shall be made in the Facility HSMS and in supporting procedures and Compliance Mechanisms if regulatory changes affect the system. Changes shall be communicated to the responsible person or team and to on-site contractors or service providers that are affected.

### 5.4.3. Hazard Assessments

All Teledyne companies that conduct operations or processes that impact, or have the potential to impact, employee health and/or safety are required to perform workplace hazard assessments of their facility. Teledyne companies must institute and maintain a hazard assessment program that proactively assesses all jobs for hazards and key personnel shall be trained in the process of carefully evaluating existing and potential hazards at the worksite. Involvement at all levels, including management, is important and will make both management and workers aware of hazards that may not otherwise have been noticed until an incident occurred. The hazards identification and assessment process will impact many other elements of the HSMS. Hazard assessment data can also be used to develop other elements of the HSMS including:

- Training and Orientation: use hazard assessment data to determine training needs and to build the content of employee orientations and job-specific training. See Section 5.6.
- Worksite Inspections: use hazard assessment data as the basis for inspection checklists. See Section 5.4.5.
- Incident Investigations: hazard assessment and control data can be used to help determine if a system failure was the cause of an incident. See Section 5.5.

#### 5.4.3.1. Sources of Hazards:

There are many sources of hazards in a workplace, however, the three most likely sources that should be considered are:

- People: Lack of training, poor communication, rushing, fatigue, poor housekeeping and other factors may cause risk behaviors.
- Equipment and Materials: Some equipment, tools and materials used in the job process are inherently hazardous, and others become hazardous over time due to inadequate maintenance, storage, or disposal method.
- Workplace Environment: Factors such as facility layout, ventilation and lighting, walking surfaces, temperature and other variables can all be sources of hazards.

The use of a Job Hazard Assessment (JHA aka risk assessment), serves as the foundation of the employer's health and safety management system and involves the identification of all jobs and tasks performed by employees, the assessment of each task for hazards, and the prioritization of the hazards based on the level of risk. This process should be followed by the implementation of controls for the identified hazards. JHA's should be reviewed on

a regular basis. An example JHA Procedure and Form is provided in Appendix A.

- 5.4.4. Hazard Prevention and Control: a proactive approach to hazard prevention and control is a necessity at Teledyne facilities. Hazards should be controlled by one or more of the following:
- 5.4.4.1. Engineering is the best method of hazard control, and involves engineering out or substitution of the hazard. When possible, engineering controls should always be the employer's first option. Examples include: Building a catwalk with handrails and replacing a portable ladder with a permanent access ladder for maintenance procedures, building a sound-dampening enclosure around a piece of loud equipment to reduce workers' noise exposure, and replacing a harmful chemical with a less hazardous product.
  - 5.4.4.2. Administrative controls are the second most effective method of hazard control, and involve the implementation of practices, procedures and rules to reduce the amount of exposure a worker has to the hazard. Examples include: Developing and enforcing the use of practices and procedures for conducting a task safely, providing emergency response training to workers and conducting regular drills, job rotation, and posting signs to warn of high noise areas.
  - 5.4.4.3. Personal Protective Equipment (PPE) is the method of last resort, and should always be used in combination with other control methods. Personal protective equipment is often the easiest control to implement, but is usually the least effective. Employers will supply workers with the required PPE.. In all cases, formal training in the care, use, and maintenance of all PPE should be provided by the employer. Examples of Personal Protective Equipment include: Safety glasses to protect the eyes from flying debris, hard hats to protect the head from falling objects, and respiratory protective equipment to protect the lungs from harmful dusts and chemical vapors.

#### 5.4.5 Ongoing Inspections

An ongoing system for conducting worksite inspections is another important element of a facility's HSMS. Regular inspections will:

- Proactively identify potential hazards that may not have been previously noted,
- Confirm the effectiveness of controls already in place, and
- Demonstrate commitment to health and safety.

#### 5.4.5.1. Inspection Program

An inspection program should clearly outline which facility processes/ equipment require inspection, who will be involved, the frequency at which inspections should be conducted, and who is responsible for corrective actions and follow-up. The results of the inspection program will provide information on whether the hazard assessment requires review, preventative maintenance programs are effective, and employer training programs are adequate.

When developing an inspection program each company shall:

- Specifically identify which facility processes/ equipment require inspection. The results of the formal hazard assessment and hazard control process can be used to determine what processes/ equipment will need to be inspected. Also check the relevant health and safety standards to determine if there are specific inspection requirements relevant to the nature of your work.
- Define a regular frequency for inspections. The frequency will be determined by the nature of the facility's operations, but it is recommended that facilities be inspected at least annually.
- Determine who will be assigned the responsibility to conduct inspections. This will vary depending on what is being inspected. In general, facility inspection tours will be performed by the facility's health and safety management team. Inspections of specific pieces of equipment can be done by an individual or competent worker. If there is a health and safety committee at the site, they should be involved in the inspection process.
- Provide training for those employees who are required to participate on inspection teams.
- Make managers and supervisors responsible for ensuring regular inspection tours are completed, and that action is taken to correct any issues identified.
- Post the results of the inspections (both positive and negative findings) for workers to see, and include the expected timelines for follow-up action.

##### 5.4.5.1.1. Inspection Forms

Developing a standard inspection form to suit the facility's specific needs can be a good way to gather consistent results, allow for the easy maintenance of inspection records, and collect data that can be analyzed later for trends. The format can be as simple or complex as needed to inspect the specific

work process or piece of equipment, but at minimum, all inspection forms should include:

- a checklist of items to be inspected
- a description of the hazards to look for
- space to list suggested actions required to remove or control the hazard
- name of the person responsible to correct the problem
- date by which the action is expected.

The inspection form is not intended to generate a "to do" list for the maintenance department. The person named as responsible for inspection follow-up should be the supervisor in control of the area where the hazard is found. The area manager has overall responsibility for ensuring corrective action has been taken, and should review and sign-off all inspections.

Management involvement in both follow-up and the inspections themselves will send the message to workers that the organization recognizes the importance of the Health and Safety Management System (see the Appendix H for sample Work Site Inspection Forms).

#### 5.4.5.2. Types of Inspections

##### 5.4.5.2.1. Formal Inspections

The team or employee conducting the formal inspections will use a written inspection form to record items identified during the inspection. The form will serve to prompt inspectors to check for specific items, and will create a consistent standard for the gathering of information. The inspection team will be looking for:

- Unsafe Conditions: slippery floor, poor lighting, cluttered work area, slipping hazards, missing guards, etc.
- Unsafe Actions: improper use of machinery or equipment, workers not wearing personal protective equipment or following safe work procedures, etc.

- Health Hazards: dangerous chemicals, dust exposure, noise, toxic waste, etc.

Once the formal inspection has been completed, an inspection report will be written, and reviewed by the inspection team. The items identified on the inspection report should be reported to responsible person in order for corrective action plans to be implemented.

#### 5.4.5.2.2. Informal Inspections

Informal inspections are carried out by workers, supervisors, and managers, and may not involve a formal report or a specific schedule. Some examples of informal inspections include:

- A manager walking through the shop may take the opportunity to verify that workers are following safe procedures, using safety equipment, or following healthy work procedures, and provide feedback on their safety performance.
- A tradesperson conducts a routine check on their tools, looking for defects and maintenance needs prior to starting work each day.

Informal inspection information will only be recorded and reported if the situation requires it. In most cases, the required action only takes a few minutes. Regularly performed informal inspections can be an effective health and safety tool. Both positive and negative observations should be noted.

## 5.5 Health and Safety Incident Response, Investigation, and Correction

### 5.5.1 Reporting

Each Facility shall develop a procedure for identifying and reporting injuries, illnesses, exposures, near misses, property damage, or any other potential unsafe working conditions or employee health issues. Procedures should address both internal reporting and responsibilities related to any required disclosures to external regulatory agencies. There must be a reporting system that is initiated by the first observer of an injury, illness, near miss, property damage or other potential issue and that defines the chain of incident reporting, i.e. the sequence of whom to notify and back-up personnel to contact when primary contacts are not available. When in doubt, contact the Corporate Legal Department. See Appendix I.

See Appendix B-1 for Sample “Health and Safety Incident Reporting Procedure”, Appendix B-2 for “Supervisors Incident Investigation Report General Instructions” and Appendix B-3 for “Supervisors Incident Report Form”.

Guidelines for notification of Operating Segment management or the Corporate Legal Department representatives should also be incorporated in the procedures. The guidelines set forth in Appendix C (Attorney-Client Privilege) must be considered when developing notification procedures. The process must be integrated with emergency reporting procedures for incidents, which may require immediate response and/or reporting. If an immediate external notification is required, notification shall be made, and the Corporate Legal Department shall be promptly advised of the circumstances underlying the notification.

Notifications or communications on potential noncompliance areas that do not require immediate notification to a government agency, per regulatory requirements, shall be communicated to the Facility Health and Safety Manager or Facility Health and Safety Management Team and the Corporate Legal Department before contacting the government agency.

#### 5.5.2 Investigation and Corrective Action

Each Facility shall develop a procedure for investigating and promptly addressing potential or actual regulatory violations related to health and safety requirements. Potential violations may also be determined during Regulatory Agency inspections. Facilities should follow Appendix D guidelines if Agency inspections occur.

Once a situation is identified a root-cause analysis technique shall be used in investigations to help assure that corrective actions are taken on the correct cause. The practice may vary with the critical nature of the problem (i.e., from simple discussion and agreement up to formal problem analysis reports and action plans). Corrective actions must limit or prevent the future occurrence of the problem. Corrective action target dates should reflect the criticality of the problem and be evaluated for appropriateness along with the proposed actions. See Appendix B-1 Reporting and Investigating Incidents Procedure.

#### 5.5.3 Action Follow-up and Verification

Each Facility shall implement a follow-up system that will be used to verify that corrective and preventive actions were taken and were effective, and to ensure that the initiator of the finding is advised as to the disposition of the issue. This advisement may range from a simple follow-up visit by the health and safety representative at some stated period after the scheduled corrective action to formal posting of investigation activities. Regardless of the system used, follow-up must ensure that delinquencies in the completion of corrective actions are identified, reported and addressed.

#### 5.5.4 Targets, Objectives and Action Plans

In the event a Facility is in non-compliance with health and safety requirements, the Facility must establish targets, objectives, and action plans for achieving and maintaining compliance with the subject requirement. The activities of on-site service providers and contractors must be included when applicable. Action plans must identify how progress towards targets and objectives are tracked and reported.

### 5.6. Health and Safety Training, Awareness and Competency

#### 5.6.1 Specific Education and Training

Each Operating Segment or Facility shall implement a written training plan that effectively provides basic health and safety education, and continuing training, to enable employees to understand and fulfill the health and safety responsibilities of their position. Education and training is a critical element of a strong and effective health and safety management system. The objective of the education and training is to provide employees with the level of knowledge necessary for them to properly execute the health and safety responsibilities of their job positions or assignments. The training plan must identify the type, amount, and current status of required training for employees and/or categories of employees. Employees must receive a level of health and safety training appropriate to their job responsibilities. Records of completed training shall be maintained.

Examples of required training topics include, but are not limited to: Emergency Response and Evacuation, Injury and Illness reporting, Hazard Communication training for employees who work with or are exposed to hazardous materials; Personal Protective Equipment Standard training for employees performing tasks which require use of PPE; and Respiratory protection training for employees who require use of a respirator to protect them from airborne contaminants.

#### 5.6.2 Awareness

Each Facility shall develop a written plan that describes the process for ensuring employees are aware of health and safety policies and procedures, applicable health and safety requirements, and their roles and responsibilities within the HSMS. This may include use of posters, supervisor discussions, meetings, written materials, videos, etc.

The Facility HSMS should also address the process by which any employee can raise questions or concerns related to health and safety matters and/or their responsibilities, without fear of retaliation, and the method by which health and safety management will respond to each such question or concern. While it should not be regarded as the first means by which an employee can raise questions or concerns related to health and safety matters, or if anonymity is desired, employees should feel free to contact and not be dissuaded from contacting the Corporate Ethics Help Line (1-877-666-6968) with health and safety issues or concerns.

### 5.6.3 Competency

Each Facility shall develop a process for ensuring personnel responsible for meeting and maintaining compliance with health and safety requirements are competent. Competency determinations shall be based on education, training and experience. Competency determination may be performed by supervisor review and certification, testing or other means.

## 5.7 Health and Safety Planning and Organization Decision-Making

### 5.7.1 Health and Safety Planning

In conjunction with Section 5.4.2. above on MOC procedures, the HSMS must describe how health and safety planning is integrated into the organizational decision making process for plans and programs such as: capital improvement plans, new product plans, product and process improvement plans, new process development plans, training and maintenance programs, etc.

## 5.8 Maintenance of Records and Documentation

### 5.8.1 Records

The Facility HSMS shall identify the minimum requirements for records and documentation. These records and documents shall include those required by regulation, by provisions elsewhere in this HSMS, or those otherwise mandated by Operating Segment or Corporate Management.

### 5.8.2 Data Management

The Facility shall develop a written data management system that provides for maintenance of required records and documentation. This system shall define, among other things:

- The individuals or groups who "own" the document (i.e. those who have the responsibility for maintenance and update)
- The requirements for keeping logs and tracking records up-to-date. This includes, for example, the frequency with which OSHA logs should be updated.
- The control requirements for procedure and other reference document management. (A tie-in to other Facility document management or library systems should be considered.)
- Location of records and physical access controls.
- Record retention requirements (as described by regulation or corporate directive).

### 5.8.3 Release of Information to Outside Parties

The Facility shall have written procedures related to release of records. These procedures should require that original records not be released outside of the control of the responsible person unless directed in writing. Copies should be provided instead of originals whenever possible. Neither copies nor originals shall be released outside of the Facility without Corporate, Legal Department and General Manager approval. Nothing in this requirement is intended to interfere with timely and cooperative disclosure of any data to governmental officials pursuant to a search warrant, subpoena, or other legal enforcement mechanism. (Additional discussions related to this topic are included at Appendix D regulatory inspections.)

## 5.9 Continuing Program Evaluation and Improvement

### 5.9.1 Periodic HSMS Evaluations

The Facility HSMS shall require, at least annually, an evaluation of the HSMS by appropriate personnel including the Facility Health and Safety Manager and/or Facility Health and Safety Management Team. This evaluation shall look for program improvement opportunities. Viable program improvement opportunities shall be incorporated into the Facility HSMS (subject, as necessary, to review and approval by Operating Segment or Corporate senior management.) If needed, action plans for the change(s) shall be developed. These changes to the HSMS shall be disseminated as required by Section 4 above. Action plans shall also be coordinated with and disseminated to affected personnel, including employees, on-site contractors, vendors and suppliers.

### 5.9.2 Facility Compliance Evaluations for HSMS

Each Facility shall develop a program for periodic evaluation of Facility compliance with health and safety requirements. Facilities may also consider using an audit program conducted by Corporate or Operating Segment health and safety personnel as a supplement to the internal evaluation. (Reviews conducted by outside parties do not, however, eliminate the need for internal evaluations.) Results of internal evaluations or of audits shall be reported to the General Manager and the Operating Segment Health and Safety Manager/Corporate Health and Safety Management Team who shall include the data in their report to upper management. Required corrective actions should be established and monitored in accordance with requirements outlined in Section 5.5 above.

Each Facility shall participate in health and safety compliance reviews and audits conducted by the Corporate Health and Safety Management Team pursuant to such scope and procedures set forth by Senior Corporate Management.

### 5.9.3. Certification of Compliance

Within thirty (30) days of the end of each fiscal year, the General Manager and Manager for each Facility subject to the HSMS shall certify to the best of their knowledge, after due inquiry, that their Facility is in compliance with the requirements of HSMS and applicable laws. The form of certification to be submitted to the Corporate Legal Department [attention General Counsel or Designee] is attached as Appendix F to the HSMS Manual.

In 2002, Teledyne published the Teledyne Environmental Management System (HSMS) Manual which required, among other things, an annual certification of compliance with the EMS and applicable environmental laws. In 2019, the environmental and health and safety certifications were combined into a single certification.

### 5.10 Public Involvement and Community Outreach

Each Facility HSMS shall consider fostering ongoing community education and involvement in the health and safety aspects of the Facility's operations. Generally, these efforts would be applicable to Facilities with operations that could have a significant impact on employees and/or community members, or when required by regulation or as a legally mandated remedy pursuant to a Notice of Violation, Citation, or other finding. Any such activities or programs must be coordinated with the Corporate Legal Department.

## **APPENDIX A**

### **Sample Job Hazard Assessment Procedure**

#### 1 PURPOSE

- 1.1 The purpose of this procedure is to define the method for producing written “Job Hazard Analyses” for all applicable operations at the facility. The process is intended to reduce risks of injury or illness through any combination of the following: 1) removing hazards through engineering controls; 2) reducing exposure through procedural controls (administrative); or 3) safeguarding employees by fitting them with personal protective equipment controls.

#### 2 REFERENCE

- 2.1 Code of Federal Regulations, Title 29 Part 1910, Subpart I (1910.132 - 1910.140), Appendix B - Non -mandatory Compliance Guidelines for Hazard Assessment and Personal Protective Equipment Selection.
- 2.2 California Administrative Code, Title 8, Section 3203 - Injury and Illness Prevention Plan.

#### 3 ACTIVITIES AFFECTED

- 3.1 This procedure is applicable to all applicable facility operations.

#### 4 FORMS USED

- 4.1 Job Hazard Assessment Priority Worksheet
- 4.2 Job Hazard Assessment Worksheet

#### 5 PROCEDURE

- 5.1 JHA Principles
  - 5.1.1 Each Facility shall have a working method for identifying and controlling hazards to ensure that employees can work safely.

