

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	HSE Manual Program List (TOC)			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-000	Pages	2	Rev. 8.0
Procedure Owner	Safety Manager	Effective Date	ongoing	

Document No.	Title	Revision	Date
NGE-HSE-001	HSE Policy Statement	08	01/20/2023
NGE-HSE-002	Code of Safety Practices	01	03/02/2015
NGE-HSE-003	Access to Employee Medical Records	02	07/06/2022
NGE-HSE-004			
NGE-HSE-005	Benzene Awareness	03	07/06/2022
NGE-HSE-006	Bloodborne Pathogens	02	07/07/2022
NGE-HSE-007	Confined Space	04	07/07/2022
NGE-HSE-008	Disciplinary Program	02	07/07/2022
NGE-HSE-009	Driving and Vehicle Safety	03	07/07/2022
NGE-HSE-010	Electrical Safety	03	07/06/2022
NGE-HSE-011	Emergency Action Plan	03	02/21/2023
NGE-HSE-012	Fall Protection	03	07/07/2022
NGE-HSE-013	Fatigue Management	03	07/13/2022
NGE-HSE-014	Fire Prevention and Fire Protection	03	07/13/2022
NGE-HSE-015			
NGE-HSE-016	Housekeeping & General Waste Management	02	07/13/2022
NGE-HSE-017	Hand and Power Tools	02	07/13/2022
NGE-HSE-018	Hazard Communication	04	07/13/2022
NGE-HSE-019	HAZWOPER and RCRA	03	07/13/2022
NGE-HSE-020			
NGE-HSE-021			
NGE-HSE-022	Hydrogen Sulfide (H ₂ S) Awareness	02	07/14/2022
NGE-HSE-023	Incident Reporting & Investigation	04	07/14/2022
NGE-HSE-024	Ladder and Stairway Safety	03	07/14/2022
NGE-HSE-025	Lead Safety Awareness	03	07/14/2022
NGE-HSE-026	Control of Hazardous Energy - LOTO	03	07/14/2022
NGE-HSE-027	NORM - Natural Occurring Radioactive Material	02	08/18/2022
NGE-HSE-028	Personal Protective Equipment (PPE)	02	07/14/2022
NGE-HSE-029			
NGE-HSE-030	Risk Assessment – Hazard Identification	03	08/18/2022
NGE-HSE-031	Spill Prevention / Response	02	08/18/2022
NGE-HSE-032	Stop Work Authority	02	08/18/2022
NGE-HSE-033	Transportation of Hazardous Materials	02	08/22/2022
NGE-HSE-034	Working Near Water	02	08/22/2022
NGE-HSE-035	Aerial Lift Safety	01	08/22/2022
NGE-HSE-036	Compressed Gases Safety	02	08/22/2022
NGE-HSE-037	Contractor Management	02	08/22/2022
NGE-HSE-037a	Contractor Questionnaire	00	08/22/2022
NGE-HSE-037b	Contractor Pre-Qualification Scoring	00	08/22/2022
NGE-HSE-037c	Contractor Management - Task List-Questionnaire	00	08/22/2022
NGE-HSE-038	Hot Work Safety	02	08/26/2022
NGE-HSE-038a	Hot Work Appendix A	00	08/26/2022

