

The INGAA Foundation, Inc.

Document: CS-G-3 Revision: 0 Publication Date: January 2016

1.0 ACTIVITY DESCRIPTION

- 1.1 The purpose of safety orientation/communication is to make sure that all personnel are aware of applicable safety rules and procedures (work instructions) pertaining to their work site, including emergency procedures where applicable.
- 1.2 Orientations are intended to inform all personnel on the known potential for fire, explosions, toxic release hazards, and other serious construction safety hazards related to their work or the work site.
- 1.3 The Orientation is used to elevate the level of awareness of safety by making it personal, relevant, and important such that it impacts our choices and actions.
- 1.4 The guidelines in this document are not meant to supersede or replace regulatory requirements, nor are they intended to be all inclusive of the applicable regulatory requirements. Instead, they are intended to be supportive and complimentary to such requirements.

2.0 HAZARD ASSESSMENT

- 2.1 An authorized representative(s) develops a list of site-specific safety hazards, conditions and operations which is provided to all personnel prior to them entering the work site or performing work.
- 2.2 The list of site-specific safety hazards, conditions and operational requirements should be reviewed periodically and should form part of the orientation program for awareness.

3.0 ROLES AND RESPONSIBILITIES

3.1 Management Responsibilities (includes all personnel with a supervisory role)

- 3.1.1 Management must make sure that employees, visitors and contractors are aware of all safety rules before entering a job site.
- 3.1.2 Management must confirm that personnel are properly trained in accordance with designated procedures.
- 3.1.3 Management must define and clearly communicate safety roles, responsibilities, and accountability.
- 3.1.4 Management must make sure that all incidents are reported in a timely fashion.
- 3.1.5 Management must demonstrate commitment to leadership through active participation and the clear communication of expectations.
- 3.1.6 Management must confirm that a site-specific list of safety hazards, conditions, and operational requirements are provided to all employees, visitors and contractors prior to work being performed.



The INGAA Foundation, Inc.

Document: CS-G-3 Revision: 0 Publication Date: January 2016

3.2 Health & Safety Personnel (H&S) Responsibilities

- 3.2.1 The Project Safety personnel are responsible for:
 - Participating in all project related safety meetings and be capable of speaking to safety performance.
 - Providing input into site safety plans and monitoring performance to the overall plan.
 - Serving as liaison with owner and contractor's safety professionals to verify effective management of safety related issues.
 - Verifying that all incidents are reported in a timely manner.

3.3 Employee Responsibilities

- 3.3.1 The employee is responsible for his or her own safety. The employee also has the responsibility to call attention to unsafe acts and conditions that they observe.
- 3.3.2 The employee has the responsibility to stop any unsafe work immediately
- 3.3.3 The employee should participate in a site safety orientation (at project start-up or immediately upon joining the project), in routinely scheduled safety briefings, and non-routine safety meetings (as applicable).

3.4 Visitors and Contractor Personnel

3.4.1 All visitors, contractor personnel and temporary contractor personnel must complete a sitespecific safety orientation to be aware of all safety rules and procedures and emergency procedures applicable to the worksite.

4.0 EQUIPMENT AND SUPPLIES

- 4.1 All appropriate personal protective safety equipment and any specialized safety equipment required for special work tasks shall be onsite and in working order prior to work starting.
- 4.2 All safety equipment shall be reviewed on a periodic basis as required by regulations and specifications to ensure it is in good working condition. All equipment found to be deficient shall be removed from service immediately to prevent inadvertent use.

5.0 HAZARD MITIGATION

5.1 Overall Safety Messages

5.1.1 Through the joint efforts of every employee, we shall maintain full compliance with all applicable environmental and safety laws and regulations, conserve natural resources, reduce wastes and keep our environment clean and our workplace free of health hazards for ourselves, for the community and for future generations.

Ensure that safety is a core value and establish a work environment that facilitates active caring for all individuals and all assets. The INGAA Foundation video "A Culture of Safety" shall be shown.



The INGAA Foundation, Inc.