- 5.1.2 The purpose of JHA is to provide a comprehensive system for minimizing employee exposure to hazardous conditions.
  - 5.1.3 The result of the JHA is a set of work rules for a specific process and or activity, many of which may be included in the Facility Code of Safe Work Practices.
  - 5.1.4 JHA data is collected and evaluated from a walk-through investigative survey.
  - 5.1.5 Each hazard identified on the JHA worksheet shall have a corresponding safe work condition, practice, or personal protection measure.
  - 5.1.6 JHA is dynamic and ongoing process that needs to keep pace with the changes in process, equipment, and people in the workplace.
  - 5.1.7 Safe work conditions must exist before employees are allowed to perform a job.
  - 5.1.8 Safe work practices identify how the workplace should be maintained or how a job should be performed. The safe work practice identifies an action for the employee to take to ensure safety. Examples include: requirements regarding how work areas should be maintained, how tooling should be placed and used, etc.
  - 5.1.9 Personal protection measures shall always be reviewed and approved by the Facility Safety Coordinator.
- 5.2 General Guidance
- 5.2.1 Establish a JHA Coordinator. This person should have a fairly good understanding of the manufacturing process and work flow.
  - 5.2.2 Form a JHA task force comprised of 4 to 6 members (including the Coordinator). Establish teams of 2 to perform JHA's.
- Note: Ideally, the committee should have supervisory or management representation from Operations, Engineering, Quality, and Facilities.
- 5.2.3 Identify a schedule for the JHA task force to meet monthly for 30-minutes. Meeting activity shall be as follows:
    - 5.2.3.1 Review completed JHA's.

- 5.2.3.2 Submit completed and approved JHA's to the Coordinator.
  - 5.2.3.3 Identify JHA assignment to be completed for next meeting.
  - 5.2.4 Incorporate completed JHA's into document control so that they are traceable to specific job processes or activities.
  - 5.2.5 Plan for each task force member to dedicate 1 to 2 hours per month maximum, including 30 minutes of meeting time.
  - 5.2.6 Plan for the JHA task force to be an ongoing process.
- 5.3 Responsibility
- 5.3.1 Senior Management
    - 5.3.1.1 Holds ultimate responsibility for regulatory compliance and employee health and Safety.
    - 5.3.1.2 Ensures that an effective JHA program is in place in accordance with the regulations and the needs of the Facility.
    - 5.3.1.3 Allocates resources for JHA activity.
  - 5.3.2 JHA Coordinator
    - 5.3.2.1 Plan and coordinate monthly JHA meetings.
    - 5.3.2.2 Produce minutes from the JHA meetings, and then distribute to management.
    - 5.3.2.3 Channel completed JHA's through a document control system.
    - 5.3.2.4 Ensure that JHA's placed into a system where they are tracked, updated, and linked to mainstream activity (i.e. on the job training).
    - 5.3.2.5 Coordinate any necessary changes, trainings or other follow-on activity as result of the JHA.
    - 5.3.2.6 Confer with Health and Safety to determine if any of the JHA's is regulated by a specific Corporate, Federal, State or local standard.

- 5.3.2.7 Forward completed JHA's to Health and Safety staff for review and distribution to other locations.
  - 5.3.2.8 Forward any items in need of fixing, changing, etc., to their respective groups, with a copy to the Site Health and Safety Coordinator for tracking and accountability.
  - 5.3.2.9 Forward all items to be corrected to their respective departments: for example safety issues to the Safety Coordinator and process discrepancies to Quality Control, etc.
- 5.3.3 JHA Member.
- 5.3.3.1 Attend a JHA training session (2 hours).
  - 5.3.3.2 Attend and participate in a monthly meeting (30 minutes).
  - 5.3.3.3 Produce 1 JHA per month (with a partner).
  - 5.3.3.4 Dedicate 1 to 2 hours per month for JHA activity.
- 5.4 JHA – How to Perform a JHA.
- 5.4.1 Select a specific process or activity from the JHA priority worksheet. Those with greater exposures shall be selected first.
  - 5.4.2 Observe the process or activity being performed.
  - 5.4.3 Determine if the process or activity can be duly handled with one JHA. Some processes may need to be handled in multiple JHA's.
  - 5.4.4 Review all written procedures or other guidance documentation.
  - 5.4.5 Compare and evaluate all written instructions to the actual work being performed.
  - 5.4.6 Confer with area supervisor for input.
  - 5.4.7 Complete the JHA worksheet as follows
    - 5.4.7.1 Document the first action in Column A of the JHA Priority Worksheet.

- 5.4.7.2 Identify sources of employee exposure to any of the following Health and Safety Hazards:
  - 5.4.7.2.1 Motion that could result in collision with personnel, (i.e. machinery, or processes where any movement of tools, machine element or particles could exist), or movement of personnel that could result in collision with stationary objects.
  - 5.4.7.2.2 High temperature that could result in burns or eye injury to personnel or ignition of protective equipment, etc.;
  - 5.4.7.2.3 Chemical exposure (e.g. inhalation, eye and skin contact) see chemical group attachment for guidance;
  - 5.4.7.2.4 Harmful dust;
  - 5.4.7.2.5 Light radiation, (i.e. welding, brazing, cutting, furnaces heat treating, high intensity lights, etc.);
  - 5.4.7.2.6 Falling objects or potential for dropping objects;
  - 5.4.7.2.7 Sharp objects which might pierce the feet or cut the hands;
  - 5.4.7.2.8 Rolling or pinching objects which could crush fingers, hands, arms, feet, etc.;
  - 5.4.7.2.9 Poor workplace layout and location of co-workers could cause collision;
  - 5.4.7.2.10 Electrical hazards;
  - 5.4.7.2.11 Trip and fall hazards;
  - 5.4.7.2.12 Noise hazards;
  - 5.4.7.2.13 Cumulative trauma or repetitive motion hazards.
- 5.4.7.3 Identify and record a Safety and or Health Hazard for each specific action, then document in column B.
- 5.4.7.4 Review OSHA 300 Logs and Workers Compensation Loss Runs to determine if there have been any injuries or

illnesses resulting from the process or activity.

- 5.4.7.5 Document a recommended or required safe work condition, work practice, or personal protective equipment for each specific action if needed.
- 5.4.7.6 Submit all items for correction to the appropriate person. Safety issues to be fixed shall not be included in the JHA.

**Job Hazard Assessment Priority Worksheet**

Description of Process / Activity	Safety or Health Hazard	Recommended Safe Work Condition, Work Practice or Personal Protective Equipment



## APPENDIX B-1

### Health and Safety Incident Reporting Procedure

Teledyne *[company name]*

Category:	Health and Safety
Classification:	Procedure
Title:	Incident Response, Investigation and Reporting
Number:	<i>[TBD]</i>
Revision Date:	<i>[TBD]</i>
Release Date:	<i>[TBD]</i>
Effective Date:	<i>[TBD]</i>

#### 1.0 Purpose

This procedure describes the process for providing emergency medical response and investigating and reporting work-related injuries, illnesses, and near miss incidents. The procedure also describes a process for performing a root-cause analysis and identifying corrective and preventative measures.

#### 2.0 Scope

This procedure applies to all operations of Teledyne *[company name]*

#### 3.0 Policy

It is the policy of Teledyne *[company name]* to provide the most appropriate level of emergency response and care to all occupationally injured or ill employees; to timely investigate and document all occupational injuries, illnesses, and near miss incidents; to thoroughly evaluate such incidents so that the root cause and contributing factors are clearly understood; and to implement the most appropriate corrective and preventive measures to prevent recurrence.

#### 4.0 References

- 4.1 *[Insert applicable state, provincial or federal occupational injury and illness reporting regulatory citation, e.g. Title 29 Code of Federal Regulations Part 1904. Recording and Reporting Occupational Injuries and Illness; Title 8 California Code of Regulations, §14000 et seq. Occupational Injury or Illness Reports and Records, etc.]*
- 4.2 Supervisor's Incident Investigation Report Instructions
- 4.3 Supervisor's Incident Investigation Report

## 5.0 Definitions

- 5.1 **Life Threatening:** Any condition whereby delay in receiving medical attention may result in further injury or death. Paramedics or other outside emergency services are typically notified.
- 5.2 **Serious Injury or Illness:** Any condition that requires medical evaluation, care, and/or treatment beyond first aid, but is not life threatening.
- 5.3 **Non-Serious Injury or Illness:** Any condition that requires first aid or medical care but does not reach the level of Serious Injury or Illness.
- 5.4 **Incident:** A generic term that is used to identify any of the following conditions: injury, illness, exposure, and near miss events, that cause, or have to the potential to cause, bodily injury or illness.
- 5.5 **Injury or Illness:** An injury or illness is an abnormal condition or disorder. Injuries include cases such as, but not limited to, a cut, fracture, sprain, strain or amputation. Illnesses include both acute and chronic illnesses, such as, but not limited to, a skin disease, respiratory disorder, or poisoning.
- 5.6 **First aid:** First aid is defined at 29 CFR §1904 (b)(5)(ii) *[or applicable state, provincial or federal definition]*
- 5.7 **Near Miss:** Incidents where no property was damaged and no personal injury sustained, but where, given a slight shift in time or position, damage and/or injury may have occurred.

## 6.0 General Guidelines and Principles

- 6.1 Emergency response and rescue, if applicable, shall be the first priority when an incident occurs. The goal is to safely secure the incident area and protect affected individuals from further harm.
- 6.2 Once an incident area is secure, the administration of first aid and medical care shall be the next priority.
- 6.3 Conditions deemed unsafe or unhealthy shall be safeguarded and corrected to prevent

recurrence.

- 6.4 Required reporting and documentation shall be timely, complete and accurate as required by this procedure and any applicable regulatory reporting requirements.
- 6.5 An incident investigation is intended to identify the root cause(s) of an accident or near miss event so that appropriate corrective and preventative measures can be implemented to prevent recurrence.
- 6.6 All work-related injuries and illnesses must be reported to the appropriate facility personnel, e.g. Health and Safety Department (HS) and Human Resources Department (HR), and to the organization's workers' compensation insurer, e.g. Zurich.
- 6.7 All serious injuries, illnesses and fatalities must be reported immediately to the Corporate Legal, Risk Management and Human Resources Departments, and if required, to the applicable state, provincial or federal Occupational Safety and Health Agency, e.g. State OSHA, United States OSHA, United Kingdom Health and Safety Executive, Canadian Centre for Occupational Health and Safety, etc.

## **7.0 Responsibilities**

### **7.1 Managers and Supervisors**

- 7.1.1 Immediately report all incidents to the Health and Safety Department "HS" and the Human Resources Department "HR".
- 7.1.2 In the event of injury or illness, ensure proper action is taken to provide injured employee with proper first aid or medical care.
- 7.1.3 In conjunction the HS and HR, complete a Supervisor Incident Investigation Report in accordance with the form instructions, and provide a copy of the completed and signed report to HS and HR no later than 24 hours from date/time of incident.
- 7.1.4 Collect and preserve all evidence that may be useful in an investigation.
- 7.1.5 Conduct interviews with the injured or ill employee (if possible) and witnesses.
- 7.1.6 Ensure all assigned corrective and preventative measures have been completed.

### **7.2 Employees**

- 7.2.1 Immediately report all incidents, injuries and illnesses to area (supervisor/manager/HS/HR).
- 7.2.2 Assist as requested in all incident investigations.
- 7.2.3 Report all injuries and illnesses, hazardous conditions and near-miss incidents to your supervisor.

## **8.0 Procedure**

### **8.1 Initial Response**

**8.1.1** Life threatening or Serious Injury or Illness

- 8.1.1.1** Assess the situation. Ensure that the employee(s) are safe from all conditions that could cause harm or worsen their condition.
- 8.1.1.2** Notify public safety (i.e. call 911)
- 8.1.1.3** Notify HS, HR and Emergency Response Team for assistance. See Exhibit B for contact information. Refer to company Emergency Response Plan.
- 8.1.1.4** If safe to do so, stay in the area and provide assistance if needed until emergency services arrive and take control.
- 8.1.1.5** Control hazards, preserve the scene and secure equipment and materials that may have caused or contributed to the incident.
- 8.1.1.6** HS shall notify the corporate legal department and government agencies as required for serious injuries or illnesses. Refer to state or federal regulations regarding the immediate reporting of fatalities and serious injuries.

**8.1.2** Non-Serious Injury or Illness

- 8.1.2.1** Assess the situation. Ensure that the employee(s) are safe from all conditions that could cause harm or worsen their condition.
- 8.1.2.2** Notify HS, HR and Emergency Response Team for assistance.
- 8.1.2.3** Control hazards, preserve the scene and secure equipment and materials that may have caused or contributed to the incident.
- 8.1.2.4** During normal working hours (e.g., Monday through Friday 8 AM to 5 PM), the employee reporting the injury should contact HS and HR then proceed to the appropriate offsite medical clinic as directed by management. See Exhibit A for offsite medical clinic location map.
- 8.1.2.5** During other working hours, the employee reporting the injury should contact the onsite shift supervisor then proceed to the appropriate offsite medical clinic as directed by management.

**8.1.3** Near Miss Events

- 8.1.3.1** All near miss events as defined in this procedure shall be reported to area supervisor and HS.

**8.2** Follow Up Investigation

- 8.2.1** Upon employee notification or knowledge of an incident, the area supervisor, in conjunction with HS, HR, the Safety Committee and/or cognizant engineer(s), (i.e. the “Incident Investigation Committee”) shall conduct an incident investigation and document findings in the Supervisor’s Incident Investigation Report. Instructions for completing the report are provided in the Supervisor’s Incident Investigation Report Instructions.
- 8.2.2** The Supervisor’s Incident Investigation Report shall identify all probable causes of, and factors that contributed to, the incident.

- 8.2.3 Corrective and preventive measures shall be identified and implemented to prevent incident recurrence.
- 8.2.4 Target dates shall be established for implementing corrective and preventive measures.
- 8.2.5 Responsibility for implementation shall be assigned to the appropriate individual(s)

### 8.3 Verification of Corrective and Preventative Action

- 8.3.1 The area supervisor, HR and HS will review the report and confirm all required information is recorded and that all corrective and preventive measures have been implemented in a timely manner.

### 8.4 Return to Work

- 8.4.1 If an employee is on Workers' Compensation because of a job related injury/illness and is temporarily unable to perform his or her regular duties because of a temporary physical, mental or emotional impairment, the Company, consistent with its obligation(s) under applicable law, will attempt to accommodate the employee's work restrictions, including, but not limited to, considering and/or assigning alternative duties and responsibilities to encourage the employee back to work.

## 9.0 Recordkeeping

- 9.1 Copies of Supervisor's Incident Investigation Reports shall be maintained by the HR department.

## 10.0 Training/Information Distribution

- 10.1 All employees shall receive initial and recurrent training on their responsibilities under this procedure.
- 10.2 Recurrent training shall be conducted annually for managers, supervisors and other employees who have Supervisor's Incident Investigation Report preparation responsibilities.
- 10.3 Recurrent training on the requirements of Section 7.2 – Employee Responsibilities shall be conducted annually for all other employees. Electronic or paper copy notifications to employees concerning their responsibilities under Section 7.2 will satisfy the annual training requirement.

## 11.0 Transportation

- 11.1 The supervisor, HS and/or HR shall make transportation arrangements for the injured or ill employee and ensure that the employee receives prompt medical attention. Injured or ill

employees should be discouraged from self-transportation. Transportation arrangements include, but are not limited to: ambulance, company or personal vehicle driven by someone other than the injured or ill employee, e.g. supervisor, manager, HR, HS, on-site nurse, other employee, etc., taxi, chauffer, etc.

*[Insert facility map]*

*[Insert medical/MPN clinic map]*

Health and Safety Management System Manual  
**EXHIBIT B**

**HS Department Contact Information:**

Name	Title	Phone
<i>[insert HS contact]</i>		
<i>[insert HS contact]</i>		

**HR Department Contact Information:**

Name	Title	Phone
<i>[insert HR contact]</i>		
<i>[insert HR contact]</i>		

**Emergency Response Team (ERT) Contact Information:**

Name	Title	Phone
<i>[insert ERT contact]</i>		
<i>[insert ERT contact]</i>		

## APPENDIX B-2

### Supervisors Incident Investigation Report General Instructions:

- The Supervisors Incident Investigation Report (the “Report”) requires the collection and documentation of certain incident information including: personal information (if other than a near miss), incident classification, medical treatment (if other than a near miss), cause analysis and corrective and preventive measure information. Certain information, e.g. personal and medical treatment information, should be kept confidential.
- The Report requires input from various personnel including, but not limited to, the injured employee, the Supervisor, the Human Resources Department (HR), the Health and Safety Department (HS), and if applicable, the Safety Committee, cognizant engineer(s) and/or other personnel, e.g. incident witnesses.
- The report is deemed complete only after it has been reviewed and approved by the Supervisor, HR and HS.
- Questions 1 through 20 are to be completed by the area supervisor, with assistance if necessary, from the HR and HS.
- Questions 21 through 32 are to be completed by HR and follow-up must be completed within seven (7) days of the incident.
- Questions 33 through 38 are to be completed by the Incident Investigation Committee, e.g. supervisor, HR, HS, cognizant engineer(s), and/or safety committee, as applicable.
- The Report shall be completed as soon as possible after the incident. The goal should be to complete the report within 24 hours of the incident, however, additional time may be necessary to collect all relevant information, perform a root-cause analysis and identify corrective and preventative measures.
- Notify HR and HS if the report cannot be completed within 24 hours.
- Contact HR or HS if you need assistance with the report.
- Follow-up as necessary and confirm all corrective and preventative measures have been implemented.