Document No.	Title	Revision	Date
NGE-HSE-040	NFPA 70E - Electric Arc Safety	02	08/26/2022
NGE-HSE-041	Hot and Cold Weather Safety	03	08/26/2022
NGE-HSE-042	Short Service Employee	04	08/26/2022
NGE-HSE-043	Behavior Based Safety	01	09/01/2022
NGE-HSE-043a	Behavior Based Safety Card	00	09/01/2022
NGE-HSE-044	Fit for Duty	01	09/01/2022
NGE-HSE-045	Job Competency	01	09/01/2022
NGE-HSE-046	Lone Worker Safety	01	09/01/2022
NGE-HSE-047	Return to Work	02	09/01/2022
NGE-HSE-048	Rigging Safety	01	09/01/2022
NGE-HSE-049	Mobile Equipment Safety	01	09/01/2022
NGE-HSE-050	Environmental Sustainability	01	09/01/2022
NGE-HSE-051	Manual Materials Handling	01	09/06/2022
NGE-HSE-052	Preventive Maintenance	01	09/06/2022
NGE-HSE-053	Powered Industrial Trucks	01	09/06/2022
NGE-HSE-054	Silica Exposure Control Plan	02	09/06/2022
NGE-HSE-055	Asbestos Awareness	01	09/06/2022
NGE-HSE-056	Medical Case Management Program	04	10/10/2022
NGE-HSE-057			
NGE-HSE- 058	Commercial Driver Qualifications and Safety	02	09/07/2022
NGE-HSE-059	Gas Hazards Awareness	01	09/06/2022
NGE-HSE-060			
NGE-HSE-061	Pandemic Preparedness Plan	01	09/14/2022
NGE-HSE-062	Excavating and Trenching Safety	00	09/14/2022
NGE-HSE-063	Training Policy	00	12/21/2023
NGE-HSE-099			

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	HSE Policy Statement			
Applicability	Novel Geo-Environmental, Inc.– Employees & Subcontractors			
Procedure Number	NGE-HSE-001	Pages	2	Rev. 8.0
Procedure Owner	Safety Manager	Effective Date	01.20.23	

HSE Policy Statement

Novel Geo-Environmental, Inc. is committed to providing a safe and healthy workplace for our employees and subcontractors. Novel Geo-Environmental, Inc. will always conduct its business operations in a sustainable and environmentally responsible manner. The Health, Safety, and Environmental management system is designed with these core values in mind and is the shared responsibility of every employee and subcontractor.

It is Our policy to:

- Comply with all health, safety and environmental laws and regulations.
- Cooperate with local, state, and federal agencies in their inspection and enforcement activities.
- Incorporate health, safety and environmental considerations in the company's planning and operational decisions.
- Commit to the resources necessary for the successful implementation of this HSE Policy.
- Manage our business to prevent incidents that could result in harm to people, property, or the environment.
- Develop and communicate health, safety and environmental objectives throughout the company so that all employees understand their individual responsibilities and are appropriately trained in carrying out those objectives.
- Conduct periodic assessments of operations to evaluate, measure and assure health, safety and environmental performance and compliance.
- Provide an effective HSE management system that drives continuous review and improvement, as well as employee adherence to Novel Geo-Environmental, Inc. processes and requirements.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Provide a work environment free from unsafe conditions or activities.
- Demonstrate HSE excellent by following all regulatory, client and company requirements.
- Communicate and strictly enforce all HSE policies to employees and subcontractors.
- Assure accountability by including HSE metrics in annual employee performance reviews and operational goals.
- Provide employees with the appropriate tools and training to successfully complete each job safely.
- Require the use of the necessary personal protective equipment by all employees.
- Conduct and document periodic safety and environmental meetings.
- Perform regular safety and environmental assessments and promptly correct substandard conditions.
- Ensure all employees and subcontractors are qualified to perform assigned job duties.
- Analyze HSE performance when evaluating service contracts and conduct third-party contractor audits.
- Require all injuries, vehicle incidents, environmental releases, near misses, fires, and any other unsafe incidents to be reported, tracked, investigated, and corrected.

Employees

- Follow all regulatory, client and company HSE policies and requirements.
- Promptly report all unsafe conditions and practices (including those of subcontractors) to

Management.

- Stop any task/job immediately if observing an unsafe act being performed or in the presence of an unsafe condition.
- Immediately report all injuries, vehicle incidents, environmental releases, near misses, fires, and any other unsafe incidents to management.
- Wear all the necessary personal protective equipment for the job task.
- Actively participate in safety and environmental meetings and training classes.
- Actively participate in safety and environmental assessments.

