1.0 ACTIVITY DESCRIPTION

1.1. The purpose of a Job Safety Analysis (JSA) program is to mitigate or eliminate hazards associated with performing specific job tasks. The JSA program provides a process and tool to identify, evaluate, discuss, mitigate, and document potential hazards and appropriate control measures. In alignment with CS-G-9, "Guidance for Serious Injury and Fatality Prevention", life-threatening (High Energy) hazards and Direct Controls are prioritized. JSAs are vital to an organization's overall safety program because they encourage operational prioritization of safety, integrate safety as part of the work task for high risk and/or novel activities, and encourage safety communication at the crew level.

1.2. The purpose of this document is to describe guidelines for the preparation and communication of task specific JSAs. A JSA, sometimes called a Field Level Hazard Analysis (FLHA), may be discussed, or included with other processes such as a Job Hazard Analysis (JHA), Site-Specific Safety Plans (SSSP), and Toolbox Talks. It is important that workers know that the previously listed items are all jobsite safety-related tools, and each plays a different role. For these guidelines, the following definitions will be used:

1.2.1. **Job Safety Analysis (JSA)** – JSAs are prepared for a specific work activity that will be performed. JSAs are performed to identify hazards (real and potential) that are, or may be, present at the specific work location under current environmental conditions (weather, external impacts, etc.) and to prescribe the appropriate mitigation of the identified potential hazard(s), before commencing a work activity. JSAs should be updated when activities scope of work, or conditions (weather, soil conditions, etc.) change during performance of the task.

1.2.2. **Field Level Hazard Analysis (FLHA)** – FLHAs are equivalent to JSAs.

1.2.3. **Pre-Job Brief (PJB)** – PJBs are equivalent to JSAs.

1.2.4. **Job Hazard Analysis (JHA)** – A JHA is a document that identifies the general hazards of and mitigation measures for common construction activities or tasks, such as excavation, stringing pipe, lowering-in, welding, tie-ins, bending, etc.

1.2.5. **Site-Specific Safety Plan (SSSP)** – An SSSP is a document that is developed for each specific project, identifying its safety hazards and how to mitigate them. A SSSP can be an important source material for creating JSAs.

1.2.6. **Toolbox Talks** – Toolbox talks are utilized for a wide variety of topics (e.g., safety, task review, environmental, landowner considerations, etc.). Toolbox talks are particularly useful to communicate "good catches" or incidents that have happened within a company or they can be lessons learned that have been shared in our industry (e.g., refer to the INGAA Foundation Lessons Learned Database).

1.3. The basic JSA described in this document is most often prepared by the Crew Leader or Foreman (or other personnel as assigned or designated by the Foreman), with ACTIVE input and participation from the crew members, and used to stimulate substantive conversation regarding task steps or sequencing, specific hazards, and the corresponding control measures.

1.4. Hazard recognition is crucial to any JSA, especially for the prioritization of hazards that could most likely cause a Serious Injury or Fatality (SIF). Relevant hazard recognition and prioritization tools are defined as follows.

1.4.1. Energy Wheel: A tool used to help identify and evaluate potential sources of hazardous energy in a workplace or during a specific task.

1.4.2. High Energy Hazard: A hazard that exceeds 1500 Joules (roughly equivalent to 500 foot-pounds) of physical energy and is most likely to cause a SIF if an employee contacts the energy.

1.4.3. High Energy Icons: 13 icons that represent hazard types that are categorically almost always more than 1500 Joules of physical energy (CS-G-9, Appendix A).

1.4.4. Direct Control: A barrier that is specifically targeted to the high-energy source; effectively mitigates exposure to the high-energy source when installed, verified, and used properly; and is effective even if there is unintentional human error during work that is unrelated to the installation of the control.

1.5. 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 contractor/owner company safety protocols or regulatory requirements. Instead, these guidelines are intended to support and complement existing requirements.

2.0 HAZARD ASSESSMENT

2.1. Hazard assessments are performed as part of the JHA (routine activities) or the JSA (site-specific) development process.

2.2. Hazard assessments should be performed to identify potential hazards associated with work activities, particularly those involving High Energy sources, commonly performed on natural gas pipeline construction projects.

2.3. High Energy hazards should be prioritized and highlighted for additional focus on SIF prevention. High Energy hazards may be colloquially referred to as life-threatening hazards, stuff that could kill you (STKY hazards), life changing/altering/ending events, etc.

3.0 ROLES AND RESPONSIBILITIES

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

3.1.1. Provide the mechanism for adequate training of all applicable personnel to identify hazards associated with the tasks they may perform and to designate the appropriate control measures.

3.1.2. Empower applicable personnel with the ability to mitigate or make recommendations on appropriate control measures for site-specific hazards and potential hazards.