#### Line Item Instructions:

**Questions 1 through 20 (Personal and Incident Information) are to be completed by the supervisor.**

1. State the employee's full name.
2. State the employee's gender.

3. Enter the time the employee started work on the day the incident occurred.
4. State the employee's ID number as it appears on his/her identification badge.
5. State the employee's job title.
6. List the employee's normal work hours. For example, 7 to 4 p.m.
7. State the employee's department name.
8. Indicate specific area/room number where the employee works.
9. List the employee's work telephone extension number.
10. Check the appropriate incident classification for this report. Use the following definitions as a guide:
  - a. **INJURY** - A condition where the employee is suffering from bodily damage such as wounds, cuts, scrapes, punctures, strains, sprains, breaks, etc.
  - b. **ILLNESS** - A condition where the employee has symptoms, such as: skin or eye irritation, dermatitis, headaches, dizziness and nausea, allergic reactions, aching pain and numbness in the hands, etc.
  - c. **EXPOSURE** - Complaints from the employee about the following: excessive noise levels, high frequency sounds, radiation, vapors and fumes, extreme heat or extreme cold, indoor air pollution, poor air circulation, etc.
  - d. **NEAR MISS** - Situations where injury, illness, or exposure could have occurred.
11. Based on your knowledge at the time, check if the incident is work related or not.
12. Record the incident date. If the exact incident date is not known, record the date given by the employee.
13. Record approximate time of the incident.
14. Record date the incident was reported. All incidents must be reported to HR & HS. If incident is reported to carrier, indicate when it was reported.
15. Record who the incident was reported to initially (generally Supervisor/Management). All incidents must be reported to HR & HS. If incident is reported to carrier, indicate who reported it to the carrier.
16. Record the exact location of the incident; include specific area or room number. Indicate if employee was working in a temporarily assigned work area.
17. Check the item that best describes the type/cause of injury or illness. Check "Other" and write-in your best description if none of the items fit.
18. Check the item that best describes the nature of injury or illness. Check "Other" and write-in your best description if none of the items fit.
19. Identify the object or substance that directly harmed the employee, e.g. concrete floor, chlorine gas, radial arm saw, knife blade, etc.

20. Be precise in identifying the body part affected by the injury or illness. A diagram is provided, however you may sketch your own if appropriate. Fill in comments to assist in explanation of injury/illness.

**Questions 21 through 32 (Treatment, Follow-up and OSHA Form 301) are to be completed by HR**

21. Check the type of care or treatment received.
22. State the method of treatment administered.
23. Indicate whether lost time beyond the day of injury was incurred. Track the number of days away from work.
24. Indicate whether restrictions or modified duty was prescribed by treating physician.
25. Date employee was released by the treating physician to return to normal work schedule.
26. Enter the employee's date of birth.
27. Enter the employee's address.
28. Enter the date the employee was hired.
29. Was the employee treated in an emergency room? Enter yes or no.
30. Was the employee hospitalized overnight as an in-patient? Enter yes or no.
31. Enter the case number from the OSHA 300 log (OSHA Form 300)
32. If the employee died, enter the date of death.

**Questions 33 through 38 are to be completed by the Incident Investigation Committee, e.g. supervisor, HR, HS, cognizant engineer(s), and/or safety committee, as applicable.**

33. Describe task/activity the employee was performing when the incident occurred.
34. To the best of your knowledge, describe in detail how the incident occurred.
35. Use the diagram or your own sketch and comments section to assist in explanation of incident details. Take photographs, if appropriate, note photographs taken in comments section, and attach hard copies or electronic files.
36. To the best of your knowledge, list and/or describe all direct and root causes of the incident. Include any unsafe acts or conditions.
- Examples of unsafe conditions include, but are not limited to: unguarded hazard, inadequate guard, defective safety device, defective tool or equipment, hazardous workstation layout, inadequate lighting, inadequate ventilation, lack of personal protective equipment, inadequate or inappropriate tools, unsafe clothing, no or insufficient training, etc.

Examples of unsafe acts include, but are not limited to: operating equipment or process without permission, operation at unsafe speeds, servicing equipment that has not been properly de-energized and locked out, making a safety device inoperative, using tools or equipment in an unapproved manner, improper lifting, taking an unsafe posture or position, distraction/teasing/horseplay, failure to wear personal protective equipment, failure to use the correct tools, etc.

37. To the best of your knowledge, list and/or describe all indirect causes of the incident, e.g. factors that contributed to the incident. Contributing factors are not direct causes, but an incident may have been avoided or been less serious had these contributing factors not been in place. Include information on why an unsafe act or condition existed.

38. Describe measures that will be taken to correct any problems and prevent recurrence.

Examples of corrective and preventive measures include, but are not limited to: stopping the activity, training the employee and other affected personnel, enforcing existing policy, develop and implement a new policy, design and install a guard, routinely inspect for the hazard, replace tools or equipment, redesign work/task steps, redesign workstation/workplace, provide personal protective equipment, etc.

Corrective Action Plan:

- List corrective action items
- Enter target dates for each action items
- Assign the person who is responsible for each action item
- Enter the date each action item was completed

**Review Signatures:**

- Enter the name, signature, title and date for reviewers.
- Supervisor, HR & HS signatures are required.

**Employee Statement (to be completed by injured employee)**

- Detach form and give to injured employee
- Ask employee if they are comfortable filling the form out in English. If not, it is OK to fill out in native language.
- Ask employee to complete and return statement within 24 hours.
- Indicate if assistance (reading/writing/comprehension) was provided
- Indicate if translation assistance was provided
- Signatures are required

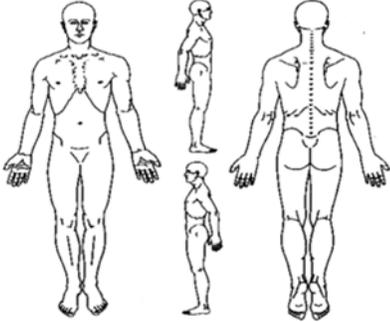
**Witness Statement (to be completed by witness)**



<input type="checkbox"/> Cut/Laceration	<input type="checkbox"/> Avulsion	<input type="checkbox"/> Amputation	<input type="checkbox"/> Fracture	<input type="checkbox"/> Sprain/ Strain	<input type="checkbox"/> Dermatitis
<input type="checkbox"/> Puncture	<input type="checkbox"/> Abrasion	<input type="checkbox"/> Irritation	<input type="checkbox"/> Contusion	<input type="checkbox"/> Numbness	<input type="checkbox"/> Stress
<input type="checkbox"/> Other: _____					

19. Identify the object or substance that directly harmed the employee:

20. Specifically name the body part affected (e.g. right elbow, left index finger, upper back, etc.):



**Comments:**

<b>Treatment (completed by HR)</b>	
21. Type of Treatment:	<input type="checkbox"/> None <input type="checkbox"/> First Aid <input type="checkbox"/> Medical <input type="checkbox"/> Other
22. Treatment administered by (Name of clinic):	<input type="checkbox"/> In house by <input type="checkbox"/> Onsite Nurse/Physician <input type="checkbox"/> Self explain <input type="checkbox"/> Emergency Response Team explain <input type="checkbox"/> Other explain  <input type="checkbox"/> Off site by <input type="checkbox"/> Personal Doctor: name & contact info <input type="checkbox"/> Occupational Health Clinic (MPN): name & contact info
<b>Follow Up (Must be completed by HR within seven (7) days of incident)</b>	
23. Was there lost-time beyond first day?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If so, track number of days away from work:	
24. Did physician prescribe work restrictions?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If so, explain and track the number of days of job transfer or restricted work:	
25. Date employee returned to normal work schedule:	
<b>OSHA Form 301 Required Information (completed by HR)</b>	
26. Employee date of birth:	
27. Employee Address:	
28. Date Employee Hired:	
29. Was the employee treated in an emergency room?	
30. Was the employee hospitalized overnight as an in-patient?	
31. Case number from OSHA 300 log:	
32. If the employee died, when did the death occur?	

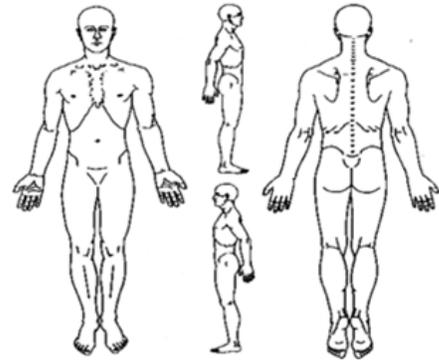




**Employee Statement (Detach and give to employee)**

Describe what happened:

Empty space for describing the incident.



Feel free to make any other sketches or diagrams to add clarity:

Comments:

\*add photos if appropriate

Do you have any suggestions on how this could be avoided in the future?

Empty space for suggestions on how to avoid the incident in the future.

**Review Signatures**

	Signature	Title	Date
<b>Completed By:</b> Employee name			
<b>Assisted By:</b> Employee name			
<b>Translated By:</b> Employee name			
<b>Received By:</b> Employee name			

**Witness Statement (detach and give to witness)**

Describe what happened:

Do you have any suggestions on how this could be avoided in the future?

Make any sketches or diagrams to add clarity:

**Review Signatures**

	Signature	Title	Date
<b>Completed By:</b> Employee name			
<b>Assisted By:</b> Employee name			
<b>Translated By:</b> Employee name			
<b>Received By:</b> Employee name			

**APPENDIX C**  
**Attorney-Client Privilege**  
**and**  
**Attorney Work Product Privilege**

**Confidentiality**

The need for confidentiality when working in the health and safety area is paramount. Obviously, there are many things, which must be written down in order to do your job. But, every effort should be made to communicate information verbally where possible, and avoid committing to writing unnecessary or sensitive information regarding your Facility and its operation. When you must write information, limit your writing to facts. Avoid transmitting unnecessary or sensitive written information to outside consultants. If, after consultation with the Corporate Legal Department, it is determined that such information must be transmitted to a consultant, oral communications with consultants are preferable. In many health and safety matters, you will want to have counsel retain outside consultants.

If you become aware of adverse information, do not discuss the information with personnel at your Facility. Take any necessary emergency action to prevent harm to employees, the public, or the environment, then immediately call the Corporate Legal Department and discuss the information with an attorney. Your communication with counsel, if conducted properly, will protect the communication from disclosure in any adversarial situation. As discussed in greater detail below, the attorney-client privilege and the attorney work product doctrine are useful in protecting you and the people for whom or with whom you work.

**Audits**

Audits of your Facility or other health and safety investigations of your Facility need to be conducted in a highly confidential manner under the direction of counsel. If you wish to have a Facility audit or investigation to assess your level of compliance with health and safety requirements contact the Corporate Legal Department in order to arrange for an audit.

**What is a Privileged Communication?**

Unlike other communications, a privileged communication is a communication between an attorney and usually his or her client that is protected from disclosure in adversarial situations, including litigation. In other words, the content of the communication will be kept confidential.

### **What Does the Attorney-Client Privilege Cover?**

The attorney-client privilege covers confidential oral and written communications between attorney and client, which relate to the legal advice being sought. Thus, any lawyer-client communications that are outside the scope of legal advice are not protected.

### **Who Holds the Privilege – The Client or the Lawyer?**

The privilege belongs to the client, who may refuse to reveal, or prevent another from revealing, the confidential communication. Absent directions from the client to waive the privilege, an attorney generally must assert the privilege on behalf of the client. You should be aware that you can intentionally or unintentionally waive the privilege by failing to observe the formalities of maintaining the privilege. One way to waive the privilege is if the client does not keep their communications confidential.

### **Why Was the Attorney-Client Privilege Created?**

The privilege promotes full and open communication between lawyer and client without apprehension that later disclosure can be compelled without the client's consent. Without full discussion with the client, the lawyer cannot give reliable or effective legal advice.

### **What Does the Attorney Work Product Doctrine Protect?**

The attorney work product doctrine creates a qualified (i.e., not absolute) privilege for the work papers, notes, memoranda, and reports gathered or prepared **by or for** counsel or their agents in anticipation of litigation.

### **What Does the Attorney Work Product Doctrine Not Protect?**

Any material that is considered to be part of the underlying facts or evidence may not be deemed work product. This material includes, for example, the identity or location of evidence, and material objects that can be used as evidence.

### **Does the Attorney Work Product Doctrine Apply to Documents Prepared Before Litigation Is Threatened?**

Yes. If documents are prepared because of a concern about the potential for litigation, even if they were prepared before litigation first was threatened, the privilege would apply. Thus, the work product doctrine can be a particularly effective tool in maintaining the confidentiality of

internal corporate investigatory reports. Documents and materials gathered in the course of an internal corporate investigation, before litigation is actually threatened, may be considered to have been prepared in anticipation of litigation.

### **Why Was the Attorney Work Product Doctrine Created?**

Courts have recognized that an attorney's or consultant's preparation in anticipation of litigation or for trial should be protected to encourage pretrial investigation and analysis of facts without fear that the information obtained or theories developed could be used to help an adversary's position.

### **Who Decides if the Privileges Apply in a Particular Case?**

As a question of law, the court ultimately determines whether the privileges apply.

### **May the Attorney-Client and Attorney Work Product Privileges Be Waived?**

Yes. The privileges may be waived through authorized or unintentional disclosure to certain third parties either orally or through circulation of written materials. Unauthorized disclosure, such as when documents are stolen or misappropriated, does not waive the privileges.

In the case of the attorney-client privilege, the essential element of confidentiality may be lost if the communication occurs in the presence of third parties who have no legitimate reason for being there. Such third parties would not include your secretary or clerk, or a consultant retained to assist the lawyer in advising his client, but would include parties copied on an otherwise privileged communication with counsel.

### **May Communications With a Consultant Usually Be Protected From Disclosure?**

Yes, generally not by the attorney-client privilege; instead, such communications may be protected by the attorney work product doctrine.

The federal work product doctrine protects materials compiled, prepared or analyzed both by lawyers and non-lawyers, including consultants. It is not required that the documents be prepared under the direction of an attorney in order to be privileged; however, if materials are prepared by a consultant who is not working under an attorney's supervision, there is a risk that the documents will be found to have been prepared in the ordinary course of business and not in anticipation of litigation.

### **Does the Attorney Work Product Doctrine Apply If the Consultant Becomes a Witness?**

No. Any consultant who is slated to testify at trial may be deposed and thus asked about any opinions offered and the bases for those opinions. On the other hand, any facts known or opinions held by a consultant who has been retained by a party in anticipation of litigation, but who will not be called to testify at trial, constitute protected work product. Therefore, if it is

anticipated that a consultant may be needed to testify as an expert witness, it may be desirable to hire two consultants: one to use generally and one for the limited purpose of expert testimony.

**What Are the Rules For Maintaining the Attorney-Client Privilege?**

Communicate information only to counsel. If communicated orally, other supervisory personnel may be present. If communicated in writing (including via e-mail), **NO OTHER PARTY MAY BE COPIED.**

If communicated in writing (including via e-mail), the following must appear on page one:

**CONFIDENTIAL AND PRIVILEGED ATTORNEY-CLIENT  
COMMUNICATION; or  
CONFIDENTIAL; LEGALLY PRIVILEGED**

The body of the writing should begin with substantially these words:

**"The following information is being provided to you in order to enable you to render legal advice in connection with this matter."**

## Appendix D

### Regulatory Inspection – Surprise or Scheduled

#### 1. Introduction

When representatives of an health and safety regulatory agency arrive at your Facility to conduct an unanticipated inspection or audit of the Facility's health and safety management practices or to investigate a death, serious injury, or serious health and/or safety mishap you need a responsive plan of action. This Appendix sets forth a model response plan.

In general, most major federal health and safety laws specifically provide federal inspectors the authority to enter facilities, review records and collect samples. State, county or city laws and regulations similarly authorize inspections by state and local inspectors.

The bywords in any inspection are "COOPERATION" and "BE POLITE." If Facility personnel attempt to deny access to an inspector or allow a visit to become adversarial or antagonistic causing the inspectors to leave the site, the inspection may continue later under authority of a search warrant. If Facility personnel are adversarial or evasive, the inspectors' curiosity will be aroused. As a result, the inspectors may spend more time at the Facility, investigate Facility operations more closely, and be more likely to issue a violation for marginal non-compliance. A cooperative working relationship between the inspectors and Facility personnel will simplify any investigation and contribute to development of a positive working relationship.

#### 2. Death, Serious Injury or Serious Health and/ or Safety Mishap

It is important to note that, in the case of potential criminal liability, while maintaining a cooperative attitude, you are not required to respond to questions without the advice of counsel. Therefore, it is imperative that, **IN THE CASE OF DEATH, SERIOUS INJURY OR SERIOUS HEALTH AND/OR SAFETY MISHAP**, you notify the Corporate Legal Department immediately. **You should request that counsel be present and Counsel should be present during the inspection.**

It is TDY's policy to cooperate with regulatory and law enforcement authorities in the course of investigations. However, in situations involving potential criminal liability, individuals have Constitutional rights and TDY in no way intends for its cooperation to interfere with the rights of its employees.

If an employee is contacted at home or at work by federal, state, provincial, local, etc. law enforcement agents, (either domestic or international), the employee has the right (1) to choose whether he or she wishes to be interviewed, (2) to request at any time that the interview be

terminated, (3) to request that the interview be held at a different time or location. The employee also has the right to consult with either Corporate Legal Department attorney or his or her own attorney before an interview and may insist that an attorney be present during any interview. In all cases, the agent must honor the employee's request. If an employee is interviewed, the employee must tell the truth to the best of his or her recollection.