HSE Audits and Inspections

Novel Geo-Environmental, Inc. has a system for identifying and evaluating workplace hazards whenever new substances, procedures or processes are introduced into the workplace. This system requires periodic inspections for all safety and health hazards. All inspections are to be documented. Hazards must be corrected in order of priority based on severity in an expeditious manner.

Management or his/her competent designate will inspect the operation's facilities/job sites at least quarterly. During the inspection, Management or his/her competent designate will document the job site hazards or unsafe procedures, materials or equipment observed during the inspection. One copy of the report will be filed at the main office and another copy will be sent to the manager/supervisor directly responsible for the location or work procedure.

Each manager/supervisor receiving an inspection report that has corrections to be made must respond, in writing, to Management or his/her competent designate within 14 days. The response will note the estimated time to make necessary corrections or to develop alternative work procedures as uncovered during the inspection. The manager/supervisor's response may also include other suggestions to improve safety within his/her area of responsibility.

Management or his/her competent designate will track all corrective actions to completion.

Other inspections will be conducted:

- Whenever new substances, processes, procedures, or equipment are introduced to the workplace that represent a new occupational safety and health hazard; and
- Whenever the Management or his/her competent designate is made aware of a new or previously unrecognized hazard.

When an imminent hazard exists which cannot be immediately abated without endangering employee(s) and/ or property, Management or his/her competent designate will remove all exposed personnel from the area except those necessary to correct the existing condition. Employees necessary to correct the hazardous condition will be provided with the necessary safeguards and training.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
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Procedure Owner	Safety Manager	Effective Date	02.07.23	

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Novel Geo-Environmental, Inc.'s senior leadership has reviewed and approved this policy statement.

Amy L. Veltri, CEO

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Access to Employee Exposure & Medical Records			
Applicability	Novel Geo-Environmental, Inc.– Employees & Subcontractors			
Procedure Number	NGE-HSE-003	Pages	4	Rev. 2.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

The purpose of this procedure is to insure right of access to relevant exposure and medical records to employees and/or their designated representatives. It also provides representatives of the Assistant Secretary a right of access to these records in order to fulfill responsibilities under the Occupational Safety and Health Act.

Scope

This Program is applicable to all employees of Novel Geo-Environmental, Inc. that have work-related medical records.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Manager of Administrative Services

- Responsible for the review, implementation and maintenance of the local worksite medical records procedure.

Employees

- All shall be familiar with this procedure and have access to their records.

Procedure

This section applies to employees who make, maintain, contract for, or have access to employee exposure or medical records, or analyses thereof, pertaining to employees exposed to toxic substances or harmful physical agents.

This section applies to all employee exposure and medical records, and analyses thereof, of such employees, whether or not specific occupational safety and health standards mandate the records.

This section applies to all employee exposure and medical records, and analyses thereof, made or maintained in any manner, including on an in-house or contractual basis.

Records Retention

Unless a specific occupational safety and health standard provides a different period of time, each employer will assure the preservation and retention of records as follows:

The medical record for each employee will be preserved and maintained for at least the duration of employment plus thirty (30) years, except that the following types of records need not be retained for any specified period:

- Health insurance claims records maintained separately from the employer's medical program and its records.

- First aid records (not including medical histories) of one- time treatment and subsequent observation of minor scratches, cuts, burns, splinters, and the like which do not involve medical treatment, loss of consciousness, restriction of work or motion, or transfer to another job, if made on-site by a non-physician and if maintained separately from the employer's medical program and its records.
- The medical records of employees who have worked for less than (1) year for the employer need not be retained beyond the term of employment if they are provided to employee upon the termination of employment.