3.1.3. Verify that applicable employees are trained in the JSA process.

3.1.4. Confirm that Frontline Supervisors are trained on communication of JSAs.

3.1.5. Actively participate in and support the JSA process/activity while visiting a site/project (where applicable).

3.1.6. Perform objective assessments on the quality of JSAs preparation and communication, specifically but not limited to the effectiveness of Frontline Supervisor preparation and communication of JSAs. Provide recommendations and support to continuously improve their effectiveness (where applicable).

3.1.7. Stop Work Authority/Responsibility – Immediately stop and correct perceived unsafe or hazardous activities.

3.2. **Frontline Supervisor Responsibilities**

3.2.1. Review the more general JHAs that are applicable to the work/project.

3.2.2. Assess and evaluate applicable on-site personnel to ensure that they understand the JSA process.

3.2.3. Prepare comprehensive and detailed JSAs.

3.2.4. Encourage crew involvement in preparation of JSAs.

3.2.5. Communicate the JSA before the scheduled tasks are performed.

3.2.6. Conduct appropriate reviews and revisions to JSAs and communicate changes to pertinent field personnel.

3.2.7. Stop Work Authority/Responsibility – Immediately stop and correct perceived unsafe or hazardous activities.

3.3. **Health & Safety (H&S) Professional Responsibilities**

3.3.1. Provide technical support for preparation and communication of JSA guidelines.

3.3.2. Develop, coordinate, conduct and/or approve JSA training.

3.3.3. Evaluate the effectiveness of the JSA program and make recommendations for improvement (when necessary).

3.3.4. Review completed JSAs to evaluate thoroughness and/or the appropriate level of communication and control measures/mitigations.

3.3.5. Stop Work Authority/Responsibility – Immediately stop, report, and correct perceived unsafe or hazardous activities.

3.3.6. Actively participate in and support the JSA process/activity while visiting a site/project (where applicable).

3.4. **Employee Responsibilities**

3.4.1. Follow the procedures described in these guidelines.

3.4.2. Complete the JSA-related training associated with job assignments and responsibilities.

3.4.3. Participate in the development and communication of JSAs, as applicable to assigned tasks and job responsibilities.

3.4.4. Report to the Supervisor any recognized hazard that cannot be immediately corrected.

3.4.5. Review JSAs when conditions change (e.g., weather, scope of the task, nearby activity), and make appropriate changes to potential hazards and/or control measures.

3.4.6. Immediately stop and correct perceived and actual unsafe or hazardous activities.

4.0 EQUIPMENT AND SUPPLIES

Not Applicable

5.0 HAZARD MITIGATION USING JSAs

5.1. There are three basic steps in preparing a JSA:

1. Identify the job, task, and steps.
2. Identify real and potential hazards, particularly those involving High Energy sources, or potential incidents that may be associated with each task and step.
   - Reference general JHAs pertinent to the task/work activity and/or the SSSP.
   - Consider potential impacts from site-specific conditions (weather conditions, ground surface slope, landscape, other nearby activities, etc.).
3. Describe mitigation and control measures applicable to the potential hazards identified in Step 2. Identify presence or absence of Direct Controls for each High Energy hazard identified.

5.2. **JSA Format and Content**

5.2.1. The JSA form lists common hazards identified that can be reviewed and checked with the crew. The form should also provide blank areas that can be used to add any site-specific hazards and mitigations of those hazards.

5.2.2. The form should include fields for all individuals to sign after each review, the date, and time of review.

5.2.3. Examples of information the JSA form could include, but are not limited to:

- Identification of task(s) to be performed, associated potential hazards, and corresponding mitigations required to perform the task safely,

- Identification and emphasis on High Energy Hazards and corresponding Direct Controls,
- Resources to be used (equipment, shoring, materials, etc.),
- Alternative (i.e. controls that are not Direct Controls) required prior to work (signs, barricades, goalposts, etc.),
- Person responsible for each task (training required, spotters needed, etc.),
- Work location (site address or equivalent),
- Current weather,
- Identification of short-service employees,
- Proper PPE,
- Required permits (e.g., hot work, lock-out/tag-out),
- Muster point(s),
- Warnings/alerts – How to communicate in the event of an emergency,
- Address/Phone Number of nearest medical facility (Pre-printed on JSA for each project/location),
- Emergency contact information/Names of First Aid CPR trained personnel,
- "Competent Person(s),
- Signature of Owner/Operator Representative,
- Security concerns or considerations, and
- Reminder of Obligation to exercise Stop Work Authority (SWA) if conditions warrant.

5.2.4. Refer to Appendix A for example JSA forms.

5.3. Identifying Hazards and Control Measures

5.3.1. A JSA is an important tool in the effort to identify hazards and outline effective mitigation or controls. To improve the effectiveness of identification and control efforts, the following suggestions are offered:

- It is important for JSA authors/facilitators to consider adjacent activities. JSAs can be too focused on the tasks they are scoped for, overlooking nearby hazards that could have an impact on the immediate task.
- Scanning the worksite for energy sources (potential energy, mechanical energy, thermal energy, etc.) has been a technique

demonstrated to improve hazard identification effectiveness. *Refer to Appendix B for Energy Wheel Hazard Assessment Tool.*

- Scanning the worksite for high-energy hazards using the High Energy Icons. *Refer to Appendix A of CS-G-9 for relevant definitions.*
- It is more helpful to be specific than general when identifying hazards. For example, broadly citing "trip hazards" is not as effective as citing the "trip hazards from the cable trays in the Northeast corner of the site."
- Finally, JSAs are most valuable when they focus on substance over form. When done in a way in which the quality of the conversation is held to more importance than the format of the written, JSAs, encourage vital scenario-building, brainstorming and high engagement among field staff.