If agents are seeking to execute a properly issued search warrant, the Facility and its employees must furnish the materials requested in the search warrant. The Corporate Legal Department should be contacted, and counsel should be present.

### 3. Model Response Plan for Regulatory Inspection

This section sets forth a model for a responsive plan of action. Note that this model approach works equally well for scheduled or surprise inspections. The model can be customized for a Facility's individual circumstance. However, any customized response plan should be discussed with the Corporate Legal Department prior to its implementation.

3.1 Inspection Response Team. Each Facility should designate an Inspection Response Team ("IRT") to respond to surprise or scheduled inspections at the Facility. The IRT should consist of at least two supervisory level employees familiar with the Facility's production processes and waste management practices. When responding to an inspection, the IRT members should each have in their possession the following items:

- A note pad;
- A hand-held tape recorder;
- A camera with flash attachment; and
- A solid/liquid material sample collection kit.

3.2 Signing In. The Facility's security guard or receptionist should have each regulatory agency inspector present his or her credentials and sign the visitors' log with his or her full name, title, date of arrival and time of arrival. In the event the Facility has national security information, or is otherwise restricted or classified for security purposes, the investigator should be required to provide proof of appropriate security clearance before being allowed to enter restricted or classified areas. During the sign-in, the guard or receptionist should alert the IRT. The guard or receptionist should advise the inspectors that appropriate Facility representatives will meet them at the gate (or in the lobby) momentarily.

3.3 Meeting the Inspectors. The IRT should greet the inspectors at the gate (or in the lobby). Upon greeting the inspectors, the IRT should politely ask:

- What the purpose of the inspection is;

- What the authority for the inspection is;
- What the Facility's rights are;
- Whether the Facility or any employee at the Facility should have Corporate Legal Counsel present;
- What portions of the Facility they would like to visit;
- Whether they intend to take photographs, collect samples, copy documents and/or interview employees;
- Whether the IRT may have "splits" of any samples collected by the inspectors; and
- **IN THE CASE OF DEATH, SERIOUS INJURY OR SERIOUS HEALTH AND/ OR SAFETY MISHAP**, whether they will delay the commencement of the inspection for a reasonable time to allow for the arrival of the Facility's Corporate or retained legal counsel.

Preferably, the IRT will tape record these questions and answers. At a minimum, the IRT will take extensive notes.

- 3.4 Press and Media Inquiries. The IRT will politely refuse access to any media representatives who wish to accompany the inspectors and, at the first opportunity, should advise the Corporate Media Contact of the situation. All requests for information from the media should be referred to the Corporate Media Contact.
- 3.5 Keeping Together. As the inspection begins, the IRT will ask the inspectors to stay together. If the inspectors do so, one member of the IRT will lead the inspectors through the requested portions of the Facility, while the other IRT member notifies the Corporate Legal Department. If the inspectors refuse to stay together, the IRT should temporarily delay notifying counsel until additional properly equipped Facility personnel can be located to accompany each independent inspector or group of inspectors.
- 3.6. During The Inspection. During the course of the inspection, the IRT should ask to tape record all conversations involving the inspectors – or, at a minimum, take extensive notes. Only the most innocuous questions should be answered on the spot. All other questions should be deferred until the end of the inspection visit so that answers may be discussed in advance with an attorney in the TDY Legal Department. During the course of the inspection, the IRT should:
- Photograph everything photographed by the inspectors;
  - Duplicate sample everything sampled by the inspectors;
  - Duplicate copy every document copied by the inspectors; and
  - Make careful notes concerning those portions of the Facility seen by the inspectors
- 3.7 Documents. The IRT should number all documents reviewed by the inspectors. **Attorney-Client privileged documents should never be produced under any circumstances.** (See Appendix E for a discussion of the Attorney-Client Privilege.) The IRT should refuse to produce any arguable privileged document to the inspectors until that document has first been reviewed by counsel. In addition, trade secret documents should not be produced unless and until counsel has negotiated an appropriate protective agreement with the inspectors.
- 3.8 Employee Interviews. An IRT member should be present whenever an inspector interviews any Facility employee. If, for any reason, this is not possible, an IRT member should de-brief interviewed Facility employees immediately after completion of the inspection.

3.9 Signing Out. Upon the conclusion of the inspection, the IRT should accompany the inspector to the gate or lobby where they entered the Facility. The IRT should ask the inspectors:

- What they found during the inspection?
- What significance they attach to their findings?
- What plan of action they intend to pursue?
- What laboratory they are taking any solid or liquid samples to for analysis?
- Whether they would give the IRT a copy of their inspection notes?
- Whether they would send the IRT a copy of the laboratory analysis report and/or their final inspection report?
- The IRT should then have the inspectors sign out at the visitors' log.

3.10 After the Inspection. Following the inspection, the IRT should immediately review the inspection with counsel. The IRT should follow counsel's advice concerning the separate storage and preservation of the notes, photographs, samples and tapes generated during the inspection.

#### 4. Checklist For Regulatory Inspections

##### 4.1 Before the Inspection

- Be polite at all times;
- Have the inspectors present their credentials, and sign-in;
- Ask what the authority for the inspection is;
- Ask what the purpose of the inspection is; and
- **IN THE CASE OF DEATH, SERIOUS INJURY OR SERIOUS HEALTH AND/ OR SAFETY MISHAP**, notify the Corporate Legal Department immediately. In-house or retained counsel should be present during the visit.

##### 4.2 During the Inspection

- The IRT should make every effort possible to have at least two people accompany the inspectors at all times – one to act as scribe-recording all questions asked and all responses. If the inspectors are interviewing an employee, have an attorney or an Operating Segment representative present. Alternatively, interview the employee after the government inspector is done with the employee, including any people previously interviewed prior to the inspections (e.g., at their homes after working hours);
- Check documents for attorney-client privileged communications and for trade secrets/business confidentiality;
- Number every document the inspectors review;
- Be cooperative and polite but know that you do not have to say anything;
- If the inspectors ask you questions you can refer them to the relevant documents and ask that they hold their questions until the end of the day;
- It is best not to answer any "why" questions:

- Ask the inspectors to submit those in writing; or
- Ask them to save any "why" questions to be asked at the end of the inspections. Record all "why" questions and discuss answers with counsel before responding, if possible.

#### 4.3 Before the Inspectors Leave

- Ask the inspectors for all split samples, photos, copies of notes and other materials generated during the inspection;
- Ask for a copy of any reports they are preparing for internal or external use and a copy of any data, lab results, etc.; and
- Try to get as much information from them as possible to identify areas of potential violation.

#### 4.4 After the Inspectors Leave

- Immediately review the inspection with counsel.
- Follow information retention guidelines given to you by counsel.

## Appendix E

### Management of Change (MOC) Triggers Guidelines

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Examples of change criteria (i.e., MOC triggers) that trigger health and safety reviews include, but are not limited to, the following.

#### 1. Raw Materials

- Request for a new material;
- Request for a new use for an existing material;
- Significant change in the quantity used of an existing material;
- Materials that are purchased or received free as samples or for use on a trial basis, or used by an outside contractor, or materials bought on one-time basis; or
- Deletion of a material from inventory.

#### 2. Products

- The addition or deletion of a product line; or
- A change in the customer's end use of a product.

#### 3. Processes

- Request for addition, deletion or change to an existing process including changes to operating parameters (e.g. ranges of temperatures, pressure, hours of operation, etc.); or
- Request for a new use of an existing material or an equipment.

#### 4. Facilities (including equipment and maintenance activities)

Changes that will add, delete, relocate or modify any of the following:

- Machinery or equipment;
- Interior walls;
- Sidewalks/ employee walkways;
- Recreational, cafeteria or break areas
- Ventilation
- Fire suppression systems
- Electrical system

**5. Personnel**

- New hires;
- Termination of an employee;
- Significant change in number of hours worked by an employee; or
- Transfer of an employee from/to a different position.

**6. Corporate or Operating Segment Requirements**

- Issuance of a new policy or procedure; or
- Deletion of an existing policy or procedure.

**7. Federal, State, and Local Regulations**

- Deletion, issuance, or changes to applicable federal, state, or local regulations.

**8. Permits**

- Application or receipt of any new or modified permit.

It is recommended that facilities identify existing change documents (e.g. engineering change orders and directives, purchase requisitions, bid decisions and proposals, design documents, Facility work orders, maintenance requests, employee transfer requests, new employee requisition forms, etc.) and incorporate health and safety review into the change approval process. For example, a Facility work order could have a check box to indicate that a health and safety review was performed and the requested work has received the Facility Health and Safety Manager or Team's approval.

## **Appendix F**

### **Annual Health and Safety Compliance Certification**

Refer to the Teledyne Environmental Management System Manual, Appendix H – Form of Compliance Certification, November 2019 edition.

## **Appendix G**

### **Summary of Major Federal Health and Safety Statutes and Regulations**

#### **United States**

##### **Description of Occupational Safety and Health Regulatory Framework**

Workplace safety and health laws for the U.S.A are contained primarily in federal and state statutes (federal laws and regulations/standards pre-empt state ones where they overlap or contradict one another.) This database is concerned only with federal legislation.

The main law protecting the health and safety of workers is the Occupational and Safety Health Act 1970, which covers commercial workplaces and, like other federal statues, is codified by subject matter in the United States Code (U.S.C.) A number of regulations relate to the duty of federal agencies towards their employees. Federal regulations/standards contain both detailed provisions and interpretations of provisions in the OSHA and other Acts. These final rules are codified when added to the Code of Federal Regulations (CFR) and those relating to occupational safety and health currently fill five volumes of the Code of Federal Regulations, which is revised annually on July 1.

The Occupational Safety and Health Administration (OSHA), is the agency of the Department of Labor, which sets and enforces general workplace health and safety standards. However, other federal agencies also establish safety and health regulations relating to their own areas of concern.

##### **Occupational Safety and Health Act**

Statute: 29 U.S.C Sec 651 et seq. (1970)

Regulations: 29 Code of Federal Regulations

Administering Agency: Occupational Safety and Health Administration (OSHA)

The Occupational Safety and Health Act (the “OSH Act”) was established to assure safe and healthful working conditions for working men and women; by authorizing enforcement of the standards developed under the Act; by assisting and encouraging the States in their efforts to assure safe and healthful working conditions; by providing for research, information, education, and training in the field of occupational safety and health; and for other purposes.

**Regulations Applicable to General Industry and Construction**

**29 CFR PART 1904 -- Recording and Reporting Occupational Injuries and Illnesses**

Subpart A -- Purpose

Subpart B -- Scope

Subpart C -- Recordkeeping Forms and Recording Criteria

Subpart D -- Other OSHA Injury and Illness Recordkeeping Requirements

Subpart E -- Reporting Fatality, Injury and Illness Information to the Government

Subpart F -- Transition From the Former Rule

Subpart G -- Definitions

**29 CF PART 1910 -- OCCUPATIONAL SAFETY AND HEALTH STANDARDS**

Subpart A -- General

Subpart B -- Adoption and Extension of Established Federal Standards

Subpart C -- [Removed and Reserved]

Subpart D -- Walking - Working Surfaces

Subpart E -- Exit Routes and Emergency Planning

Subpart F -- Powered Platforms, Manlifts, and Vehicle-Mounted Work Platforms

Subpart G -- Occupational Health and Environmental Control

Subpart H -- Hazardous Materials

Subpart I -- Personal Protective Equipment

Subpart J -- General Environmental Controls

Subpart K -- Medical and First Aid

Subpart L -- Fire Protection

Subpart M -- Compressed Gas and Compressed Air Equipment

Subpart N -- Materials Handling and Storage

Subpart O -- Machinery and Machine Guarding

Subpart P -- Hand and Portable Powered Tools and Other Hand-Held Equipment.

Subpart Q -- Welding, Cutting, and Brazing.

Subpart R -- Special Industries

Subpart S -- Electrical

Subpart T -- Commercial Diving Operations

Subparts U -- Y [Reserved]

Subpart Z -- Toxic and Hazardous Substances

**29 CFR PART 1926 -- SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION**

- Subpart A -- General
- Subpart B -- General Interpretations
- Subpart C -- General Safety and Health Provisions
- Subpart D -- Occupational Health and Environmental Controls
- Subpart E -- Personal Protective and Life Saving Equipment
- Subpart F -- Fire Protection and Prevention
- Subpart G -- Signs, Signals, and Barricades
- Subpart H -- Materials Handling, Storage, Use, and Disposal
- Subpart I -- Tools -- Hand and Power
- Subpart J -- Welding and Cutting
- Subpart K -- Electrical
- Subpart L -- Scaffolds
- Subpart M -- Fall Protection
- Subpart N -- Cranes, Derricks, Hoists, Elevators, and Conveyors
- Subpart O -- Motor Vehicles, Mechanized Equipment, and Marine Operations
- Subpart P -- Excavations
- Subpart Q -- Concrete and Masonry Construction
- Subpart R -- Steel Erection
- Subpart S -- Tunnels and Shafts, Caissons, Cofferdams, and Compressed Air
- Subpart T -- Demolition
- Subpart U -- Blasting and Use of Explosives
- Subpart V -- Power Transmission and Distribution
- Subpart W -- Rollover Protective Structures; Overhead Protection
- Subpart X -- Stairways and Ladders
- Subpart Y -- Commercial Diving Operations
- Subpart Z -- Toxic and Hazardous Substances
- Subpart AA-BB -- [RESERVED]
- Subpart CC -- Cranes and Derricks in Construction
- Subpart DD -- Cranes and Derricks Used in Demolition and Underground Construction

Link to United States' Occupational Safety and Health laws and regulations:

[http://www.ilo.org/dyn/legosh/en/f?p=14100:1100:0::NO:1100:P1100\\_ISO\\_CODE3,P1100\\_YE\\_AR:USA,2013:NO](http://www.ilo.org/dyn/legosh/en/f?p=14100:1100:0::NO:1100:P1100_ISO_CODE3,P1100_YE_AR:USA,2013:NO)

**Top 10 Most Frequently Cited Standards  
by OSHA for Fiscal 2015**  
*for Fiscal Year 2018 (Oct. 1, 2017, to Sept. 30, 2018).*

The following is a list of the top 10 most frequently cited standards following inspections of worksites by the United States Occupational Safety and Health Administration (OSHA). OSHA publishes this list to alert employers about these commonly cited standards so they can take steps to find and fix recognized hazards addressed in these and other standards before OSHA shows up.

1. Fall protection, construction (29 CFR 1926.501)
2. Hazard communication standard, general industry (29 CFR 1910.1200)
3. Scaffolding, general requirements, construction (29 CFR 1926.451)
4. Respiratory protection, general industry (29 CFR 1910.134)
5. Control of hazardous energy (lockout/tagout), general industry (29 CFR 1910.147)
6. Ladders, construction (29 CFR 1926.1053)
7. Powered industrial trucks, general industry (29 CFR 1910.178)
8. Fall Protection–Training Requirements (29 CFR 1926.503)
9. Machinery and Machine Guarding, general requirements
10. Eye and Face Protection (29 CFR 1926.102)

## **United Kingdom**

### **Description of Occupational Safety and Health Regulatory Framework**

The Health and Safety at Work Act 1974 (the HSWA) is the foundation law of the existing system, but there are a number of other OSH-related acts and subsidiary regulations (more than 200 in all.)

The HSWA reflects the principle that those who create risks for employees or others in the course of carrying out work activities are responsible for controlling those risks. It places specific responsibilities on employers, the self-employed, employees, designers, manufacturers, importers and suppliers. An overhaul of OSH legislation is underway to reduce/replace older prescriptive regulations with legislation that expresses OSH management goals e.g. requiring 'adequate control' or 'reasonable' steps.

An increasing amount of UK health and safety legislation is based on European directives, including the important Management of Health and Safety at Work Regulations, which establish broadly based obligations for employers to evaluate, avoid and reduce workplace risks. Note that the database only cites legislation which is either transposed into UK law or directly applicable in the UK. Some pieces of UK OSH legislation do not cover all of the UK and/or there can be often small variations in detailed provisions in particular counties

### **Health and Safety at Work Act etc. 1974**

The Health and Safety at Work etc. Act 1974 (also referred to as HSWA, the HSW Act, the 1974 Act or HASAWA) is the primary piece of legislation covering occupational health and safety in Great Britain. The Health and Safety Executive, with local authorities (and other enforcing authorities) is responsible for enforcing the Act and a number of other Acts and Statutory Instruments relevant to the working environment.

### **The Management of Health and Safety at Work Regulations 1999:**

The Management of Health and Safety at Work Regulations 1999 (the Management Regulations) generally make more explicit what employers are required to do to manage health and safety under the Health and Safety at Work Act. Like the Act, they apply to every work activity.

Note: other regulations applicable to specific topics, e.g. noise, asbestos, fire protection,

hazardous substances are also in force. See link to Statutory Instruments owned and enforced by HSE and local authorities: <http://www.hse.gov.uk/legislation/statinstruments.htm>

## **Canada**

There are fourteen jurisdictions in Canada - one federal, ten provincial and three territorial - each having its own occupational health and safety legislation, outlining the general rights and responsibilities of the employer, the supervisor and the worker. Federal legislation covers employees of the federal government including Crown agencies and corporations across Canada.

- **Alberta**

Laws governing health and safety in Alberta's workplaces fall under the OHS Act, Regulation and Code, and related legislation.