Each employee exposure record will be preserved and maintained for at least thirty (30) years, except that:

- Background data to environmental (workplace) monitoring or measuring, such as laboratory reports and worksheets, need only be retained for one (1) year so long as the sampling results, - the collection methodology (sampling plan), a description of the analytical and mathematical methods used, and a summary of other background data relevant to interpretation of the results obtained, are retained for at least thirty (30) years.
- Safety data sheets and paragraph (c) (5)(iv), 29 CFR 1910.1020 records concerning the identity of a substance or agent need not be retained for any specified period as long as some record of the identity (chemical name if known) of the substance or agent, where it was used, and when it was used is retained for at least thirty (30) years.
- Analyses using exposure or medical records. Each analysis using exposure or medical records will be preserved and maintained for at least thirty (30) years.
- 29 CFR 1910.1020 does not mandate the form, manner, or process by which an employer preserves a record so long as the information contained in the record is preserved and retrievable, except that chest X-ray films will be preserved in their original state. claim forms provided that either the analysis must have been reported to the employer or no further work is being done by the person responsible for preparing the analysis.

Access to Records

The Manager of Administrative Services will maintain applicable medical and exposure records for all employees. All requests to access medical and exposure records and analysis based on those records must be submitted to the Manager of Administrative Services using the forms provided for that purpose.

Whenever an employee or designated representative requests a copy of a record, Novel Geo-Environmental, Inc. shall assure that record copies must be provided at no cost.

Whenever an employee or designated representative requests access to a record, Novel Geo-Environmental, Inc. shall assure that access is provided in a reasonable time, place, and manner. If Novel Geo-Environmental, Inc. cannot reasonably provide access to the record within fifteen (15) working days Novel Geo-Environmental, Inc. shall within the fifteen (15) working day apprise the employee or designated representative requesting the record of the reason for the delay and the earliest date when the record can be made available.

Novel Geo-Environmental, Inc. may require of the requester only such information as should be readily known to the requester and which may be necessary to locate or identify the records being requested (e.g. dates and locations where the employee worked during the time period in question).

Whenever an employee or designated representative requests a copy of a record, the employer will assure that either:

- A copy of the record is provided without cost to the employee or representative.
- The necessary mechanical copying facilities (e.g., photocopying) are made available without cost to the employee or representative for copying the record.

- The record is loaned to the employee or representative for a reasonable time to enable a copy to be made.
- In the case of an original X-ray, Novel Geo-Environmental, Inc. may restrict access to on-site examination or make other suitable arrangements for the temporary loan of the X-ray.
- Whenever a record has been previously provided without cost to an employee or designated representative, Novel Geo-Environmental, Inc. may charge a reasonable, non-discriminatory administrative costs (i.e., search and copying expenses but not including overhead expenses) for a request by the employee or designated representative for additional copies of the record, except that:

Employee Exposure Record

- An exposure record relevant to the employee consists of:
- A record which measures or monitors the amount of a toxic substance or harmful physical agent to which the employee is or has been exposed.
- In the absence of such directly relevant records, such records of other employees with past or present job duties or working conditions related to or similar to those of the employee to the extent necessary to reasonably indicate the amount and nature of the toxic substances or harmful physical agents to which the employee is or has been subjected.
- Exposure records to the extent necessary to reasonably indicate the amount and nature of the toxic substances or harmful physical agents at workplaces or under working conditions to which the employee is being assigned or transferred.
- Requests by designated representatives for access to employee exposure records for which consent has not been granted will be in writing and will specify:
- The record requested to be disclosed.
- The occupational health need for gaining access to these records.
- years

Employee Medical Records

Novel Geo-Environmental, Inc. will, upon request, assure the access of each employee to their own employee medical record. Novel Geo-Environmental, Inc. will, upon request, assure the access of each designated representative to the employee medical records of any employee who has given the designated representative specific written consent.

Whenever access to employee medical records is requested, a physician representing Novel Geo-Environmental, Inc. may recommend that the employee or designated representative:

- Consult with the physician for the purposes of reviewing and discussing the records requested.
- Accept a summary of material facts and opinions in lieu of the records requested.
- Accept release of the requested records only to a physician or other designated representative.