Document: CS-G-3 Revision: 0 Publication Date: January 2016

5.2 Site-Specific Safety Orientation Programs

- 5.2.1 Prior to performing any work on the site, all personnel must attend a site-specific orientation session.
- 5.2.2 The orientation program must identify the method to be used to ensure visitors have completed the orientation and the process for accounting for visitors entering and leaving the site.
- 5.2.3 The site-specific safety orientation program should include the following themes:
 - Lead by example.
 - No job is so important and no service so urgent that we cannot take time to perform all work safely.
 - No job will be performed unless it can be performed safely.
 - Build a culture that values safety.
 - Safety is important both on and off the job.
 - A strong, visible leadership commitment to safety is imperative.
 - Safety is everyone's responsibility.
 - Make Safety Personal and be aware of our own safety.
 - Watch for the safety of our co-workers.
 - Foster a culture of safety 24/7.
 - Know when to say no.
- 5.2.4 The site-specific safety orientation program should include the following specific information:
 - Where to obtain access to the Company's Hazard Communication Program (readily available to all personnel).
 - The Company's safety rules applicable to the location of work.
 - Use Lessons Learned to address past near misses, unsafe conditions and out of date procedures.
 - General steps for safety:
 - 1. Identify hazards
 - 2. Assess the risk
 - 3. Stop, stand back and observe
 - 4. Think through the task
 - 5. Continually monitor the situation



The INGAA Foundation, Inc. Document: CS-G-3 Revision: 0 Publication Date: January 2016

> Hazards and hazard mitigation, as applicable to the site and work to be performed at the site should include:

 Confined space entry Respiratory protection

Excessive noise (hearing conservation)

Hazardous waste operations

Waste disposal requirements

Fire prevention and protection Emergency medical assistance

Slip, trip, and fall hazards

Excavations, trenching, and shoring

 Hazardous chemicals in the work area (including but not limited to lead, PCBs, asbestos)

 Control of hazardous energy sources (lockouttagout)

Work at height (6 ft or more from next level)

Site specific air and water permit impacts

Vehicle safety

- PPE and personal hygiene expectations. Refer to INGAA CSCG # CS-G-1 (Basic PPE) for a comprehensive set of guidelines.
 - As a minimum, wear the following appropriate PPE:
 - Hard hat
 - Gloves
 - Safety glasses with side shields
 - Steel or composite toe boots with a minimum 6" top
 - Reflective vest or shirt
 - Fire retardant clothing where appropriate and/or required
 - Proper hygiene is expected while at work
 - No loose jewelry or clothing
 - Long hair must be put into ponytails & tucked into your shirt
 - Dress for the weather (cold or hot) and understand the symptoms of cold/heat

Safety Communication for Visitors and Contractors 5.3

- All personnel working at a job site will complete the Site-Specific Safety Orientation prior to beginning work. Documentation of attendance will be recorded and kept on file.
- 5.3.2 Any visitors to the site (exclusions may occur, example: delivery personnel) shall complete the appropriate version of the Safety Orientation(s).
 - Visitors accompanied by employees or a suitable site representative are not required to undergo the comprehensive orientation program; however, a safety briefing should be conducted outlining smoking areas, washroom locations, emergency evacuation procedures, PPE requirements, first aid stations, and/or any unique hazards or conditions.
- 5.3.3 During performance of work, contractor shall comply with all safety, health, and environmental requirements of Federal, State, and local laws, regulations and ordinances and any other requirements of the Company or the host facility.



The INGAA Foundation, Inc.

Document: CS-G-3 Revision: 0 Publication Date: January 2016

5.4 Safety Briefings

- 5.4.1 A safety briefing establishes requirements for:
 - Routine Safety Meetings to provide education and training regarding safe work practices.
 - Providing an understanding of safety policies and procedures.
 - Providing an understanding of governmental and regulatory requirements.
 - Providing an understanding of the requirements for compliance with company and client safety rules and regulations.
- 5.4.2 General safety meetings should be attended by all personnel, and are held regularly to increase awareness.
- 5.4.3 On the job site, management shall conduct a safety briefing prior to beginning work to inform personnel of any hazards associated with any job task.
- 5.4.4 Before work starts each day, the work team will discuss all hazards and risks associated with the daily job tasks through a Job Safety Analysis (JSA).
 - The JSA is a reoccurring reminder to always think about safety.
 - The JSA will inform personnel on how to protect themselves while performing their daily tasks.
 - It is important for all personnel to actively participate in the JSA.
 - If the job tasks change significantly, another JSA is required.
- 5.4.5 Safety meeting records shall be maintained.