Link to Alberta OHS Act, OHS Regulations and OHS Codes:  
<http://work.alberta.ca/searchaarc/>

- **Ontario**

The Occupational Health and Safety Act (OHSA) is Ontario's cornerstone legislation for workplace health and safety. Other contributing legislation includes the Workplace Safety and Insurance Act (WSIA), Part II of which deals with the prevention of occupational injury and disease and the Human Rights Code, which often has to be considered in dealing with OHS issues. Both OHSA and WSIA are available along with all of Ontario's other Acts and regulations at the e-Laws website.

Link to Ontario laws and regulations:  
<https://www.labour.gov.on.ca/english/hs/laws/index.php>

- **Quebec**

Quebec Occupational Health and Safety Acts and corresponding regulations

### **An Act respecting occupational health and safety (AOHS)(CQLR, c. S-2.1)**

Passed in 1979, this Act deals first and foremost with the prevention of work-related accidents and diseases. It created the CSST, now named CNESST, and entrusted this organization with its various mandates.

**An Act respecting industrial accident and occupational diseases (AIAOD) (CQLR, c. A-3.001)**

Having entered into force in 1985, this Act introduces a remedial system for injuries or diseases caused by work. It provides for the payment of compensation when necessary, the supply of health care and assistance with rehabilitation.

**Workers' Compensation Act (WCA) (CQLR, c. A-3)**

This Act, passed in 1931, was replaced by An Act respecting industrial accidents and occupational diseases on August 19, 1985, but is still in force for the accidents or diseases having occurred prior to that date.

Link to Acts and corresponding regulations:

[http://www.csst.qc.ca/en/Pages/en\\_legislation.aspx](http://www.csst.qc.ca/en/Pages/en_legislation.aspx)

## **Mexico**

### **Description of Occupational Safety and Health Regulatory Framework**

Article 123 of the Constitution of Mexico provides for standards and principles to be observed within the employment relations, including duties of the employer in the field of occupational safety and health.

The Federal Regulation on Occupational Safety and Hygiene and the Working Environment adopted in 1997 is the leading OSH legislation. It aims to set up the necessary measures to prevent accidents and diseases in addition to ensuring safe and healthy working conditions for workers.

The Federal Labour Law, reformed in 2012 contains provisions on OSH. There are also a number of Official Mexican Standards regulating particular OSH issues as the Standard on the Constitution, Composition, Organization and Operation of Safety and Health Committees.

Furthermore, the General Regulations on the Inspection and Application of Sanctions concerning Labour Legislation Violations of 1998 contains OSH related provisions, and the Regulations of the Secretariat of Labour and Social Welfare of 2008 provides for the duties of the General Director of Safety and Health at Work

Link to Mexican law and regulations:

[http://www.ilo.org/dyn/legosh/en/f?p=14100:1100:0::NO::P1100\\_ISO\\_CODE3,P1100\\_YEAR:](http://www.ilo.org/dyn/legosh/en/f?p=14100:1100:0::NO::P1100_ISO_CODE3,P1100_YEAR:)

MEX,2013

## **Denmark**

### Description of Occupational Safety and Health Regulatory Framework

Documents of a legal nature include Acts, Executive Orders and WEA Guidelines.

Acts (Love):

The Danish Working Environment Act includes general provisions on the working environment. The Work Environment Act is binding on citizens and any violation of the rules is therefore subject to legal sanctions.

Executive Orders (Bekendtgørelser): The Work Environment Act is implemented through Executive Orders. Executive Orders are binding on citizens and any violation of the rules is therefore subject to legal sanctions.

WEA Guidelines (At-vejledninger): WEA Guidelines are based on Acts and Executive Orders. They explain how the regulations are to be interpreted. WEA Guidelines describe, among other things, how enterprises, etc. can plan and carry out their work, so as to ensure that the health and safety requirements are met. WEA Guidelines are not binding on the enterprises etc. but the Danish Working Environment Authority will take no further action if an enterprise has complied with the WEA Guidelines.

The Danish Working Environment Authority supervises whether Acts and rules in the field of safety and health at work are observed, inter alia through inspection visits and guidance of the enterprises and their safety organisations, with a view to making the enterprises capable of solving their own tasks in relation to the working environment. The different forms of sanctions of the Danish Working Environment Authority, i.e. improvement notices, legal charges, administrative fines and guidelines - will depend on both the enterprise's actual working environment standards and on its own efforts. As an executive authority, the Danish Working Environment Authority focuses in particular on enterprises with poor safety and health conditions and no serious policy in relation to working environment issues.

The Ministry of Employment is responsible for the framework and rules regarding employment and working conditions, safety and health at work and industrial injuries, financial support and

allowances to all persons with full or partial working capacity as well as placement services in relation to enterprises and active employment measures

Link to Denmark's occupational safety and health laws and regulations:

[http://www.ilo.org/dyn/legosh/en/f?p=14100:1100:0::NO:1100:P1100\\_ISO\\_CODE3,P1100\\_YE\\_AR:DNK,2014:NO](http://www.ilo.org/dyn/legosh/en/f?p=14100:1100:0::NO:1100:P1100_ISO_CODE3,P1100_YE_AR:DNK,2014:NO)

## **The Netherlands**

Description of Occupational Safety and Health Regulatory Framework

The Netherlands has adopted various laws and regulations applicable to occupational health and safety.

Link to the Netherlands' Occupational Safety and Health laws and regulations:

[http://www.ilo.org/dyn/natlex/natlex4.listResults?p\\_lang=en&p\\_country=NLD&p\\_count=2273&p\\_classification=14&p\\_classcount=193](http://www.ilo.org/dyn/natlex/natlex4.listResults?p_lang=en&p_country=NLD&p_count=2273&p_classification=14&p_classcount=193)

## **Belgium**

Description of Occupational Safety and Health Regulatory Framework

Belgium has adopted various laws and regulations applicable to occupational health and safety.

Link to Belgium's Occupational Safety and Health laws and regulations:

[http://www.ilo.org/dyn/natlex/natlex4.listResults?p\\_lang=en&p\\_country=BEL&p\\_classification=14](http://www.ilo.org/dyn/natlex/natlex4.listResults?p_lang=en&p_country=BEL&p_classification=14)

## **Germany**

Description of Occupational Safety and Health Regulatory Framework

Germany has adopted various laws and regulations applicable to occupational health and safety.

Link to Germany's Occupational Safety and Health laws and regulations:

[http://www.ilo.org/dyn/natlex/natlex4.listResults?p\\_lang=en&p\\_country=DEU&p\\_classification=14](http://www.ilo.org/dyn/natlex/natlex4.listResults?p_lang=en&p_country=DEU&p_classification=14)

## **China**

### Description of Occupational Safety and Health Regulatory Framework

The legislative structure of Occupational Safety and Health in China is based on the Constitution, and consists of laws, administrative regulations, local regulations, departmental rules, local rules and OSH standards. The major OSH laws are Law on Work Safety, Law on Prevention and Control of Occupational Diseases, Law on Safety in Mines, Labour Law, Labour Contract Law, Fire Protection Law, Emergency Response Law and Criminal Law. The major regulations are Regulations on Coal Mine Safety Inspection, Special Regulations of the State Council on Preventing Coal Mine Accidents, Regulations on Safety Management in Construction Projects, Regulations on the Safe Administration of Hazardous Chemicals, Regulations on Fireworks and Firecracker Safety Management, Regulations on Work Safety Licenses, Regulations on Civil Explosive Products Safety Management, Regulations on Special Equipment Safety Inspection, Regulations on Safety Supervision and Management of Agricultural Machinery, Regulations on Ascertaining Administrative Responsibility in Extraordinarily Serious Safety Accidents, Regulations on Work Injury Insurance, and Regulations on Reporting, Investigation and Handling of Work Safety Accidents

Link to China's Occupational Safety and Health laws and regulations:

[http://www.ilo.org/dyn/legosh/en/f?p=14100:1100:0::NO:1100:P1100\\_ISO\\_CODE3,P1100\\_YE\\_AR:CHN,2013:NO](http://www.ilo.org/dyn/legosh/en/f?p=14100:1100:0::NO:1100:P1100_ISO_CODE3,P1100_YE_AR:CHN,2013:NO)

## APPENDIX H – SELF INSPECTION CHECKLISTS

### Self-Inspection Scope

Your self-inspections should cover safety and health issues in the following areas:

- **Processing, Receiving, Shipping and Storage** - equipment, job planning, layout, heights, floor loads, projection of materials, material handling and storage methods, training for material handling equipment.
- **Building and Grounds Conditions** - floors, walls, ceilings, exits, stairs, walkways, ramps, platforms, driveways, aisles.
- **Housekeeping Program** - waste disposal, tools, objects, materials, leakage and spillage, cleaning methods, schedules, work areas, remote areas, storage areas.
- **Electricity** - equipment, switches, breakers, fuses, switch-boxes, junctions, special fixtures, circuits, insulation, extensions, tools, motors, grounding, national electric code compliance.
- **Lighting** - type, intensity, controls, conditions, diffusion, location, glare and shadow control.
- **Heating and Ventilation** - type, effectiveness, temperature, humidity, controls, natural and artificial ventilation and exhausting.
- **Machinery** - points of operation, flywheels, gears, shafts, pulleys, key ways, belts, couplings, sprockets, chains, frames, controls, lighting for tools and equipment, brakes, exhausting, feeding, oiling, adjusting, maintenance, lockout/tagout, grounding, work space, location, purchasing standards.
- **Personnel** - training, including hazard identification training; experience; methods of checking machines before use; type of clothing; PPE; use of guards; tool storage; work practices; methods for cleaning, oiling, or adjusting machinery.
- **Hand and Power Tools** - purchasing standards, inspection, storage, repair, types, maintenance, grounding, use and handling.
- **Chemicals** - storage, handling, transportation, spills, disposals, amounts used, labeling, toxicity or other harmful effects, warning signs, supervision, training, protective clothing and equipment, hazard communication requirements.
- **Fire Prevention** - extinguishers, alarms, sprinklers, smoking rules, exits, personnel assigned, separation of flammable materials and dangerous operations, explosion-proof fixtures in hazardous locations, waste disposal and training of personnel.
- **Maintenance** - provide regular and preventive maintenance on all equipment used at the worksite, recording all work performed on the machinery and by training personnel on the proper care and servicing of the equipment.
- **PPE** - type, size, maintenance, repair, age, storage, assignment of responsibility, purchasing methods, standards observed, training in care and use, rules of use, method of assignment.
- **Transportation** - motor vehicle safety, seat belts, vehicle maintenance, safe driver programs.
- **First Aid Program/Supplies** - medical care facilities locations, posted emergency phone numbers, accessible first aid kits.
- **Evacuation Plan** - establish and practice procedures for an emergency evacuation, e.g., fire, chemical/biological incidents, bomb threat; include escape procedures and routes, critical plant operations, employee accounting following an evacuation, rescue and medical duties and ways to report emergencies.

### Self-Inspection Checklists

These checklists are by no means all-inclusive. You should add to them or delete items that do not apply to your business; however, carefully consider each item and then make your decision. You should refer to OSHA standards for specific guidance that may apply to your work situation. (**Note:** These checklists are typical for general industry but not for construction or maritime industries.)

## **EMPLOYER POSTING**

- Is the required OSHA Job Safety and Health Protection Poster displayed in a prominent location where all employees are likely to see it?
- Are emergency telephone numbers posted where they can be readily found in case of emergency?
- Where employees may be exposed to toxic substances or harmful physical agents, has appropriate information concerning employee access to medical and exposure records and Material Safety Data Sheets (MSDSs) been posted or otherwise made readily available to affected employees?
- Are signs concerning exit routes, room capacities, floor loading, biohazards, exposures to x-ray, microwave, or other harmful radiation or substances posted where appropriate?
- Is the Summary of Work-Related Injuries and Illnesses (OSHA Form 300A) posted during the months of February, March and April?

## **RECORDKEEPING**

- Are occupational injuries or illnesses, except minor injuries requiring only first aid, recorded as required on the OSHA 300 log?
- Are employee medical records and records of employee exposure to hazardous substances or harmful physical agents up-to-date and in compliance with current OSHA standards?
- Are employee training records kept and accessible for review by employees, as required by OSHA standards?
- Have arrangements been made to retain records for the time period required for each specific type of record? (Some records must be maintained for at least 40 years.)
- Are operating permits and records up-to-date for items such as elevators, air pressure tanks, liquefied petroleum gas tanks, etc.?

## **SAFETY AND HEALTH PROGRAM**

- Do you have an active safety and health program in operation that includes general safety and health program elements as well as the management of hazards specific to your work-site?
- Is one person clearly responsible for the safety and health program?
- Do you have a safety committee or group made up of management and labor representatives that meets regularly and reports in writing on its activities?

## **OSHA HANDBOOK FOR SMALL BUSINESSES**

- Do you have a working procedure to handle in-house employee complaints regarding safety and health?
- Are your employees advised of efforts and accomplishments of the safety and health program made to ensure they will have a workplace that is safe and healthful?
- Have you considered incentives for employees or workgroups who excel in reducing workplace injury/illnesses?

## **MEDICAL SERVICES AND FIRST AID**

- Is there a hospital, clinic, or infirmary for medical care near your workplace or is at least one employee on each shift currently qualified to render first aid?
- Have all employees who are expected to respond to medical emergencies as part of their job responsibilities received first aid training; had hepatitis B vaccination made available to them; had appropriate training on procedures to protect them from bloodborne pathogens, including universal precautions; and have available and understand how to use appropriate PPE to protect against exposure to bloodborne diseases?\*

\*Pursuant to an OSHA memorandum of July 1, 1992, employees who render first aid only as a collateral duty do not have to be offered pre-exposure hepatitis B vaccine only if the employer includes and implements the following requirements in his/her exposure control plan: (1) the employer must record all first aid incidents involving the presence of blood or other potentially infectious materials before the end of the work shift during which the first aid incident occurred; (2) the employer must comply with post-exposure evaluation, prophylaxis and follow-up requirements of the Bloodborne Pathogens standard with respect to "exposure incidents," as defined by the standard; (3) the employer must train designated first aid providers about the reporting procedure; (4) the employer must offer to initiate the hepatitis B vaccination series within 24 hours to all unvaccinated first aid providers who have rendered assistance in any situation involving the presence of blood or other potentially infectious materials.

- If employees have had an exposure incident involving bloodborne pathogens, was an immediate post-exposure medical evaluation and follow-up provided?
- Are medical personnel readily available for advice and consultation on matters of employees' health?
- Are emergency phone numbers posted?
- Are fully supplied first aid kits easily accessible to each work area, periodically inspected and replenished as needed?
- Have first aid kits and supplies been approved by a physician, indicating that they are adequate for a particular area or operation?
- Is there an eye-wash station or sink available for quick drenching or flushing of the eyes and body in areas where corrosive liquids or materials are handled?

## **FIRE PROTECTION**

- Is your local fire department familiar with your facility, its location and specific hazards?
- If you have a fire alarm system, is it certified as required and tested annually?
- If you have interior standpipes and valves, are they inspected regularly?
- If you have interior standpipes and valves, are they inspected regularly?
- If you have outside private fire hydrants, are they flushed at least once a year and on a routine preventive maintenance schedule?
- Are fire doors and shutters in good operating condition?
- Are fire doors and shutters unobstructed and protected against obstructions, including their counterweights?
- Are fire door and shutter fusible links in place?
- Are automatic sprinkler system water control valves, air and water pressure checked periodically as required?
- Is the maintenance of automatic sprinkler systems assigned to responsible persons or to a sprinkler contractor?
- Are sprinkler heads protected by metal guards if exposed to potential physical damage?
- Is proper clearance maintained below sprinkler heads?
- Are portable fire extinguishers provided in adequate number and type and mounted in readily accessible locations?
- Are fire extinguishers recharged regularly with this noted on the inspection tag?
- Are employees periodically instructed in the use of fire extinguishers and fire protection procedures?

## **PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING**

- Has the employer determined whether hazards that require the use of PPE (e.g., head, eye, face, hand, or foot protection) are present or are likely to be present?
- If hazards or the likelihood of hazards are found, are employers selecting appropriate and properly fitted PPE suitable for protection from these hazards and ensuring that affected employees use it?
- Have both the employer and the employees been trained on PPE procedures, i.e., what PPE is necessary for job tasks, when workers need it, and how to properly wear and adjust it?
- Are protective goggles or face shields provided and worn where there is any danger of flying particles or corrosive materials?
- Are approved safety glasses required to be worn at all times in areas where there is a risk of eye injuries such as punctures, abrasions, contusions, or burns?
- Are employees who wear corrective lenses (glasses or contacts) in workplaces with harmful exposures required to wear only approved safety glasses, protective goggles, or use other medically approved precautionary procedures?
- Are protective gloves, aprons, shields, or other means provided and required where employees could be cut or where there is reasonably anticipated exposure to corrosive liquids, chemicals, blood, or other potentially infectious materials? See the OSHA Bloodborne Pathogens standard, 29 CFR 1910.1030(b), for the definition of "other potentially infectious materials."
- Are hard hats required, provided and worn where danger of falling objects exists?

- Are hard hats periodically inspected for damage to the shell and suspension system?
- Is appropriate foot protection required where there is the risk of foot injuries from hot, corrosive, or poisonous substances, falling objects, crushing, or penetrating actions?
- Are approved respirators provided when needed? (See 29 CFR 1910.134 for detailed information on respirators or check [OSHA's website](#)).
- Is all PPE maintained in a sanitary condition and ready for use?
- Are food or beverages consumed only in areas where there is no exposure to toxic material, blood, or other potentially infectious materials?
- Is protection against the effects of occupational noise provided when sound levels exceed those of the OSHA Noise standard?
- Are adequate work procedures, PPE and other equipment provided and used when cleaning up spilled hazardous materials?
- Are appropriate procedures in place to dispose of or decontaminate PPE contaminated with, or reasonably anticipated to be contaminated with, blood or other potentially infectious materials?