Whenever an employee requests access to his or her employee medical records, and a physician representing the employer believes that direct employee access to information contained in the records regarding a specific diagnosis of a terminal illness or a psychiatric condition could be detrimental to the employee's health, the employer may inform the employee that access will only be provided to a designated representative of the employee having specific written consent. The employee's request for direct access to this information only will be denied. Where a designated representative with specific written consent requests access to information so withheld, Novel Geo-Environmental, Inc. will assure the access of the designated representative to this information, even when it is known that the designated representative will give the information to the employee.

A physician, nurse, or other responsible health care personnel maintaining employee medical records may delete from requested medical records the identity of a family member, personal friend, or fellow employee who has provided confidential information concerning an employee's health status.

Analysis Using Exposure or Medical Records

Novel Geo-Environmental, Inc. will, upon request, assure the access of each employee and designated representative to each analysis using exposure or medical records concerning the employee's working conditions or workplace.

Whenever access is requested to an analysis which reports the contents of employee medical records by either direct identifier (name, address, social security number, payroll number, etc.) or by information which could reasonably be used under the circumstances indirectly to identify specific employees (exact age, height, weight, race, sex, date of initial employment, job title, etc.), Novel Geo-Environmental, Inc. will assure that personal identifiers are removed before access is provided. If we can demonstrate that removal of personal identifiers from an analysis is not feasible, access to the personally identifiable portions of the analysis need not be provided.

OSHA Access

Novel Geo-Environmental, Inc. will, upon request, and without derogation of any rights under the Constitution or the Occupational Safety and Health Act of 1970, 29 U.S.C. 651, that the employer chooses to exercise, assure the prompt access of representatives of the Assistant Secretary of Labor for Occupational Safety and Health to employee exposure and medical records and to analyses using exposure or medical records. Rules of agency practice and procedure governing OSHA access to employee medical records are contained in 29 CFR 1913.10.

Whenever OSHA seeks access to personally identifiable employee medical information by presenting to the employer a written access order pursuant to 29 CFR 1913.10(d), the employer will prominently post a copy of the written access order and its accompanying cover letter for at least fifteen (15) working days.

Training

Employees will be trained initially on this Program as part of the new hire orientation and annually thereafter.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Benzene Awareness			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-005	Pages	5	Rev. 3.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

The purpose of this program is to define work practices, administrative procedures and engineering controls to protect employees exposed to benzene concentrations above the OSHA action level. This plan shall be implemented and kept current by the Safety Manager as required to reflect the most recent exposure monitoring data.

Scope

This program covers all employees who may be exposed to benzene in the course of completing job duties. This written plan shall be made available to the Assistant Secretary, the Director, affected employees and designated employee representatives. This document covers Novel Geo-Environmental, Inc. employees and contractors and shall be used on owned premises, and non-owned or operated sites. Employees will be made aware of provisions of site-specific contingency/emergency plans by either Novel Geo-Environmental, Inc. or the site owner.

The Novel Geo-Environmental, Inc. Safety Manager will develop and implement project/task specific benzene control procedures prior to the start of activities that may include exposure to benzene. Novel Geo-Environmental, Inc. will be aware of an owner's contingency plan provisions and all employees must be informed where benzene is used in a host site and aware of additional site safety rules.

Employees working in petroleum refining plants and providing field maintenance or other services on tanks containing petroleum-based products have the potential for exposure to Benzene.

Definitions

- Action Level – means an airborne concentration of benzene of 0.5 ppm calculated as an 8-hour time-weighted average.
- Benzene – a toxic, colorless liquid or gaseous material. Benzene has an aromatic odor, is not soluble in water and is flammable.
- Employee exposure – exposure to airborne benzene that would occur if the employee were not using respiratory protective equipment.
- Health Effects – Short-term exposure causes depression of the central nervous system (CNS), marked by drowsiness, dizziness, being irritable, being euphoric, headache, nausea, loss of coordination, confusion and unconsciousness. No effects are expected at 25 ppm. Exposure to 50 to 150 ppm produces headache, and tiredness. Eye and skin irritation, nose and throat irritation have also been reported following short-term exposure.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy
- Ensure personnel are aware of work that has the potential of exposure to benzene.