5.5 Communication: Alcohol, Drugs and Fire Arms

- 5.5.1 Weapons are generally prohibited in the workplace.
- 5.5.2 Improperly transporting firearms, flammables, or other hazardous materials in a company vehicle is prohibited.
- 5.5.3 Alcohol in any consumable form is prohibited in the workplace.
- 5.5.4 Use, sale, purchase, possession of illegal drugs, prohibited drugs or any drugs used in an illegal manner is prohibited.
- 5.5.5 Drivers are prohibited from operating any vehicle while under the influence of alcohol or drugs.
- 5.5.6 Drug testing of any individual will be conducted as per company policy.

5.6 Communication: Cell Phones and Personal Electronic Devices

- 5.6.1 Refer to Section 5.2 (Guidelines for Electronic Devices) in INGAA CSCG # CS-S-13 (Vehicle Safety).
- 5.6.2 Photos/videos are prohibited unless otherwise stated.



The INGAA Foundation, Inc.

Document: CS-G-3 Revision: 0 Publication Date: January 2016

5.7 Communication: Confined Space

- 5.7.1 A pre-entry checklist must be filled out along with a confined space entry permit before work can begin.
- 5.7.2 Authorization to enter a "permit required" confined space must be formally documented
- 5.7.3 No one will be allowed entrance into a confined space until a permit has been issued and all confined space entry precautions have been completed.

5.8 Communication: Safety Instruction and Warning Signs

5.8.1 All personnel must abide by all warning signs that are posted by the Company or Contractor.

5.9 Communication: Trenching, Excavation and Backfilling

- 5.9.1 Refer to INGAA CSCG # CS-S-12(Excavation and Trenching) for a comprehensive set of guidelines.
- 5.9.2 Follow Excavation and Backfill Procedure for safe work in and around excavations.
- 5.9.3 Notify required excavation authorities (One Call) prior to performing an excavation.

5.10 Communication: Spotters

- 5.10.1 A spotter must be used when excavating or working near existing facilities.
- 5.10.2 When asked to perform the spotter's duties, you are not allowed to perform any other tasks simultaneously.
- 5.10.3 Utilize spotters when the existing conditions exist: blind spots; congestion; materials-stacked in a work area; vehicles parked to close to work or backing maneuvers; overhead utilities-working near or under and crossing under buried utilities; some excavation activities; and/or traffic.
- 5.10.4 When overhead power lines are present protection must be in place to ensure safe passage.

5.11 Communication: Motor Vehicles / Driving / Drivers / Incidents

- 5.11.1 Refer to INGAA CS-S-13 (Vehicle Safety) and CS-S-11 (Traffic Control Plans) for a comprehensive set of guidelines.
- 5.11.2 Adjust the vehicle controls such as mirrors, seat, radio or air conditioning before driving.
- 5.11.3 Do all GPS programming before driving.
- 5.11.4 Plan ahead check weather and traffic condition before driving when traveling any distance.
- 5.11.5 Avoid distractions such as eating, playing with the radio, intense conversations, etc.
- 5.11.6 If you are involved in an incident, report it immediately.
- 5.11.7 Perform a walk-around inspection prior to operation.
- 5.11.8 Ensure a valid registration and insurance card are in the vehicle at all times.
- 5.11.9 Take precautions at uncontrolled intersections and railroad crossings.



The INGAA Foundation, Inc.

Document: CS-G-3 Revision: 0 Publication Date: January 2016

- 5.11.10 All vehicle operators are expected to look behind closely before backing and shall sound their horn prior to backing in congested areas. The use of a backup alarm signal is an acceptable alternative to sounding the horn.
- 5.11.11 Drivers of vehicles must have a current valid driver's license.
- 5.11.12 Picking up hitchhikers or providing strangers transportation in a company vehicle is prohibited.
- 5.11.13 A safety belt must be worn when driving and riding in the passenger compartment.
- 5.11.14 No one can ride on equipment except the equipment operator.
- 5.11.15 All vehicles shall be equipped with a suitable fire extinguisher, a first aid kit, and a spill kit.

5.12 Communication: Ergonomic Hazards

- 5.12.1 Ergonomic hazards should be identified to avoid:
 - Strains by pushing or pulling heavy objects.
 - Strains in reaching, bending or turning while twisting at the same time.
 - Strains in using heavy tools or large machines.
 - Falls and slips on hazardous surfaces.