### **GENERAL WORK ENVIRONMENT**

- Are all worksites clean, sanitary and orderly?
- Are work surfaces kept dry and appropriate means taken to assure the surfaces are slip-resistant?
- Are all spilled hazardous materials or liquids, including blood and other potentially infectious materials, cleaned up immediately and according to proper procedures?
- Is combustible scrap, debris and waste stored safely and removed from the worksite promptly?
- Is all regulated waste, as defined in the OSHA Bloodborne Pathogens standard (29 CFR 1910.1030), discarded according to Federal, state and local regulations?
- Are accumulations of combustible dust routinely removed from elevated surfaces including the overhead structure of buildings, etc.?
- Is combustible dust cleaned up with a vacuum system to prevent suspension of dust particles in the environment?
- Is metallic or conductive dust prevented from entering or accumulating on or around electrical enclosures or equipment?
- Are covered metal waste cans used for oily or paint-soaked waste?
- Are all oil and gas-fired devices equipped with flame failure controls to prevent flow of fuel if pilots or main burners are not working?
- Are paint spray booths, dip tanks, etc., cleaned regularly?
- Are the minimum number of toilets and washing facilities provided and maintained in a clean and sanitary fashion?
- Are all work areas adequately illuminated?
- Are pits and floor openings covered or otherwise guarded?
- Have all confined spaces been evaluated for compliance with 29 CFR 1910.146? (Permit required confined spaces.)

### **WALKWAYS**

- Are aisles and passageways kept clear and marked as appropriate?
- Are wet surfaces covered with non-slip materials?
- Are holes in the floor, sidewalk, or other walking surface repaired properly, covered, or otherwise made safe?
- Is there safe clearance for walking in aisles where motorized or mechanical handling equipment is operating?
- Are materials or equipment stored in such a way that sharp projections will not interfere with the walkway?
- Are spilled materials cleaned up immediately?
- Are changes of direction or elevations readily identifiable?
- Are aisles or walkways that pass near moving or operating machinery, welding operations, or similar operations arranged so employees will not be subjected to potential hazards?
- Is adequate headroom provided for the entire length of any aisle or walkway?
- Are standard guardrails provided wherever aisle or walkway surfaces are elevated more than 30 inches (76.20 centimeters) above any adjacent floor or the ground?
- Are bridges provided over conveyors and similar hazards?

#### **FLOOR AND WALL OPENINGS**

- Are floor openings guarded by a cover, a guardrail, or equivalent on all sides (except at stairways or ladder entrances)?
- Are toeboards installed around the edges of permanent floor openings where persons may pass below the opening?
- Are skylight screens able to withstand a load of at least 200 pounds (90.7 kilograms)?
- Is the glass in windows, doors, glass walls, etc., subject to possible human impact, of sufficient thickness and type for the condition of use?
- Are grates or similar type covers over floor openings such as floor drains designed to allow unimpeded foot traffic or rolling equipment?
- Are unused portions of service pits and pits not in use either covered or protected by guardrails or equivalent?
- Are manhole covers, trench covers and similar covers, and their supports designed to carry a truck rear axle load of at least 20,000 pounds (9,072 kilograms) when located in roadways and subject to vehicle traffic?
- Are floor or wall openings in fire-resistant construction provided with doors or covers compatible with the fire rating of the structure and provided with a self-closing feature when appropriate?

#### **STAIRS AND STAIRWAYS**

- Do standard stair rails or handrails on all stairways have at least four risers?
- Are all stairways at least 22 inches (55.88 centimeters) wide?
- Do stairs have landing platforms not less than 30 inches (76.20 centimeters) in the direction of travel and extend 22 inches (55.88 centimeters) in width at every 12 feet (3.6576 meters) or less of vertical rise?
- Do stairs angle no more than 50 and no less than 30 degrees?

- Are stairs of hollow-pan type treads and landings filled to the top edge of the pan with solid material?
- Are step risers on stairs uniform from top to bottom?
- Are steps slip-resistant?
- Are stairway handrails located between 30 inches (76.20 centimeters) and 34 inches (86.36 centimeters) above the leading edge of stair treads?
- Do stairway handrails have at least 3 inches (7.62 centimeters) of clearance between the handrails and the wall or surface they are mounted on?
- Where doors or gates open directly on a stairway, is a platform provided so the swing of the door does not reduce the width of the platform to less than 21 inches (53.34 centimeters)?
- Are stairway handrails capable of withstanding a load of 200 pounds (90.7 kilograms), applied within 2 inches (5.08 centimeters) of the top edge in any downward or outward direction?
- Where stairs or stairways exit directly into any area where vehicles may be operated, are adequate barriers and warnings provided to prevent employees from stepping into the path of traffic?
- Do stairway landings have a dimension measured in the direction of travel at least equal to the width of the stairway?
- Is the vertical distance between stairway landings limited to 12 feet (3.6576 meters) or less?

#### **ELEVATED SURFACES**

- Are signs posted, when appropriate, showing the elevated surface load capacity?
- Are surfaces that are elevated more than 30 inches (76.20 centimeters) provided with standard guardrails?
- Are surfaces that are elevated more than 30 inches (76.20 centimeters) provided with standard guardrails?
- Are all elevated surfaces beneath which people or machinery could be exposed to falling objects provided with standard 4-inch (10.16centimeter) toeboards?
- Is a permanent means of access and egress provided to elevated storage and work surfaces?
- Is required headroom provided where necessary?
- Is material on elevated surfaces piled, stacked, or racked in a manner to prevent it from tipping, falling, collapsing, rolling, or spreading?
- Are dock boards or bridge plates used when transferring materials between docks and trucks or railcars?

#### **EXITING OR EGRESS - EVACUATION**

- Are all exits marked with an exit sign and illuminated by a reliable light source?
- Are the directions to exits, when not immediately apparent, marked with visible signs?
- Are doors, passageways or stairways that are neither exits nor access to exits, but could be mistaken for exits, appropriately marked "NOT AN EXIT," "TO BASEMENT," "STOREROOM," etc.?
- Are exit signs labeled with the word "EXIT" in lettering at least 5 inches (12.70 centimeters) high and the stroke of the lettering at least 1/2inch (1.2700 centimeters) wide?
- Are exit doors side-hinged?
- Are all exits kept free of obstructions?

- Are at least two means of egress provided from elevated platforms, pits, or rooms where the absence of a second exit would increase the risk of injury from hot, poisonous, corrosive, suffocating, flammable, or explosive substances?
- Are there sufficient exits to permit prompt escape in case of emergency?
- Are special precautions taken to protect employees during construction and repair operations?
- Is the number of exits from each floor of a building and the number of exits from the building itself appropriate for the building occupancy load?
- Are exit stairways that are required to be separated from other parts of a building enclosed by at least 2-hour fire-resistive construction in buildings more than four stories in height, and not less than 1-hour fire-resistive construction elsewhere?
- Where ramps are used as part of required exiting from a building, is the ramp slope limited to 1 foot (0.3048 meter) vertical and 12 feet (3.6576 meters) horizontal?
- Where exiting will be through frameless glass doors, glass exit doors, storm doors, etc., are the doors fully tempered and meet the safety requirements for human impact?

### **EXIT DOORS**

- Are doors that are required to serve as exits designed and constructed so that the path of exit travel is obvious and direct?
- Are windows that could be mistaken for exit doors made inaccessible by means of barriers or railings?
- Are exit doors able to be opened from the direction of exit travel without the use of a key or any special knowledge or effort when the building is occupied?
- Is a revolving, sliding, or overhead door prohibited from serving as a required exit door?
- Where panic hardware is installed on a required exit door, will it allow the door to open by applying a force of 15 pounds (6.80 kilograms) or less in the direction of the exit traffic?
- Are doors on cold storage rooms provided with an inside release mechanism that will release the latch and open the door even if the door is padlocked or otherwise locked on the outside?
- Where exit doors open directly onto any street, alley, or other area where vehicles may be operated, are adequate barriers and warnings provided to prevent employees from stepping into the path of traffic?
- Are doors that swing in both directions and are located between rooms where there is frequent traffic provided with viewing panels in each door?

### **PORTABLE LADDERS**

- Are all ladders maintained in good condition, joints between steps and side rails tight, all hardware and fittings securely attached, and moveable parts operating freely without binding or undue play?
- Are non-slip safety feet provided on each metal or rung ladder, and are ladder rungs and steps free of grease and oil?
- Are employees prohibited from placing a ladder in front of doors opening toward the ladder unless the door is blocked open, locked, or guarded?
- Are employees prohibited from placing ladders on boxes, barrels, or other unstable bases to obtain additional height?
- Are employees required to face the ladder when ascending or descending?

- ❑ Are employees prohibited from using ladders that are broken, have missing steps, rungs, or cleats, broken side rails, or other faulty equipment?
- ❑ Are employees instructed not to use the top step of ordinary stepladders as a step?
- ❑ When portable rung ladders are used to gain access to elevated platforms, roofs, etc., does the ladder always extend at least 3 feet (0.9144 meters) above the elevated surface?
- ❑ Are employees required to secure the base of a portable rung or cleat type ladder to prevent slipping, or otherwise lash or hold it in place?
- ❑ Are portable metal ladders legibly marked with signs reading "CAUTION - Do Not Use Around Electrical Equipment" or equivalent wording?
- ❑ Are employees prohibited from using ladders as guys, braces, skids, gin poles, or for other than their intended purposes?
- ❑ Are employees instructed to only adjust extension ladders while standing at a base (not while standing on the ladder or from a position above the ladder)?
- ❑ Are metal ladders inspected for damage?
- ❑ Are the rungs of ladders uniformly spaced at 12 inches (30.48 centimeters) center to center?

#### **HAND TOOLS AND EQUIPMENT**

- ❑ Are all tools and equipment (both company and employee-owned) used at the workplace in good condition?
- ❑ Are hand tools, such as chisels, punches, etc., which develop mushroomed heads during use, reconditioned or replaced as necessary?
- ❑ Are broken or fractured handles on hammers, axes and similar equipment replaced promptly?
- ❑ Are worn or bent wrenches replaced?
- ❑ Are appropriate handles used on files and similar tools?
- ❑ Are employees aware of hazards caused by faulty or improperly used hand tools?
- ❑ Are appropriate safety glasses, face shields, etc., used while using hand tools or equipment that might produce flying materials or be subject to breakage?
- ❑ Are jacks checked periodically to ensure they are in good operating condition?
- ❑ Are tool handles wedged tightly into the heads of all tools?
- ❑ Are tool cutting edges kept sharp so the tool will move smoothly without binding or skipping?
- ❑ Are tools stored in a dry, secure location where they cannot be tampered with?
- ❑ Is eye and face protection used when driving hardened or tempered studs or nails?

#### **PORTABLE (POWER OPERATED) TOOLS AND EQUIPMENT**

- ❑ Are grinders, saws and similar equipment provided with appropriate safety guards?
- ❑ Are power tools used with proper shields, guards, or attachments, as recommended by the manufacturer?
- ❑ Are portable circular saws equipped with guards above and below the base shoe?
- ❑ Are circular saw guards checked to ensure that they are not wedged up, leaving the lower portion of the blade unguarded?

- Are rotating or moving parts of equipment guarded to prevent physical contact?
- Are all cord-connected, electrically operated tools and equipment effectively grounded or of the approved double insulated type?
- Are effective guards in place over belts, pulleys, chains and sprockets on equipment such as concrete mixers, air compressors, etc.?
- Are portable fans provided with full guards or screens having openings 1/2 inch (1.2700 centimeters) or less?
- Is hoisting equipment available and used for lifting heavy objects, and are hoist ratings and characteristics appropriate for the task?
- Are ground-fault circuit interrupters provided on all temporary electrical 15 and 20 ampere circuits used during periods of construction?
- Are pneumatic and hydraulic hoses on powder-operated tools checked regularly for deterioration or damage?

### **ABRASIVE WHEEL EQUIPMENT GRINDERS**

- Is the work rest used and kept adjusted to within 1/8 inch (0.3175 centimeter) of the wheel?
- Is the adjustable tongue on the top side of the grinder used and kept adjusted to within 1/4 inch (0.6350 centimeters) of the wheel?
- Do side guards cover the spindle, nut and flange and 75 percent of the wheel diameter?
- Are bench and pedestal grinders permanently mounted?
- Are goggles or face shields always worn when grinding?
- Is the maximum revolutions per minute (rpm) rating of each abrasive wheel compatible with the rpm rating of the grinder motor?
- Are fixed or permanently mounted grinders connected to their electrical supply system with metallic conduit or other permanent wiring method?
- Does each grinder have an individual on and off control switch?
- Is each electrically operated grinder effectively grounded?
- Are new abrasive wheels visually inspected and ring tested before they are mounted?
- Are dust collectors and powered exhausts provided on grinders used in operations that produce large amounts of dust?
- Are splash guards mounted on grinders that use coolant to prevent the coolant from reaching employees?
- Is cleanliness maintained around grinders?

### **POWDER-ACTUATED TOOLS**

- Are employees who operate powder-actuated tools trained in their use and required to carry a valid operator's card?
- Is each powder-actuated tool stored in its own locked container when not being used?
- Is a sign at least 7 inches (17.78 centimeters) by 10 inches (25.40 centimeters) with bold face type reading "POWDER-ACTUATED TOOL IN USE" conspicuously posted when the tool is being used?
- Are powder-actuated tools left unloaded until they are ready to be used?

- Are powder-actuated tools inspected for obstructions or defects each day before use?
- Do powder-actuated tool operators have and use appropriate PPE such as hard hats, safety goggles, safety shoes and ear protectors?

## **MACHINE GUARDING**

- Is there a training program to instruct employees on safe methods of machine operation?
- Is there adequate supervision to ensure that employees are following safe machine operating procedures?
- Is there a regular program of safety inspection of machinery and equipment?
- Is all machinery and equipment kept clean and properly maintained?
- Is sufficient clearance provided around and between machines to allow for safe operations, set up and servicing, material handling and waste removal?
- Is equipment and machinery securely placed and anchored to prevent tipping or other movement that could result in personal injury?
- Is there a power shut-off switch within reach of the operator's position at each machine?
- Can electric power to each machine be locked out for maintenance, repair, or security?
- Are the noncurrent-carrying metal parts of electrically operated machines bonded and grounded?
- Are foot-operated switches guarded or arranged to prevent accidental actuation by personnel or falling objects?
- Are manually operated valves and switches controlling the operation of equipment and machines clearly identified and readily accessible?
- Are all emergency stop buttons colored red?
- Are all pulleys and belts within 7 feet (2.1336 meters) of the floor or working level properly guarded?
- Are all moving chains and gears properly guarded?
- Are splash guards mounted on machines that use coolant to prevent the coolant from reaching employees?
- Are methods provided to protect the operator and other employees in the machine area from hazards created at the point of operation, ingoing nip points, rotating parts, flying chips and sparks?
- Are machine guards secure and arranged so they do not cause a hazard while in use?
- If special hand tools are used for placing and removing material, do they protect the operator's hands?
- Are revolving drums, barrels and containers guarded by an enclosure that is interlocked with the drive mechanism so that revolution cannot occur unless the guard enclosure is in place?
- Do arbors and mandrels have firm and secure bearings, and are they free from play?
- Are provisions made to prevent machines from automatically starting when power is restored after a power failure or shutdown?
- Are machines constructed so as to be free from excessive vibration when the largest size tool is mounted and run at full speed?
- If machinery is cleaned with compressed air, is air pressure controlled and PPE or other safeguards utilized to protect operators and other workers from eye and body injury?
- Are fan blades protected with a guard having openings no larger than 1/2 inch (1.2700 centimeters) when operating within 7 feet (2.1336 meters) of the floor?

- Are saws used for ripping equipped with anti-kickback devices and spreaders?
- Are radial arm saws so arranged that the cutting head will gently return to the back of the table when released?

### **LOCKOUT/TAGOUT PROCEDURES**

- Is all machinery or equipment capable of movement required to be de-energized or disengaged and blocked or locked out during cleaning, servicing, adjusting, or setting up operations?
- If the power disconnect for equipment does not also disconnect the electrical control circuit, are the appropriate electrical enclosures identified and is a means provided to ensure that the control circuit can also be disconnected and locked out?
- Is the locking out of control circuits instead of locking out main power disconnects prohibited?
- Are all equipment control valve handles provided with a means for locking out?
- Does the lockout procedure require that stored energy (mechanical, hydraulic, air, etc.) be released or blocked before equipment is locked out for repairs?
- Are appropriate employees provided with individually keyed personal safety locks?
- Are employees required to keep personal control of their key(s) while they have safety locks in use?
- Is it required that only the employee exposed to the hazard can place or remove the safety lock?
- Is it required that employees check the safety of the lockout by attempting a startup after making sure no one is exposed?
- Are employees instructed to always push the control circuit stop button prior to re-energizing the main power switch?
- Is there a means provided to identify any or all employees who are working on locked-out equipment by their locks or accompanying tags?
- Are a sufficient number of accident prevention signs or tags and safety padlocks provided for any reasonably foreseeable repair emergency?
- When machine operations, configuration, or size require an operator to leave the control station and part of the machine could move if accidentally activated, is the part required to be separately locked out or blocked?
- If equipment or lines cannot be shut down, locked out and tagged, is a safe job procedure established and rigidly followed?