5.3.2. Refer to the applicable JHAs and SSSP as the starting point to identify and mitigate potential hazards of each activity. Then expand or customize the JSA to incorporate actions or considerations based on site-specific conditions.

5.3.3. Once High Energy Hazards on the jobsite are identified, review corresponding Direct Controls. If a Direct Control is absent and cannot be feasibly reinstated, highlight the Exposure and ensure presence of Alternative Controls.

5.3.4. Once other task-related jobsite hazards are identified, designate control measures per the hierarchy of hazard control (i.e., elimination, substitution, engineered controls, administrative controls, PPE).

5.4. JSA Communication and Presentation

5.4.1. Effective JSAs are a process that integrates safety and health principles into a particular task. JSAs are more than a form.

5.4.2. The keys to success of the JSA process are twofold: 1) careful planning; and 2) effective communication via crew involvement.

5.4.3. Include the entire crew assigned to a job activity in the JSA process to ensure all employees conducting a task understand the hazards, specifically the high energy hazards that are most likely to cause a SIF, and how to mitigate them.

- The JSA should be communicated verbally and in detail with all crew personnel onsite, and then subsequently to any/all other individuals who visit or perform work on that site, before engaging in the work activity.
- Encourage the field personnel to openly discuss the JSA. By giving applicable field personnel a way to participate in safety decisions, their engagement can lead to improved hazard awareness and understanding of safe work practices.
- Frontline Supervisors should encourage the crew to actively participate. Asking questions and seeking input from crew members helps to create an environment where the entire crew is actively engaged in the JSA process.

5.4.4. Front-line supervision (Crew Leaders or Foremen) are the key individuals responsible for the success of crew safety, compliance, quality, and production. Therefore, they should have the ability to communicate and engage their crew in developing, communicating, and executing safe work plans. The ability of the Crew Leader to perform this task well will define the success of the program.

5.4.5. After the Crew Leader explains in detail the task that is to be performed, encourage team members to point out the potential High Energy hazards and Direct Controls followed by other relevant hazards and their proposed mitigation or control measures. This encourages crew engagement and communication.

5.4.6. Be mindful of the primary language(s) of the field personnel. Training, presentations, daily communications, forms, handouts, etc. need to be communicated so that all field personnel understand.

5.4.7. During the JSA discussion, give field personnel an opportunity to share examples of good catches, near misses, etc. to learn from experience and prevent potential reoccurrence.

5.5. JSA Reviews

5.5.1. The JSA MUST be reviewed by all personnel entering the active work area, including but not limited to, field personnel, contractor management, owner company representatives, inspection staff, vendors, guests/visitors onsite, etc.

5.5.2. The initial review shall take place prior to the start of any work task.

5.5.3. A recommended Best Management Practice (BMP) is to review the JSA again after any break or interruption (e.g., weather, stop work, conditional change, lunch etc.) ≥ 30 minutes.

5.5.4. Reviews should also take place any time conditions or work activities change, for example:

- If the equipment sustains damage;
- After a safety related incident (e.g., injury, accident, or near miss);
- When the job is altered; or
- Upon identification of a new hazard(s).

5.6. **JSA Documentation and Recordkeeping**

5.6.1. All JSAs should be signed by all applicable crew members and visitors.

5.6.2. All JSAs should be turned in on a daily basis.

5.6.3. Remember “If it’s not documented, it didn’t happen.”

6.0 TRAINING

6.1. All employees should receive awareness training on the JSA process.

6.2. Contractor's employees and/or on-site employees must have appropriate training to identify hazards, particularly those associated with high-energy sources, and understand the information presented in a JSA. All employees must be trained on recognition of hazards by associated energy types.

7.0 REFERENCES

7.1. Edison Electric Institute – *Pre-job Meeting Scorecard, Training Video Guidance and Solutions*, August 2023 (Power to Prevent SIF | (eei.org)).

7.2. Refer to Appendix C for Construction Safety Research Alliance (CSRA) Pre-Job Safety Scorecard, https://www.csra.colorado.edu/.

8.0 HISTORY OF REVISIONS

Revision	Date	Description
0	6/16/2017	Initial Issue
1	3/29/2022	Updated per continuous improvement cycle
2	10/22/24	Updated per High Energy and Direct Control concepts.