- Ensure individuals responsible for monitoring areas of exposure are properly trained.
- Ensure personnel receive documented medical surveillance exams.
- Ensure that medical exams are performed if an overexposure or suspected overexposure occurs.

Site Manager

- Ensure employees have the appropriate personal protective equipment (PPE) and are properly trained in its use and care.
- Ensure employees comply with the benzene control program.

Safety Manager

- In coordination with the Management, develop and implement project/task specific benzene control procedures prior to the start of activities that may include exposure to benzene.
- Coordinate monitoring activities, ensuring monitoring equipment is in proper working order and, as necessary, modifying the benzene control procedures to reflect exposure monitoring data.
- Maintain the benzene control program, notify management of any regulatory changes and ensure compliance with regulatory, client and corporate requirements.
- Update program based on the most recent exposure monitoring data.
- Coordinate training activities.
- Coordinate the medical surveillance program, including maintenance of medical records and administration of exams.
- Ensure, that due to the flammability of benzene, fire extinguishers shall always be readily available

Employees

- Comply with the benzene control program.
- Know where benzene is used at Novel Geo-Environmental, Inc. or client facilities and follow any of additional site safety rules required by the client.
- Comply with the medical surveillance program and attend examinations as required.
- Maintain respiratory protection equipment in good working order and notify the supervisor or Safety Manager of any problems prior to starting work
- Review safety data sheets or consult with the supervisor to identify any container with benzene containing material.
- Not smoke in prohibited areas where benzene is present.
- Report exposures resulting in any symptoms immediately.

Procedure

Permissible Exposure Limits

The 8-hour time-weighted average limit (TWA) for benzene is 1 ppm.

The short-term exposure limit (STEL) for benzene is 5 ppm.

Regulated Areas

- Novel Geo-Environmental, Inc. shall establish regulated areas wherever airborne concentration of benzene exceeds or can reasonably be expected to exceed the PEL or STEL.

- Novel Geo-Environmental, Inc. will control access to regulated areas and limit access to authorized personnel.
- The following signage shall be posted in all regulated areas when the potential exists for benzene vapors to be in excess of the PEL.

DANGER – BENZENE REGULATED AREA CANCER CAUSING AGENT FLAMMABLE – NO SMOKING AUTHORIZED PERSONNEL ONLY RESPRIATOR REQUIRED

Methods of Compliance

- The benzene control program shall be written and implemented to comply with OSHA regulation 29 CFR 1910.1028 (Benzene).
- Novel Geo-Environmental, Inc. shall establish and implement a written program to reduce employee exposure to or below the PEL primarily by means of engineering and work practice controls to ensure compliance with the benzene control program and federal and state requirements.

Exposure Monitoring

Exposure monitoring shall be performed for the 8-hour TWAs or for the 15-minute STEL exposure when:

- Regulated areas are established
- An emergency occurs that could require a regulated area
- A change in the production, process, control equipment, personnel or work practices may result in new or additional exposure to benzene
- Cleanup of a spill, leak repair, or rupture occurs
- If the monitoring required reveals employee exposure at or above the action level but at or below the TWA, Novel Geo-Environmental, Inc. shall repeat the monitoring for each employee at least every year.
- If the initial monitoring reveals employee exposure to be below the action level Novel Geo-Environmental, Inc. may discontinue the monitoring.
- If the monitoring reveals that employee exposures, as indicated by at least two consecutive measurements taken at least 7 days apart, are below the action level Novel Geo-Environmental, Inc. may discontinue to monitor.
- Direct reading detection instruments will be used where benzene vapors may be present in work areas not previously monitored.
- Personal monitoring will be performed by use of vapor monitoring badges following manufacturer requirements. All samples shall be analyzed at an AIHA (American Industrial Hygiene Association) certified laboratory.