### **WELDING, CUTTING AND BRAZING**

- Are only authorized and trained personnel permitted to use welding, cutting, or brazing equipment?
- Does each operator have a copy of and follow the appropriate operating instructions?
- Are compressed gas cylinders regularly examined for obvious signs of defects, deep rusting, or leakage?
- Is care used in handling and storage of cylinders, safety valves, relief valves, etc., to prevent damage?
- Are precautions taken to prevent the mixture of air or oxygen with flammable gases, except at a burner or in a standard torch?
- Are only approved apparatuses (torches, regulators, pressure reducing valves, acetylene generators, manifolds) used?
- Are cylinders kept away from sources of heat and elevators, stairs, or gangways?

- ❑ Is it prohibited to use cylinders as rollers or supports?
- ❑ Are empty cylinders appropriately marked and their valves closed?
- ❑ Are signs posted reading "DANGER, NO SMOKING, MATCHES, OR OPEN LIGHTS," or the equivalent?
- ❑ Are cylinders, cylinder valves, couplings, regulators, hoses and apparatuses kept free of oily or greasy substances?
- ❑ Is care taken not to drop or strike cylinders?
- ❑ Are regulators removed and valve-protection caps put in place before moving cylinders, unless they are secured on special trucks?
- ❑ Do cylinders without fixed wheels have keys, handles, or non-adjustable wrenches on stem valves when in service?
- ❑ Are liquefied gases stored and shipped valve-end up with valve covers in place?
- ❑ Are employees trained never to crack a fuel gas cylinder valve near sources of ignition?
- ❑ Before a regulator is removed, is the valve closed and gas released?
- ❑ Is red used to identify the acetylene (and other fuel-gas) hose, green for the oxygen hose and black for inert gas and air hoses?
- ❑ Are pressure-reducing regulators used only for the gas and pressures for which they are intended?
- ❑ Is open circuit (no-load) voltage of arc welding and cutting machines as low as possible and not in excess of the recommended limits?
- ❑ Under wet conditions, are automatic controls for reducing no-load voltage used?
- ❑ Is grounding of the machine frame and safety ground connections of portable machines checked periodically?
- ❑ Are electrodes removed from the holders when not in use?
- ❑ Is it required that electric power to the welder be shut off when no one is in attendance?
- ❑ Is suitable fire extinguishing equipment available for immediate use?
- ❑ Is the welder forbidden to coil or loop welding electrode cable around his body?
- ❑ Are wet machines thoroughly dried and tested before use?
- ❑ Are work and electrode lead cables frequently inspected for wear and damage, and replaced when needed?
- ❑ Are cable connectors adequately insulated?
- ❑ When the object to be welded cannot be moved and fire hazards cannot be removed, are shields used to confine heat, sparks and slag?
- ❑ Are fire watchers assigned when welding or cutting is performed in locations where a serious fire might develop?
- ❑ Are combustible floors kept wet, covered with damp sand, or protected by fire-resistant shields?
- ❑ Are personnel protected from possible electrical shock when floors are wet?
- ❑ Are precautions taken to protect combustibles on the other side of metal walls when welding is underway?
- ❑ Are used drums, barrels, tanks and other containers thoroughly cleaned of substances that could explode, ignite, or produce toxic vapors before hot work begins?
- ❑ Do eye protection, helmets, hand shields and goggles meet appropriate standards?

- Are employees exposed to the hazards created by welding, cutting, or brazing operations protected with PPE and clothing?
- Is a check made for adequate ventilation in and where welding or cutting is performed?
- When working in confined places, are environmental monitoring tests done and means provided for quick removal of welders in case of an emergency?

### **COMPRESSORS AND COMPRESSED AIR**

- Are compressors equipped with pressure relief valves and pressure gauges?
- Are compressor air intakes installed and equipped so as to ensure that only clean, uncontaminated air enters the compressor?
- Are air filters installed on the compressor intake?
- Are compressors operated and lubricated in accordance with the manufacturer's recommendations?
- Are safety devices on compressed air systems checked frequently?
- Before a compressor's pressure system is repaired, is the pressure bled off and the system locked out?
- Are signs posted to warn of the automatic starting feature of the compressors?
- Is the belt drive system totally enclosed to provide protection for the front, back, top and sides?
- Are employees strictly prohibited from directing compressed air towards a person?
- Are employees prohibited from using highly compressed air for cleaning purposes?
- When compressed air is used to clean clothing, are employees trained to reduce the pressure to less than 10 pounds per square inch (psi)?
- When using compressed air for cleaning, do employees wear protective chip guarding and PPE?
- Are safety chains or other suitable locking devices used at couplings of high-pressure hose lines where a connection failure would create a hazard?
- Before compressed air is used to empty containers of liquid, is the safe working pressure of the container checked?
- When compressed air is used with abrasive blast cleaning equipment, is the operating valve a type that must be held open manually?
- When compressed air is used to inflate auto tires, are a clip-on chuck and an inline regulator preset to 40 psi required?
- Are employees prohibited from using compressed air to clean up or move combustible dust if such action could cause the dust to be suspended in the air and cause a fire or explosion hazard?

### **COMPRESSORS/AIR RECEIVERS**

- Is every receiver equipped with a pressure gauge and one or more automatic, spring-loaded safety valves?
- Is the total relieving capacity of the safety valve able to prevent pressure in the receiver from exceeding the maximum allowable working pressure of the receiver by more than 10 percent?
- Is every air receiver provided with a drain pipe and valve at the lowest point for the removal of accumulated oil and water?
- Are compressed air receivers periodically drained of moisture and oil?

- Are all safety valves tested at regular intervals to determine whether they are in good operating condition?
- Is there a current operating permit?
- Is the inlet of air receivers and piping systems kept free of accumulated oil and carbonaceous materials?

### **COMPRESSED GAS CYLINDERS**

- Are cylinders with a water weight capacity over 30 pounds (13.6 kilograms) equipped with a means to connect a valve protector device, or with a collar or recess to protect the valve?
- Are cylinders legibly marked to clearly identify the type of gas?
- Are compressed gas cylinders stored in areas protected from external heat sources such as flame impingement, intense radiant heat, electric arcs, or high-temperature lines?
- Are cylinders located or stored in areas where they will not be damaged by passing or falling objects or subject to tampering by unauthorized persons?
- Are cylinders stored or transported in a manner to prevent them from creating a hazard by tipping, falling, or rolling?
- Are cylinders containing liquefied fuel gas stored or transported in a position so that the safety relief device is always in direct contact with the vapor space in the cylinder?
- Are valve protectors always placed on cylinders when the cylinders are not in use or connected for use?
- Are all valves closed off before a cylinder is moved, when the cylinder is empty and at the completion of each job?
- Are low-pressure fuel gas cylinders checked periodically for corrosion, general distortion, cracks, or any other defect that might indicate a weakness or render them unfit for service?
- Does the periodic check of low-pressure fuel gas cylinders include a close inspection of the cylinders' bottoms?

### **HOIST AND AUXILIARY EQUIPMENT**

- Is each overhead electric hoist equipped with a limit device to stop the hook at its highest and lowest point of safe travel?
- Will each hoist automatically stop and hold any load up to 125 percent of its rated load if its actuating force is removed?
- Is the rated load of each hoist legibly marked and visible to the operator?
- Are stops provided at the safe limits of travel for trolley hoists?
- Are the controls of hoists plainly marked to indicate the direction of travel or motion?
- Is each cage-controlled hoist equipped with an effective warning device?
- Are close-fitting guards or other suitable devices installed on each hoist to ensure that hoist ropes will be maintained in the sheave grooves?
- Are all hoist chains or ropes long enough to handle the full range of movement of the application while maintaining two full wraps around the drum at all times?
- Are guards provided for nip points or contact points between hoist ropes and sheaves permanently located within 7 feet (2.1336 meters) of the floor, ground, or working platform?

- Are employees prohibited from using chains or rope slings that are kinked or twisted and prohibited from using the hoist rope or chain wrapped around the load as a substitute for a sling?
- Is the operator instructed to avoid carrying loads above people?

### **INDUSTRIAL TRUCKS - FORKLIFTS**

- Are employees properly trained in the use of the type of industrial truck they operate?
- Are only trained personnel allowed to operate industrial trucks?
- Is substantial overhead protective equipment provided on high lift rider equipment?
- Are the required lift truck operating rules posted and enforced?
- Is directional lighting provided on each industrial truck that operates in an area with less than 2 foot candles per square foot of general lighting?
- Does each industrial truck have a warning horn, whistle, gong, or other device that can be clearly heard above normal noise in the areas where it is operated?
- Are the brakes on each industrial truck capable of bringing the vehicle to a complete and safe stop when fully loaded?
- Does the parking brake of the industrial truck prevent the vehicle from moving when unattended?
- Are industrial trucks that operate where flammable gases, vapors, combustible dust, or ignitable fibers may be present approved for such locations?
- Are motorized hand and hand/rider trucks designed so that the brakes are applied and power to the drive motor shuts off when the operator releases his or her grip on the device that controls the truck's travel?
- Are industrial trucks with internal combustion engines that are operated in buildings or enclosed areas carefully checked to ensure that such operations do not cause harmful concentrations of dangerous gases or fumes?
- Are safe distances maintained from the edges of elevated ramps and platforms?
- Are employees prohibited from standing or passing under elevated portions of trucks, whether loaded or empty?
- Are unauthorized employees prohibited from riding on trucks?
- Are operators prohibited from driving up to anyone standing in front of a fixed object?
- Are arms and legs kept inside the running lines of the truck?
- Are loads handled only within the rated capacity of the truck?
- Are trucks in need of repair removed from service immediately?

### **SPRAYING OPERATIONS**

- Is adequate ventilation provided before spraying operations are started?
- Is mechanical ventilation provided when spraying operations are performed in enclosed areas?
- When mechanical ventilation is provided during spraying operations, is it so arranged that it will not circulate the contaminated air?
- Is the spray area free of hot surfaces and at least 20 feet (6.096 meters) from flames, sparks, operating electrical motors and other ignition sources?
- Are portable lamps used to illuminate spray areas suitable for use in a hazardous location?

- Is approved respiratory equipment provided and used when appropriate during spraying operations?
- Do solvents used for cleaning have a flash point to 100 degrees Fahrenheit (deg. F) or more?
- Are fire control sprinkler heads kept clean?
- Are "NO SMOKING" signs posted in spray areas, paint rooms, paint booths and paint storage areas?
- Is the spray area kept clean of combustible residue?
- Are spray booths constructed of metal, masonry, or other substantial noncombustible material?
- Are spray booth floors and baffles noncombustible and easily cleaned?
- Is infrared drying apparatus kept out of the spray area during spraying operations and is the spray booth completely ventilated before using the drying apparatus?
- Is the electric drying apparatus properly grounded?
- Are lighting fixtures for spray booths located outside the booth with the interior lighted through sealed clear panels?
- Are the electric motors for exhaust fans placed outside booths or ducts?
- Are belts and pulleys inside the booth fully enclosed?
- Do ducts have access doors to allow cleaning?
- Do all drying spaces have adequate ventilation?

#### **ENTERING CONFINED SPACES**

- Are confined spaces thoroughly emptied of any corrosive or hazardous substances, such as acids or caustics, before entry?
- Are all lines to a confined space that contain inert, toxic, flammable, or corrosive materials valved off and blanked or disconnected and separated before entry?
- Are all impellers, agitators, or other moving parts and equipment inside confined spaces locked out if they present a hazard?
- Is either natural or mechanical ventilation provided prior to confined space entry?
- Are appropriate atmospheric tests performed to check for oxygen deficiency, toxic substances and explosive concentrations in the confined space before entry?
- Is adequate illumination provided for the work to be performed in the confined space?
- Is the atmosphere inside the confined space frequently tested or continuously monitored during work?
- Is there a trained and equipped standby employee positioned outside the confined space, whose sole responsibility is to watch the work in progress, sound an alarm if necessary and render assistance?
- Is the standby employee appropriately trained and equipped to handle an emergency?
- Are employees prohibited from entering the confined space without lifelines and respiratory equipment if there is any question as to the cause of an emergency?
- Is approved respiratory equipment required if the atmosphere inside the confined space cannot be made acceptable?
- Is all portable electrical equipment used inside confined spaces either grounded and insulated or equipped with ground fault protection?
- Are compressed gas bottles forbidden inside the confined space?

- ❑ Before gas welding or burning is started in a confined space, are hoses checked for leaks, torches lighted only outside the confined area and the confined area tested for an explosive atmosphere each time before a lighted torch is taken into the confined space?
- ❑ If employees will be using oxygen-consuming equipment such as salamanders, torches, furnaces, etc., in a confined space, is sufficient air provided to assure combustion without reducing the oxygen concentration of the atmosphere below 19.5 percent by volume?
- ❑ Whenever combustion-type equipment is used in a confined space, are provisions made to ensure the exhaust gases are vented outside of the enclosure?
- ❑ Is each confined space checked for decaying vegetation or animal matter which may produce methane?
- ❑ Is the confined space checked for possible industrial waste which could contain toxic properties?
- ❑ If the confined space is below ground and near areas where motor vehicles will be operating, is it possible for vehicle exhaust or carbon monoxide to enter the space?

### **ENVIRONMENTAL CONTROLS**

- ❑ Are all work areas properly illuminated?
- ❑ Are employees instructed in proper first aid and other emergency procedures?
- ❑ Are hazardous substances, blood and other potentially infectious materials, which may cause harm by inhalation, ingestion, or skin absorption or contact, identified?
- ❑ Are employees aware of the hazards involved with the various chemicals they may be exposed to in their work environment, such as ammonia, chlorine, epoxies, caustics, etc.?
- ❑ Is employee exposure to chemicals in the workplace kept within acceptable levels?
- ❑ Can a less harmful method or product be used?
- ❑ Is the work area ventilation system appropriate for the work performed?
- ❑ Are spray painting operations performed in spray rooms or booths equipped with an appropriate exhaust system?
- ❑ Is employee exposure to welding fumes controlled by ventilation, use of respirators, exposure time limits, or other means?
- ❑ Are welders and other nearby workers provided with flash shields during welding operations?
- ❑ If forklifts and other vehicles are used in buildings or other enclosed areas, are the carbon monoxide levels kept below maximum acceptable concentration?
- ❑ Has there been a determination that noise levels in the facilities are within acceptable levels?
- ❑ Are steps being taken to use engineering controls to reduce excessive noise levels?
- ❑ Are proper precautions being taken when handling asbestos and other fibrous materials?
- ❑ Are caution labels and signs used to warn of hazardous substances (e.g., asbestos) and biohazards (e.g., bloodborne pathogens)?
- ❑ Are wet methods used, when practicable, to prevent the emission of airborne asbestos fibers, silica dust and similar hazardous materials?
- ❑ Are engineering controls examined and maintained or replaced on a scheduled basis?
- ❑ Is vacuuming with appropriate equipment used whenever possible rather than blowing or sweeping dust?
- ❑ Are grinders, saws and other machines that produce respirable dusts vented to an industrial collector or central exhaust system?

- Are all local exhaust ventilation systems designed to provide sufficient air flow and volume for the application, and are ducts not plugged and belts not slipping?
- Is PPE provided, used and maintained wherever required?
- Are there written standard operating procedures for the selection and use of respirators where needed?
- Are restrooms and washrooms kept clean and sanitary?
- Is all water provided for drinking, washing and cooking potable?
- Are all outlets for water that is not suitable for drinking clearly identified?
- Are employees' physical capacities assessed before they are assigned to jobs requiring heavy work?
- Are employees instructed in the proper manner for lifting heavy objects?
- Where heat is a problem, have all fixed work areas been provided with spot cooling or air conditioning?
- Are employees screened before assignment to areas of high heat to determine if their health might make them more susceptible to having an adverse reaction?
- Are employees working on streets and roadways who are exposed to the hazards of traffic required to wear bright colored (traffic orange) warning vests?
- Are exhaust stacks and air intakes located so that nearby contaminated air will not be recirculated within a building or other enclosed area?
- Is equipment producing ultraviolet radiation properly shielded?
- Are universal precautions observed where occupational exposure to blood or other potentially infectious materials can occur and in all instances where differentiation of types of body fluids or potentially infectious materials is difficult or impossible?

#### **FLAMMABLE AND COMBUSTIBLE MATERIALS**

- Are combustible scrap, debris and waste materials (oily rags, etc.) stored in covered metal receptacles and promptly removed from the worksite?
- Is proper storage practiced to minimize the risk of fire, including spontaneous combustion?
- Are approved containers and tanks used to store and handle flammable and combustible liquids?
- Are all connections on drums and combustible liquid piping, vapor and liquid tight?
- Are all flammable liquids kept in closed containers when not in use (e.g., parts cleaning tanks, pans, etc.)?
- Are bulk drums of flammable liquids grounded and bonded to containers during dispensing?
- Do storage rooms for flammable and combustible liquids have explosion-proof lights and mechanical or gravity ventilation?
- Is liquefied petroleum gas stored, handled and used in accordance with safe practices and standards?
- Are "NO SMOKING" signs posted on liquefied petroleum gas tanks and in areas where flammable or combustible materials are used or stored?
- Are liquefied petroleum storage tanks guarded to prevent damage from vehicles?
- Are all solvent wastes and flammable liquids kept in fire-resistant, covered containers until they are removed from the worksite?
- Is vacuuming used whenever possible rather than blowing or sweeping combustible dust?
- Are firm separators placed between containers of combustibles or flammables that are stacked one upon another to ensure their support and stability?