5.13 Communication: Fire Prevention and Extinguishing Fires

- 5.13.1 Make sure that fire extinguishers are located throughout the facility as required by regulation
- 5.13.2 Employees shall not combat interior structural fires beyond incipient stage or attempt rescue from structures involved in a fire.
- 5.13.3 Ensure the proper control of all activities that may create a fire hazard: cutting, welding, and grinding operations
- 5.13.4 Smoking and open flame is not allowed in a facility except at designated smoking areas. Ask your supervisor for the location of the nearest designated smoking area.
- 5.13.5 Flammable/Explosive Material Fire or explosion:
 - Do not put gasoline or likely flammable material in containers that aren't safety cans.
 - Do not store indoors unless a flammable cabinet is available.
 - Do not fill safety cans while the can is in the back of a vehicle.
 - Ensure the appropriate people have fire extinguisher training.

5.14 Communications: Biological Hazards

5.14.1 Wildlife may be encountered at a facility or on the right-of-way. Untrained individuals should avoid attempting to remove the wildlife until the proper authorities are contacted.

5.15 Communications: Chemical Hazards

- 5.15.1 All hazardous chemicals in the workplace must be listed on the hazardous chemical inventory list for the workplace and an SDS (safety data sheet) must be available for the hazardous chemical, either hardcopy on site or available online.
- 5.15.2 Labels on all hazardous chemical containers must be complete and legible.



The INGAA Foundation, Inc.

Document: CS-G-3 Revision: 0 Publication Date: January 2016

- 5.15.3 Ensure labels include the following information:
 - Identity the name of the product as it appears on the SDS and the identity of the hazardous chemical it contains.
 - Hazard warnings words, pictures, symbols, or a combination that provides information regarding the physical and health hazards of the chemicals in the container.
 - Name and address of the chemical manufacturer, importer, or other party responsible for emergency information.

5.16 Communications: Equipment, Machinery and Mechanical Hazards

- 5.16.1 Before starting any equipment the operator or driver will check all fluid levels possible.
- 5.16.2 Complete a 360 walk around prior to moving your equipment.
- 5.16.3 No operator driven equipment shall be operated in a reckless or careless manner, such as purposely spinning your tires, skidding, weaving at another vehicle.
- 5.16.4 Install safety fence and/or signage across access areas to water bodies.
 - Personal Flotation Devices (PFDs) should be available on-site for each employee exposed to water hazard conditions.
- 5.16.5 Faulty equipment will be immediately removed from service.
- 5.16.6 The operator is responsible for inspecting the equipment prior to the operation of the equipment each day.

5.17 Communication: Emergency Response and First Aid

- 5.17.1 The Safety Orientation Program should describe:
 - Locations of first aid kits.
 - Medical service locations.
 - Emergency phone numbers and provide incident hotline numbers.
 - Different alarm tones based on the nature of the emergency.
 - Emergency response expectations for each employee.
 - The Evacuation Plan showing routes and assembly points.

5.18 Communications: Work Permits

- 5.18.1 The Contractor person in charge shall ensure the names of all personnel that are assigned to the Safe Work Permit are listed and kept current at all times.
- 5.18.2 The Safe Work Permit shall be displayed at the work site and be easily retrievable in the event of an emergency and/or request by an employee.

5.19 Communication: Fall Protection

5.19.1 All personal fall arrest equipment shall be inspected prior to use to detect damage or deterioration such as cuts, tears, abrasions, contact with fire or acids, distorted hooks, loose parts or other deficiencies that could result in a hazardous condition.



The INGAA Foundation, Inc.

Document: CS-G-3 Revision: 0 Publication Date: January 2016

- 5.19.2 Company personnel and applicable contractors who are exposed to work-related fall hazards shall be protected from falling by a guardrail system, control line, personal fall arrest system, safety net system or some other approved safety system or alternate fall protection plan. *Note:* Refer to the applicable OSHA standard for the specific requirements.
- 5.19.3 Employees on a walking/working surface with an unprotected side or edge that is more than 6 feet above the adjacent surface shall be protected with the use of guardrail systems, safety net systems, or personal fall arrest systems.