Medical Surveillance

- Baseline and annual medical exams shall be provided to employees that may work or are anticipated to participate in operations more than 10 times per year or may work in areas where benzene exposures may exceed the PEL over 30 days per year.
- Novel Geo-Environmental, Inc. shall make available a medical surveillance program for employees who are or may be exposed to benzene at or above the action level 30 or more days per year; for employees who are or may be exposed to benzene at or above the PELs 10 or more days per year; for employees who have been exposed to more than 10 ppm of benzene for 30 or more days in a year prior to the effective date of the standard when employed by their current employer.
- Notification of monitoring results shall be provided to employees in writing within 15 working days of receipt of results.

Personal Protective Equipment

- PPE will be selected on the basis of its ability to prevent absorption, inhalation and ingestion.
- PPE will reflect the needs of the employee based on work conditions, amount and duration of exposure and other known environmental factors but shall contain as a minimum; boots, proper eye protection, gloves, sleeves, aprons and others as determined.
- PPE shall be provided and worn when appropriate to prevent eye contact and limit dermal exposure to liquid benzene. PPE must meet the requirements of 29 CFR 1910.133 and provided at no cost to the employees.

Respiratory Protection

- A respiratory protection program shall be established in accordance with 29 CFR 1910.134. Respiratory protection is required:
 - During the time period necessary to implement engineering controls or work practices.
 - When engineering and work practices are not feasible.
 - In emergencies.

Recordkeeping

- Medical surveillance records shall be maintained for 30 years after termination of employment
- Exposure monitoring records shall be maintained for 30 years after completion of the project
- Exposure and medical monitoring records shall be made available to affected employees or their representatives and to OSHA upon request
- The program shall be furnished upon request to the Assistant Secretary, the Director, affected employees and designated employee representatives

Communication of Benzene Hazards

- Signs and labels shall be posted at entrances of regulated areas
- The benzene control program shall be updated by the Novel Geo-Environmental, Inc. Safety Manager.
- Project site specific contingency and emergency procedures shall be updated by the Safety Manager and made available to project staff prior to beginning work at the specific site.
- The company shall provide employees with information and training at the time of their initial assignment to a work area where benzene is present. If exposures are above the action level, employees shall be provided with information and training at least annually thereafter.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Bloodborne Pathogens			
Applicability	Novel Geo-Environmental, Inc.– Employees & Subcontractors			
Procedure Number	NGE-HSE-006	Pages	5	Rev. 2.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for the protection from exposure, determining of exposure, reporting of an exposure, and procedures to follow after an actual or potential exposure to Bloodborne Pathogens. The content of this plan complies with OSHA Standard 29 CFR 1910.1030 (Occupational Exposure to Bloodborne Pathogens).

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. that has potential for exposure or an actual exposure to Bloodborne Pathogens that is work-related.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Definitions

Bloodborne Pathogens - microorganisms present in the human blood and other body fluids that can cause and carry bloodborne diseases including Human Immunodeficiency Virus (HIV) and Hepatitis B Virus (HBV).

Potentially infectious materials - human blood and all other body fluids or secretions that may cause or can cause and carry bloodborne diseases.

Universal Precautions - an infection control method whereby all human blood and body fluids are treated as if known to be infected with bloodborne pathogens.

Procedure

Availability of Procedure to Employees

The Bloodborne Exposure Control Plan is kept at all locations and shall be accessible to employees.

Reviews and Update of the Procedure

The procedure is reviewed annually and updated whenever changes are needed.