Appendix A – Example JSA Forms

JOB SAFETY ANALYSIS WORK SHEET

TAILGATE SAFETY MEETING MINUTES

Date: _____ Job # _____ Location: _____

Company: _____ Foreman/Supervisor: _____

First Aid Personnel: _____

Name	Address	Phone #
NEAREST CLINIC:		
CLOSEST MAJOR INTERSECTION:		

FOR LIFE THREATENING INJURIES OR EMERGENCIES – DIAL 911

In Crew: _____ # Attending: _____ Current Weather: _____

Competent Person(s) (if applicable): _____

Who Will Transport Injured Personnel? _____

Work To Be Performed: _____

_____

Topics Discussed: _____

_____

Potential Site Hazards: _____

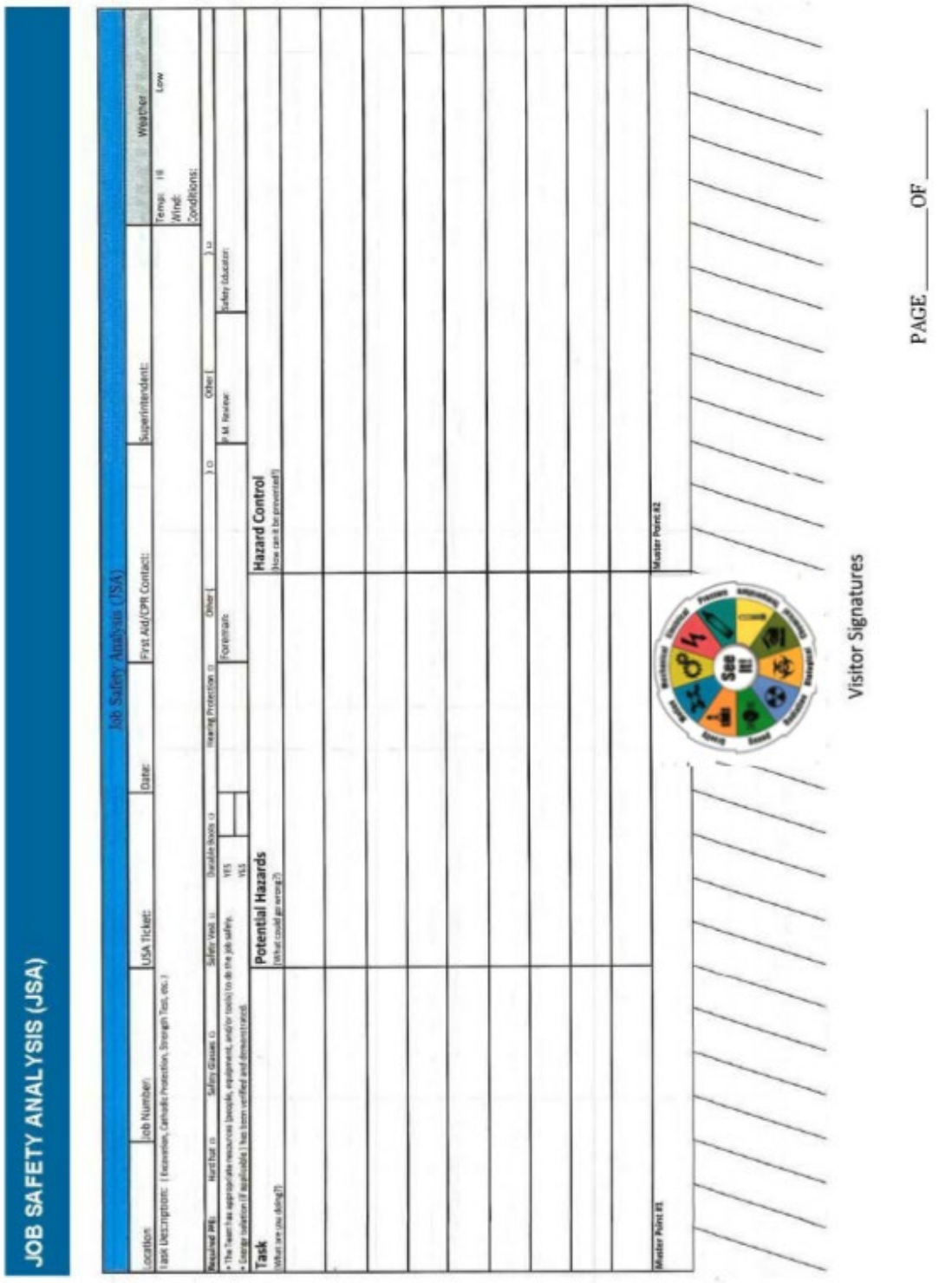
Safety Recommendations: _____

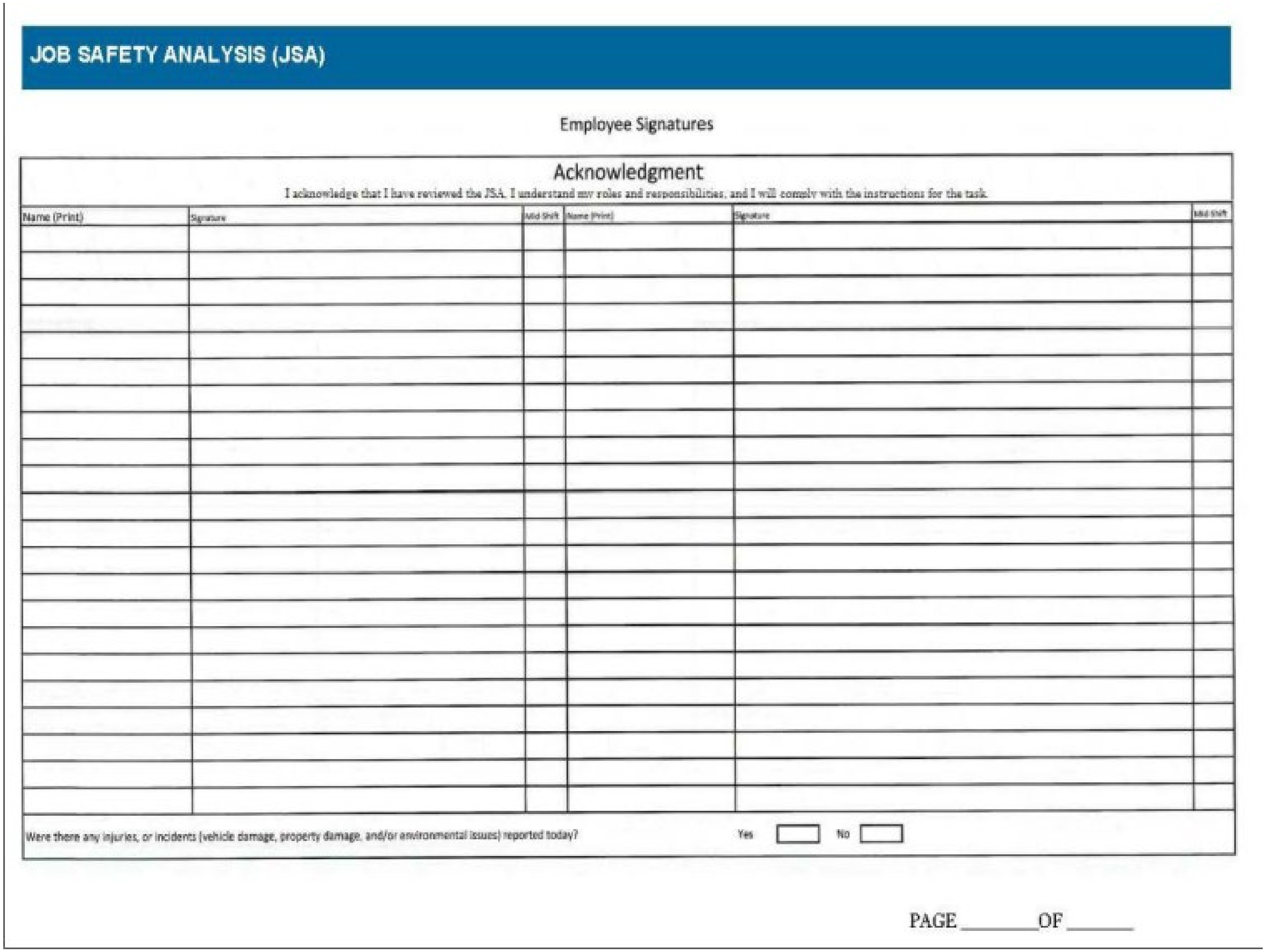
_____

Attendance (use additional paper if necessary)