5.20 Communication: General / Miscellaneous Topics

- 5.20.1 Never go under a suspended load for any reason.
- 5.20.2 There is to be no walking or standing on the pipe for any reason. This holds true whether the pipe is on skids, in the ditch or on the ground.
- 5.20.3 Never use a tag line or allow employees to touch the equipment or the suspended load when working near overhead power lines.
- 5.20.4 If mountainous terrain is encountered on this project, follow these rules:
 - Never walk behind a piece of equipment that is tracking up a hill, and never walk in front of a tractor that is tracking down a hill
 - Footing will be a major issue. Rocky, uneven terrain will be encountered and all ground personnel must use caution when having to walk this terrain
- 5.20.5 Pets are not allowed on work sites.
- 5.20.6 Good housekeeping is required in all areas. Working areas must be clean and orderly. All aisles, walkways, and fire extinguishers must be kept free from obstruction.
- 5.20.7 Consumption of food or beverages in a process area is prohibited. Ask your supervisor for designated locations which are safe to consume food and beverages.
- 5.20.8 Sexual harassment, other types of harassment, discrimination or workplace violence of any kind will not be tolerated.
- 5.20.9 All potentially hazardous waste is to be separated and disposed of properly according to project directives. If in doubt about any item, check with your immediate supervisor.
- 5.20.10 Every person has the right to stop work if they feel there is an unsafe condition or procedure about to take place.

6.0 TRAINING

- 6.1 Employees shall have training on site safety and security.
- 6.2 Contractor's employees must have appropriate training and qualifications to identify hazards.
- 6.3 Management should make sure that site safety training includes:
 - Methods and observations that may be used to detect the presence or release of a hazardous chemical, such as appearance, odor, gas detecting methods, etc.



The INGAA Foundation, Inc.

Document: CS-G-3 Revision: 0 Publication Date: January 2016

- The physical and health hazards associated with the chemicals or classes of chemicals in the work area.
- Actions necessary for employees to protect themselves from hazards, including the use of PPE specified for work practices and procedures, and emergency procedures
- Details of the hazard communication program including an explanation of the labeling system, what an MSDS is, and how the employee can obtain and use the hazard information.

7.0 REFERENCES

Current versions of the references automatically supersede the references listed below.

7.1 Occupational Safety and Health Administration (OSHA)

- 7.1.1 29 CFR 1910 Occupational Safety and Health Standards
- 7.1.2 29 CFR 1910.1200 Hazard Communication
- 7.1.3 29 CFR 1926 Safety and Health Regulations for Construction

7.2 Department of Transportation (DOT)

- 7.2.1 49 CFR Subchapter D (Pipeline Safety) Part 199 Drug and Alcohol Testing
- 7.2.2 49 CFR Part 40 Procedures for Transportation Workplace Drug and Alcohol Testing Programs

7.3 Canadian Standards Association (CSA)

- 7.3.1 Applicable provincial Occupational Health and Safety Act, Regulations, and Codes (including distracted driving (or equivalent)) legislation
- 7.3.2 Canada Labour Code Part II, RSC 1985 c. L-2, as amended
- 7.3.3 Regulations Respecting Occupational Safety and Health, SOR/86-304, as amended
- 7.3.4 Provincial Workers' Compensation Board Regulations
- 7.3.5 SOR/99-294 National Energy Board Onshore Pipeline Regulations
- 7.3.6 Canadian General Standards Board C**/CGSB-155.20
- 7.3.7 Criminal Code of Canada Section 217.1 (Bill C-45)
- 7.3.8 Canadian Electrical Code Part I
- 7.3.9 CSA Z246.1-13 Security Standard for Petroleum and Natural Gas Industry Standards
- 7.3.10 CSA Standard Z94.1-15 Industrial Head Protection
- 7.3.11 CSA Standard Z94.2-14 Hearing protection devices Performance, selection, care, and use
- 7.3.12 CSA Z462-15 Workplace Electrical Safety
- 7.3.13 CSA Z259.12-11 Canadian Fall Protection Code
- 7.3.14 CSA Z662-15 Oil and Gas Pipeline Systems



The INGAA Foundation, Inc.

Document: CS-G-3 Revision: 0 Publication Date: January 2016

7.4 American National Standards Institute (ANSI)

- 7.4.1 ANSI Z87.1-2015 American National Standard for Occupational and Educational Eye and Face Protection
- 7.4.2 ANSI/ISEA Z89.1-2014 American National Standard for Industrial Head Protection
- 7.4.3 ANSI Z535.1-2011 American National Standard for Safety Color Code
- 7.4.4 ANSI Z535.3-2011, American National Standard for Criteria or Safety Symbols
- 7.4.5 ANSI Z535.4-2011, American National Standard for Product Safety Signs and Labels
- 7.4.6 ASTM F2413-11 Standard Specification for Performance Requirements for Protective (Safety) Toe Cap Footwear

8.0 HISTORY OF REVISIONS

Number	Date	Description
0	January 2016	Initial publication of this INGAA Construction Safety Consensus Guidelines document.