- Are fuel gas cylinders and oxygen cylinders separated by distance and fire-resistant barriers while in storage?
- Are fire extinguishers selected and provided for the types of materials in the areas where they are to be used?
- Class A - Ordinary combustible material fires.
- Class B - Flammable liquid, gas or grease fires.
- Class C - Energized-electrical equipment fires.
- Are appropriate fire extinguishers mounted within 75 feet (22.86 meters) of outside areas containing flammable liquids and within 10 feet (3.048 meters) of any inside storage area for such materials?
- Are extinguishers free from obstructions or blockage?
- Are all extinguishers serviced, maintained and tagged at intervals not to exceed one year?
- Are all extinguishers fully charged and in their designated places?
- Where sprinkler systems are permanently installed, are the nozzle heads so directed or arranged that water will not be sprayed into operating electrical switchboards and equipment?
- Are safety cans used for dispensing flammable or combustible liquids at the point of use?
- Are all spills of flammable or combustible liquids cleaned up promptly?
- Are storage tanks adequately vented to prevent the development of excessive vacuum or pressure as a result of filling, emptying, or atmosphere temperature changes?
- Are storage tanks equipped with emergency venting that will relieve excessive internal pressure caused by fire exposure?
- Are rules enforced in areas involving storage and use of hazardous materials?

## **HAZARDOUS CHEMICAL EXPOSURE**

- Are employees aware of the potential hazards and trained in safe handling practices for situations involving various chemicals stored or used in the workplace such as acids, bases, caustics, epoxies, phenols, etc.?
- Is employee exposure to chemicals kept within acceptable levels?
- Are eye-wash fountains and safety showers provided in areas where corrosive chemicals are handled?
- Are all containers, such as vats, storage tanks, etc., labeled as to their contents, e.g., "CAUSTICS"?
- Are all employees required to use personal protective clothing and equipment when handling chemicals (gloves, eye protection, respirators, etc.)?
- Are flammable or toxic chemicals kept in closed containers when not in use?
- Are chemical piping systems clearly marked as to their content?
- Where corrosive liquids are frequently handled in open containers or drawn from storage vessels or pipelines, are adequate means readily available for neutralizing or disposing of spills or overflows and performed properly and safely?
- Are standard operating procedures established and are they being followed when cleaning up chemical spills?
- Are respirators stored in a convenient, clean and sanitary location, and are they adequate for emergencies?
- Are employees prohibited from eating in areas where hazardous chemicals are present?

- Is PPE used and maintained whenever necessary?
- Are there written standard operating procedures for the selection and use of respirators where needed?
- If you have a respirator protection program, are your employees instructed on the correct usage and limitations of the respirators?
- Are the respirators National Institute for Occupational Safety and Health (NIOSH) approved for this particular application?
- Are they regularly inspected, cleaned, sanitized and maintained?
- If hazardous substances are used in your processes, do you have a medical or biological monitoring system in operation?
- Are you familiar with the threshold limit values or permissible exposure limits of airborne contaminants and physical agents used in your workplace?
- Have appropriate control procedures been instituted for hazardous materials, including safe handling practices and the use of respirators and ventilation systems?
- Whenever possible, are hazardous substances handled in properly designed and exhausted booths or similar locations?
- Do you use general dilution or local exhaust ventilation systems to control dusts, vapors, gases, fumes, smoke, solvents, or mists that may be generated in your workplace?
- Is operational ventilation equipment provided for removal of contaminants from production grinding, buffing, spray painting, and/or vapor degreasing?
- Do employees complain about dizziness, headaches, nausea, irritation, or other factors of discomfort when they use solvents or other chemicals?
- Is there a dermatitis problem? Do employees complain about dryness, irritation, or sensitization of the skin?
- Have you considered having an industrial hygienist or environmental health specialist evaluate your operation?
- If internal combustion engines are used, is carbon monoxide kept within acceptable levels?
- Is vacuuming used rather than blowing or sweeping dust whenever possible for cleanup?
- Are materials that give off toxic, asphyxiant, suffocating, or anesthetic fumes stored in remote or isolated locations when not in use?

#### **HAZARDOUS SUBSTANCES COMMUNICATION**

- Is there a list of hazardous substances used in your workplace and an MSDS readily available for each hazardous substance used?
- Is there a current written exposure control plan for occupational exposure to bloodborne pathogens and other potentially infectious materials, where applicable?
- Is there a written hazard communication program dealing with MSDSs, labeling and employee training?
- Is each container for a hazardous substance (i.e., vats, bottles, storage tanks, etc.) labeled with product identity and a hazard warning (communication of the specific health hazards and physical hazards)?
- Is there an employee training program for hazardous substances that includes:
  - an explanation of what an MSDS is and how to use and obtain one;
  - MSDS contents for each hazardous substance or class of substances;
  - explanation of "A Right to Know";

- identification of where an employee can see the written hazard communication program;
  - location of physical and health hazards in particular work areas and the specific protective measures to be used; and
  - details of the hazard communication program, including how to use the labeling system and MSDSs.
- Does the employee training program on the bloodborne pathogens standard contain the following elements:
- an accessible copy of the standard and an explanation of its contents;
  - a general explanation of the epidemiology and symptoms of bloodborne diseases;
  - an explanation of the modes of transmission of Bloodborne Pathogens;
  - an explanation of the employer's exposure control plan and the means by which employees can obtain a copy of the written plan;
  - an explanation of the appropriate methods for recognizing tasks and the other activities that may involve exposure to blood and other potentially infectious materials;
  - an explanation of the use and limitations of methods that will prevent or reduce exposure, including appropriate engineering controls, work practices and PPE;
  - information on the types, proper use, location, removal, handling, decontamination and disposal of PPE;
  - an explanation of the basis for selection of PPE;
  - information on the hepatitis B vaccine;
  - information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials;
  - an explanation of the procedure to follow if an exposure incident occurs, including the methods of reporting the incident and the medical follow-up that will be made available;
  - information on post-exposure evaluations and follow-up; and
  - an explanation of signs, labels and color coding.
- Are employees trained in:
- how to recognize tasks that might result in occupational exposure;
  - how to use work practice, engineering controls and PPE, and their limitations;
  - how to obtain information on the types, selection, proper use, location, removal, handling, decontamination and disposal of PPE; and
  - who to contact and what to do in an emergency.

## **ELECTRICAL**

- Do you require compliance with OSHA standards for all contract electrical work?
- Are all employees required to report any obvious hazard to life or property in connection with electrical equipment or lines as soon as possible?
- Are employees instructed to make preliminary inspections and/or appropriate tests to determine conditions before starting work on electrical equipment or lines?
- When electrical equipment or lines are to be serviced, maintained, or adjusted, are necessary switches opened, locked out or tagged, whenever possible?
- Are portable electrical tools and equipment grounded or of the double insulated type?
- Are electrical appliances such as vacuum cleaners, polishers, vending machines, etc., grounded?

- ❑ Do extension cords have a grounding conductor?
- ❑ Are multiple plug adaptors prohibited?
- ❑ Are ground-fault circuit interrupters installed on each temporary 15 or 20 ampere, 120 volt alternating current (AC) circuit at locations where construction, demolition, modifications, alterations, or excavations are being performed?
- ❑ Are all temporary circuits protected by suitable disconnecting switches or plug connectors at the junction with permanent wiring?
- ❑ Do you have electrical installations in hazardous dust or vapor areas? If so, do they meet the National Electrical Code (NEC) for hazardous locations?
- ❑ Are exposed wiring and cords with frayed or deteriorated insulation repaired or replaced promptly?
- ❑ Are flexible cords and cables free of splices or taps?
- ❑ Are clamps or other securing means provided on flexible cords or cables at plugs, receptacles, tools, equipment, etc., and is the cord jacket securely held in place?
- ❑ Are all cord, cable and raceway connections intact and secure?
- ❑ In wet or damp locations, are electrical tools and equipment appropriate for the use or location or otherwise protected?
- ❑ Is the location of electrical power lines and cables (overhead, underground, under floor, other side of walls, etc.) determined before digging, drilling, or similar work is begun?
- ❑ Are metal measuring tapes, ropes, hand-lines or similar devices with metallic thread woven into the fabric prohibited where they could come in contact with energized parts of equipment or circuit conductors?
- ❑ Is the use of metal ladders prohibited where the ladder or the person using the ladder could come in contact with energized parts of equipment, fixtures, or circuit conductors?
- ❑ Are all disconnecting switches and circuit breakers labeled to indicate their use or equipment served?
- ❑ Are disconnecting means always opened before fuses are replaced?
- ❑ Do all interior wiring systems include provisions for grounding metal parts of electrical raceways, equipment and enclosures?
- ❑ Are all electrical raceways and enclosures securely fastened in place?
- ❑ Are all energized parts of electrical circuits and equipment guarded against accidental contact by approved cabinets or enclosures?
- ❑ Is sufficient access and working space provided and maintained around all electrical equipment to permit ready and safe operations and maintenance?
- ❑ Are all unused openings (including conduit knockouts) in electrical enclosures and fittings closed with appropriate covers, plugs, or plates?
- ❑ Are electrical enclosures such as switches, receptacles, junction boxes, etc., provided with tight-fitting covers or plates?
- ❑ Are disconnecting switches for electrical motors in excess of two horsepower able to open the circuit when the motor is stalled without exploding? (Switches must be horsepower rated equal to or in excess of the motor rating.)
- ❑ Is low voltage protection provided in the control device of motors driving machines or equipment that could cause injury from inadvertent starting?
- ❑ Is each motor disconnecting switch or circuit breaker located within sight of the motor control device?
- ❑ Is each motor located within sight of its controller or is the controller disconnecting means able to be locked open or is a separate disconnecting means installed in the circuit within sight of the motor?

- Is the controller for each motor that exceeds two horsepower rated equal to or above the rating of the motor it serves?
- Are employees who regularly work on or around energized electrical equipment or lines instructed in cardiopulmonary resuscitation (CPR)?
- Are employees prohibited from working alone on energized lines or equipment over 600 volts?

## **NOISE**

- Are there areas in the workplace where continuous noise levels exceed 85 decibels?
- Is there an ongoing preventive health program to educate employees in safe levels of noise, exposures, effects of noise on their health and the use of personal protection?
- Have work areas where noise levels make voice communication between employees difficult been identified and posted?
- Are noise levels measured with a sound level meter or an octave band analyzer and are records being kept?
- Have engineering controls been used to reduce excessive noise levels? Where engineering controls are determined to be infeasible, are administrative controls (i.e., worker rotation) being used to minimize individual employee exposure to noise?
- Is approved hearing protective equipment (noise attenuating devices) available to every employee working in noisy areas?
- Have you tried isolating noisy machinery from the rest of your operation?
- If you use ear protectors, are employees properly fitted and instructed in their use?
- Are employees in high noise areas given periodic audiometric testing to ensure that you have an effective hearing protection system?

## **FUELING**

- Are employees prohibited from fueling an internal combustion engine with a flammable liquid while the engine is running?
- Are fueling operations performed to minimize spillage?
- When spillage occurs during fueling operations, is the spilled fuel washed away completely, evaporated, or are other measures taken to control vapors before restarting the engine?
- Are fuel tank caps replaced and secured before starting the engine?
- In fueling operations, is there always metal contact between the container and the fuel tank?
- Are fueling hoses designed to handle the specific type of fuel?
- Are employees prohibited from handling or transferring gasoline in open containers?
- Are open lights, open flames, sparking, or arcing equipment prohibited near fueling or transfer of fuel operations?
- Is smoking prohibited in the vicinity of fueling operations?
- Are fueling operations prohibited in buildings or other enclosed areas that are not specifically ventilated for this purpose?
- Where fueling or transfer of fuel is done through a gravity flow system, are the nozzles self-closing?

## **IDENTIFICATION OF PIPING SYSTEMS**

- When nonpotable water is piped through a facility, are outlets or taps posted to alert employees that the water is unsafe and not to be used for drinking, washing, or other personal use?
- When hazardous substances are transported through above-ground piping, is each pipeline identified at points where confusion could introduce hazards to employees?
- When pipelines are identified by color painted bands or tapes, are the bands or tapes located at reasonable intervals and at each outlet, valve, or connection, and are all visible parts of the line so identified?
- When pipelines are identified by color, is the color code posted at all locations where confusion could introduce hazards to employees?
- When the contents of pipelines are identified by name or name abbreviation, is the information readily visible on the pipe near each valve or outlet?
- When pipelines carrying hazardous substances are identified by tags, are the tags constructed of durable materials, the message printed clearly and permanently, and are tags installed at each valve or outlet?
- When pipelines are heated by electricity, steam, or other external source, are suitable warning signs or tags placed at unions, valves, or other serviceable parts of the system?

## **MATERIALS HANDLING**

- Is there safe clearance for equipment through aisles and doorways?
- Are aiseways permanently marked and kept clear to allow unhindered passage?
- Are motorized vehicles and mechanized equipment inspected daily or prior to use?
- Are vehicles shut off and brakes set prior to loading or unloading?
- Are containers of liquid combustibles or flammables, when stacked while being moved, always protected by dunnage (packing material) sufficient to provide stability?
- Are dock boards (bridge plates) used when loading or unloading operations are taking place between vehicles and docks?
- Are trucks and trailers secured from movement during loading and unloading operations?
- Are dock plates and loading ramps constructed and maintained with sufficient strength to support imposed loading?
- Are hand trucks maintained in safe operating condition?
- Are chutes equipped with sideboards of sufficient height to prevent the materials being handled from falling off?
- Are chutes and gravity roller sections firmly placed or secured to prevent displacement?
- Are provisions made to brake the movement of the handled materials at the delivery end of rollers or chutes?
- Are pallets usually inspected before being loaded or moved?
- Are safety latches and other devices being used to prevent slippage of materials off of hoisting hooks?
- Are securing chains, ropes, chockers, or slings adequate for the job?
- Are provisions made to ensure that no one is below when hoisting material or equipment?
- Are MSDSs available to employees handling hazardous substances?

## **TRANSPORTING EMPLOYEES AND MATERIALS**

- ❑ Do employees who operate vehicles on public thoroughfares have valid operator's licenses?
- ❑ When seven or more employees are regularly transported in a van, bus, or truck, is the operator's license appropriate for the class of vehicle being driven and are there enough seats?
- ❑ Are vehicles used to transport employees equipped with lamps, brakes, horns, mirrors, windshields and turn signals, and are they in good repair?
- ❑ Are transport vehicles provided with handrails, steps, stirrups, or similar devices, placed and arranged to allow employees to safely mount or dismount?
- ❑ Are employee transport vehicles equipped at all times with at least two reflective-type flares?
- ❑ Is a fully charged fire extinguisher, in good condition, with at least a 4 B:C rating maintained in each employee transport vehicle?
- ❑ When cutting tools or tools with sharp edges are carried in passenger compartments of employee transport vehicles, are they placed in closed boxes or containers that are secured in place?
- ❑ Are employees prohibited from riding on top of any load that could shift, topple, or otherwise become unstable?

## **CONTROL OF HARMFUL SUBSTANCES BY VENTILATION**

- ❑ Is the volume and velocity of air in each exhaust system sufficient to gather the dusts, fumes, mists, vapors, or gases to be controlled, and to convey them to a suitable point of disposal?
- ❑ Are exhaust inlets, ducts and plenums designed, constructed and supported to prevent collapse or failure of any part of the system?
- ❑ Are clean-out ports or doors provided at intervals not to exceed 12 feet (3.6576 meters) in all horizontal runs of exhaust ducts?
- ❑ Where two or more different operations are being controlled through the same exhaust system, could the combination of substances involved create a fire, explosion, or chemical reaction hazard in the duct?
- ❑ Is adequate makeup air provided to areas where exhaust systems are operating?
- ❑ Is the source point for makeup air located so that only clean, fresh air, free of contaminants will enter the work environment?
- ❑ Where two or more ventilation systems serve a work area, is their operation such that one will not offset the functions of the other?

## **SANITIZING EQUIPMENT AND CLOTHING**

- ❑ Is required personal protective clothing or equipment able to be cleaned and disinfected easily?
- ❑ Are employees prohibited from interchanging personal protective clothing or equipment, unless it has been properly cleaned?
- ❑ Are machines and equipment that process, handle, or apply materials that could injure employees cleaned and/or decontaminated before being overhauled or placed in storage?
- ❑ Are employees prohibited from smoking or eating in any area where contaminants are present that could be injurious if ingested?
- ❑ When employees are required to change from street clothing into protective clothing, is a clean change room with a separate storage facility for street and protective clothing provided?

- Are employees required to shower and wash their hair as soon as possible after a known contact with a carcinogen has occurred?
- When equipment, materials, or other items are taken into or removed from a carcinogen-regulated area, is it done in a manner that will not contaminate non-regulated areas or the external environment?

#### **TIRE INFLATION**

- Where tires are mounted and/or inflated on drop center wheels or on wheels with split rims and/or retainer rings, is a safe practice procedure posted and enforced?
- Does each tire inflation hose have a clip-on chuck with at least 2.54 inches (6.45 centimeters) of hose between the chuck and an in-line hand valve and gauge?
- Does the tire inflation control valve automatically shut off the air flow when the valve is released?
- Is a tire restraining device such as a cage, rack, or other effective means used while inflating tires mounted on split rims or rims using retainer rings?
- Are employees prohibited from standing directly over or in front of a tire while it is being inflated?

## **Appendix I – Corporate Environmental Management Team Contact List**

Contact information for Corporate Environmental, Health and Safety Management Team members is posted to the Teledyne EHS Intranet site (employee access only):

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