Print	Sign	Print	Sign

Tasks to be performed/critical steps to be taken (Check all that apply to job)	Potential Hazard (Check all that apply to tasks/steps from column 1)	Recommended Safe Job Procedures (Check all protective measures that apply to hazards identified in column 2)
☐ Driving	☐ Traffic hazards (vehicular & pedestrian)	☐Designate a person for a specific task such as confined space attendant, fire watch, etc. / ☐Keep guards in place at all times – no modifications to tools or equipment
☐Walking	☐Working on rough/challenging/uneven terrain	☐Hold a pre job meeting with all involved / ☐Use hearing protection
☐Manual Digging	☐Exposure to loud noise	☐ Utilize one call and pothole/daylight existing utilities BEFORE excavating / ☐ Use Lock out / Tag out procedures
☐Mechanical Digging	☐Overhead Utilities / Underground Utilities	☐ Inspect excavations & complete report / ☐Yield for pedestrians & equipment
☐Manual Lifting	☐Suspended Loads / Swinging Loads	☐ Barricade or mark areas of excavation / ☐Reduce speed and drive defensively
☐Mechanical Lifting (Crane)	☐Heavy Objects/ Back Injuries	☐ Utilize protective systems (shoring/sloping) / ☐Use of additional PPE (face shield, goggles, chaps etc.)
☐Welding /Cutting/Grinding	☐Heavy Lifting Equipment	☐ Nobody permitted to enter unsafe excavations (ensure access/egress is provided) / ☐Inspection and color coding of electrical tools
☐Hauling Equipment/Materials	☐Heavy Earthmoving Equipment	☐Walk with small steps, take time & watch footing / ☐ Inspect tools for signs of excessive wear/damage & replace if necessary
☐ Setting/Moving Timbers/Mats	☐Trenches/Excavations (Engulfment/collapse)	☐ Never park a vehicle next to heavy equipment / ☐Stay clear of x-ray operations
☐Coating	☐Asphyxiation / confined space hazards	☐ Wear appropriate PPE at all times / ☐Install portable lighting in dark areas
☐Sandblasting	☐ Slips, trips & falls – rough/slippery working surfaces	☐Use tagines where appropriate / ☐ Use bug spray or other means of pest control
☐ Rigging	☐Possible hit/struck/crushed by moving Trucks or equipment	☐Stay a minimum of 25 ft. from loads and equipment / ☐Store cylinders upright, secured with the caps on and transport properly
☐Line-ups	☐Slings, Cables, Chains could break/fail	☐Use proper lifting techniques (lift with legs) / ☐ Identify and avoid poisonous plants
☐End-facing/Beveling	☐Exposure to gamma emitting sources & x-ray	☐Stay clear of equipment when in operation / ☐ Use spotter with warning device (air horn)
☐Climbing to Higher/Lower Levels	☐ Abrasive materials (eye injuries/skin abrasions)	☐ Never stand/walk between two pieces of working equipment / ☐ Drink plenty of water, take cool down/warm-up breaks
☐ Backfilling	☐Multiple pinch/crush points	☐ Stay a minimum of 10 ft. from all power lines / ☐ Use GFCI's and proper grounding
☐ Set up traffic control / flagging ops	☐Compressed Gases	☐ Utilize goal post system and spotters / ☐Test the atmospheres for hazards
☐ Cell Phone use	☐Heat Stress/Hypothermia (Hot/Cold weather)	☐Flashback arrestors must be in place / ☐ Ensure proper ventilation
☐ Use of ladders	☐Inclement Weather (Lightning/Rain/Snow/Fog/Icy conditions)	☐Ensure certifications are in place on all lifting equipment, devices and rigging / ☐ Wear sunscreen and appropriate clothing
☐ Road Crossing	☐Falls from an upper level	☐ Inspect pins and cables daily for problems / ☐ Never lift with the teeth of buckets
☐ Loading/Offloading equipment/Materials	☐ Without proper communication drill string can turn inadvertently causing pinched by/ struck by	☐Establish eye contact and intent with the operator of the equipment before approaching / ☐ Visually inspect the leads as they are being run out
☐ Installing shoring/trench box	☐ Poisonous plants (Contact Dermatitis)	☐ Stay on designated ROW / ☐ Ensure spill kit is readily available
☐ Break connections apart to install or remove rods or tooling	☐ Worn or damaged leads could cause shock or property damage	☐ Establish good communication between workers and drill operator before any operations start / ☐ Ensure hoses are properly connected and whip-checks are in place
☐ Pumping	☐ Uneven/unsecured or bulky loads	☐ Only one person directing operator/driller / ☐ Inspect wear points on hoses/HDPE and replace damaged/worn sections
☐ Lowering-in product	☐ Environmental release/spill	☐Remove potential ignition sources
☐ Refueling	☐Overloading equipment – equipment failure	☐Secure ladders, & inspect to ensure they are not damaged / ☐ Ensure fall protection (tied-off/guard rails/hand rails) are in place
☐ Boring/Directional Drilling	☐ Welding, cutting, burning tools (Fire Hazard)	☐ Road/traffic signs must be up while working / ☐ Erect barricades and ensure personnel are kept clear of test area
☐ Pipe Entry	☐ Chemical Burn/Thermal Burn	☐ Use flaggers to control vehicle/pedestrian traffic / ☐Do not place hands in the box or on the ends of the drill stem/pipe
☐ Hydrotest product line	☐ Rotating tooling, pinched by, struck by	☐ Ensure adequate number of fire extinguishers on site and in vehicles / ☐
☐ Changing out hydraulic components	☐ Grinding tools - Flying Sparks and Debris	☐ Wear chemical suit / boots & gloves / ☐Communicate with the railroad and ensure flagger protection is provided if necessary – don't work within 25 feet without flagger protection!
☐ Making wire connections	☐ Cuts / Abrasions	☐Install back-up alarms/ensure alarms are working / ☐ Stop work and take cover in inclement weather
☐ Pre-heating	☐Electrical Shock Hazards / Induced Voltage	☐ Never step or reach over rotating stem/pipe / ☐
☐ X-Raying	☐Safety Latch on rigging inoperable/missing	☐ Position trailer on level terrain if possible / ☐
☐ Purging line(s)	☐Working near live railroad tracks (train traffic)	☐Set parking brake on vehicles & equipment when not in use / ☐
☐	☐ Accidental Ignition	☐ / ☐


JOB SAFETY ANALYSIS (JSA)
Job Safety Analysis (JSA)
Location
Job Number
USA Ticket
Date:
First Aid/CPR Contact:
Superintendent:
Weather
Task Description: (Excavation, Cathodic Protection, Strength Test, etc.)
Temp: Hi Low
Wind:
Conditions:
Required PPE:
Hard Hat
Safety Glasses
Safety Vest
Flagging Protection
Other
Foreman
Other
Safety Educator
Hazard Control
(How can it be prevented?)
Potential Hazards
(What could go wrong?)
Task
(What are you doing?)
Master Point #1
Master Point #2
See It!
Visitor Signatures
PAGE ____ OF ____



JOB SAFETY ANALYSIS (JSA)

Employee Signatures

Acknowledgment

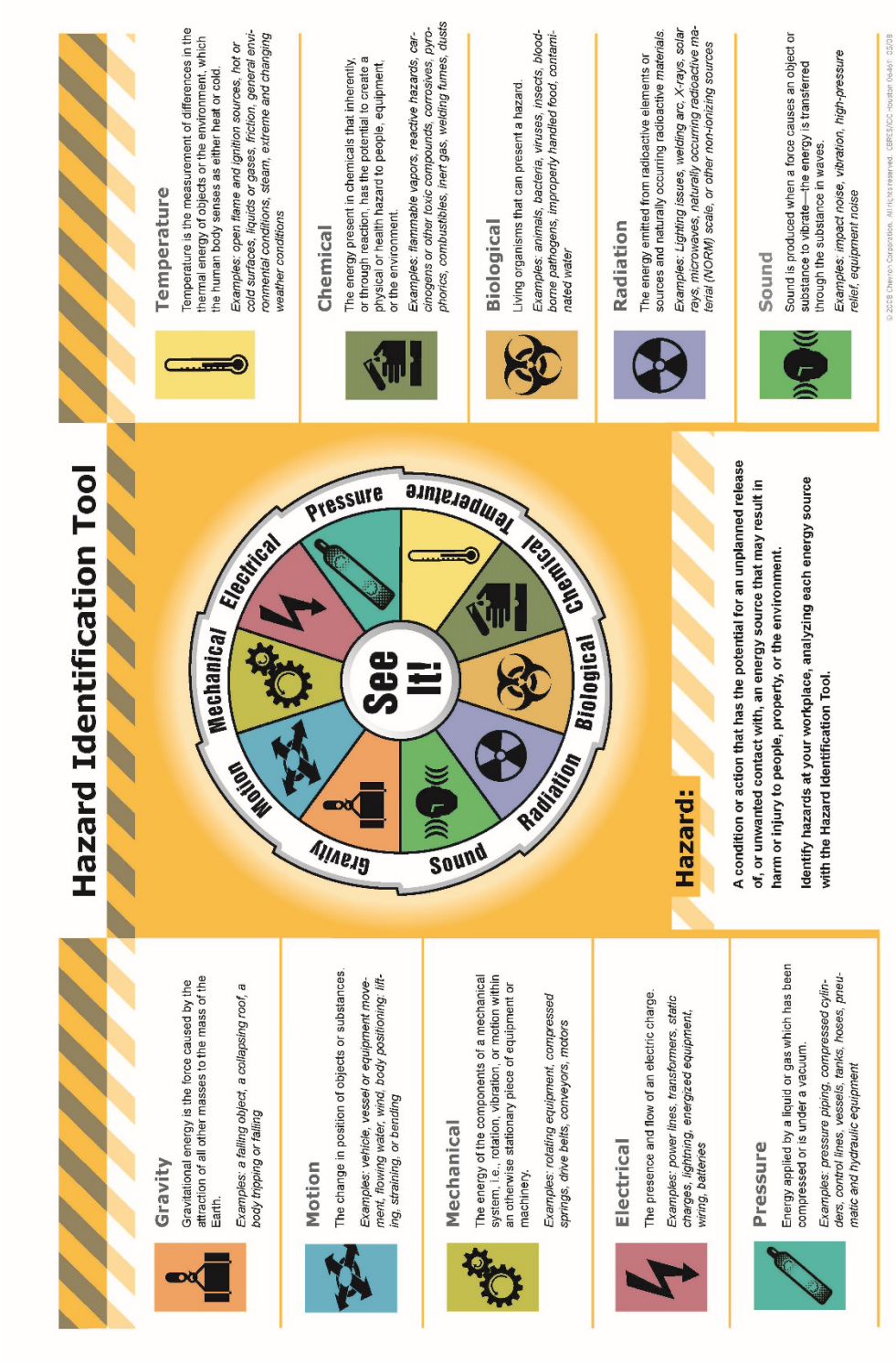
I acknowledge that I have reviewed the JSA. I understand my roles and responsibilities, and I will comply with the instructions for the task.

Name (Print)	Signature	Mid Shift	Name (Print)	Signature	Mid Shift

Were there any injuries, or incidents (vehicle damage, property damage, and/or environmental issues) reported today? Yes ☐ No ☐

PAGE ______ OF ______

Appendix B – Energy Wheel Hazard Assessment Tool



Appendix C – Pre-Job Safety Meeting Scorecard

	Statement	Weight	True=1 False=0	Weighted Score
	EXAMPLE	**2**	**0**	**2*0=0**
1	**Everyone performing the job was present at the meeting**	**4**		
2	**The discussion was held as close to the work as reasonably possible.**	**4**		
3	**Work steps required to complete the job were identified and discussed.**	**4**		
4	**Necessary tools and equipment were identified and discussed.**	**3**		
5	**Hazards associated with the job were identified and discussed.**	**5**		
6	**Hazards posed by the environment or surrounding work were identified and discussed.**	**4**		
7	**Controls for each hazard were identified and discussed.**	**5**		
8	**All life-threatening hazards and their controls were emphasized.**	**5**		
9	**Hazards and necessary controls were documented.**	**3**		
10	**All required permits were obtained and reviewed.**	**3**		
11	**Potential changes were identified and discussed and a plan to address change was created.**	**4**		
12	**The importance of stopping work to address and unexpected change, disruption, or hazard was discussed.**	**4**		
13	**Emergency response plans were reviewed, including individual roles and responsibilities.**	**3**		
14	**Crew actively demonstrated their understanding of their work steps, hazards and controls.**	**3**		
15	**All crew members participated in the discussion by identifying hazards and controls.**	**3**		

Total Weighted Score (sum weighted scores for items 1 through 15)

Guidance on using this scorecard and rating a pre-job safety meeting follows.

INGAA FOUNDATION	Construction Safety & Quality Consensus Guidelines	Job Safety Analysis		
		Document	Revision	Date
		CS-G-2	2	10/22/24

This page provides example characteristics of a high-quality pre-job safety meeting. This is not a comprehensive list and the observer should use their best judgement when scoring.

	Statement	Weight
1	**Everyone performing the job was present at the meeting**	☐ Everyone performing the planned task was present for the entire pre-job meeting. ☐ If working alone, plans were discussed with a manager, mentor, or co-worker.
2	**The discussion was held as close to the work as reasonably possible.**	☐ Meeting was held at or near where the work will be performed. ☐ Workspace was reviewed by the crew before starting the meeting.
3	**Work steps required to complete the job were identified and discussed.**	☐ Crew identified and discussed the major work steps. ☐ Facilitator confirmed the major work steps and plans to address changes and provided corrections if necessary.
4	**Necessary tools and equipment were identified and discussed.**	☐ Crew identified and discussed tools and equipment needed to safely complete the work. ☐ Facilitator confirmed that the crew had all necessary tools and equipment.
5	**Hazards associated with the job were identified and discussed.**	☐ Crew identified and discussed hazards associated with their tasks.
6	**Hazards posed by the environment or surrounding work were identified and discussed.**	☐ Crew identified and discussed the hazards created by other crews. ☐ Crew discussed how hazards they create may impact other crews. ☐ Crew identified and discussed hazards posed by the environment.
7	**Controls for each hazard were identified and discussed.**	☐ Crew identified and discussed controls or management strategies associated with each identified hazard.
8	**All life-threatening hazards and their controls were emphasized.**	☐ Crew emphasized all hazards with the potential to cause serious injury or fatality. ☐ Crew emphasized all controls for all hazards with potential to cause serious injury or fatality.
9	**Hazards and necessary controls were documented.**	☐ Crew completed required pre-job documentation. ☐ Facilitator confirmed that pre-job documentation is readily accessible.

	Statement	Weight
10	**All required permits were obtained and reviewed.**	☐ Facilitator confirmed that all required work permits were obtained and readily accessible.
11	**Potential changes were identified and discussed and a plan to address change was created.**	☐ Crew identified and discussed possible changes to the work and work environment. ☐ Crew discussed the impacts of those changes on the safety.
12	**The importance of stopping work to address and unexpected change, disruption, or hazard was discussed.**	☐ Crew identified and discussed potential work conditions to use Stop Work Authority. ☐ Crew discussed the protocol for using Stop Work Authority.
13	**Emergency response plans were reviewed, including individual roles and responsibilities.**	☐ Crew identified potential emergencies. ☐ Crew discussed the protocol to address emergencies. ☐ Crew discussed individual roles and responsibilities during and emergency.
14	**Crew actively demonstrated their understanding of their work steps, hazards and controls.**	☐ Crew verbally acknowledged the hazards and controls. ☐ Crew demonstrated that they understand the safety expectations. ☐ Facilitator confirmed that the crew members understand their roles and responsibilities.
15	**All crew members participated in the discussion by identifying hazards and controls.**	☐ Crew was active in the conversation by identifying hazards and controls, voicing comments or concerns, and providing specific details.

Source: Construction Safety Research Alliance: https://www.csra.colorado.edu/