Exposure Determination

- There is no reasonably anticipated occupational exposure to bloodborne pathogens by employees of Novel Geo-Environmental, Inc. as providing first-aid and/or CPR is on a voluntary basis and is not a required job duty or collateral duty of the employees trained in first-aid and CPR.
- This exposure determination has been made without regards to the Personal Protective Equipment or other control methods that may be used by employees.

Exposure Reporting

- In case of an exposure or potential exposure incident, immediately report the incident following the NGE-HSE-023 Incident Investigation Procedure.
- The exposure will be documented exactly as an Incident in the Incident Reporting and Investigation Procedure. Care should be exercised to include in the Incident Report a list of first aid providers, name of the employee(s) involved in the exposure incident, a complete description of the exposure incident, witnesses, date and time, and if a blood exposure occurred.

Exposure Control

- Workers are encouraged to render first-aid measures to their self in as much as is possible. Coworkers are permitted to assist the injured worker in providing self-aid.
- Do not perform First-aid/CPR/AED unless specifically trained and currently certified to do so.
- Those employees voluntarily providing first-aid and/or CPR must use the necessary bloodborne exposure control equipment when treating an injured worker.

Work Practice Controls

- Employees Workers will use Universal Precautions and protect against contact with potentially infectious materials such as gloves, mask, eye protection, and aprons as necessary. This PPE will be provided to the employee without cost by Novel Geo-Environmental, Inc.
- Hands and other potentially contaminated skin surfaces will be washed immediately after assisting self first-aid or providing first aid. Antiseptic towelettes are available in the first-aid kits.
- Blood contaminated clothing will be disposed of using a biohazard waste service or specifically qualified laundry service. These materials should be placed in a container or a red plastic bag appropriately labeled with the "Bio-Hazard" symbol and sealed.
- Blood contaminated PPE will be disposed of using a biohazard waste service. This is to include all contaminated personal protective equipment (PPE) and any items contaminated with blood, such as gloves, bandages, paper towels. These materials should be placed in a leak proof container or a red plastic bag appropriately labeled with the Bio-Hazard symbol and sealed.
- Equipment or machinery that is contaminated with blood or other potentially infectious materials will be cleaned with an appropriate disinfectant such as a hospital-grade disinfectant or a mixture of 1 ½ cup of chlorine bleach to 1 gallon of fresh lukewarm water.
- When conducting CPR and to minimize the need for direct contact during mouth-to-mouth resuscitation, mouthpieces, resuscitation bags or other ventilation devices will be available for use in areas where the need for resuscitation may exist. Compression only CPR may also be provided and performed.

Post Exposure

When an incident occurs, an evaluation of the exposure must be performed by the Safety Manager.

Novel Geo-Environmental, Inc. will ensure that all medical evaluations and procedures including the Hepatitis B vaccine and vaccination series and post-exposure evaluation and follow-up, are made available at no cost to the employee, made available to the employee at a reasonable time and place, and performed by or under the supervision of a licensed physician or by or under the supervision of another licensed healthcare professional.

Novel Geo-Environmental, Inc. will make available the Hepatitis B vaccine and vaccination series to employees as part of a post-exposure evaluation and follow-up to all employees who have had an exposure incident. If the employee declines the vaccine, the employee will read and sign Appendix A of 1910.1030 "Hepatitis B Vaccine Declination" form Appendix A. The form will be maintained in the employee's Medical file for the duration of employment.

Following a report of an exposure incident, Novel Geo-Environmental, Inc. will make immediately available to the exposed employee a confidential medical evaluation and follow-up, including documentation of the route(s) of exposure, and the circumstances under which the exposure incident occurred, identification and documentation of the source individual, unless the employer can establish that identification is infeasible or prohibited by state or local law. The source individual's blood will be tested as soon as feasible and after consent is obtained in order to determine HBV and HIV infectivity. If consent is not obtained, the employer will establish that legally required consent cannot be obtained.

When the source individual's consent is not required by law, the source individual's blood, if available, will be tested and the results documented. When the source individual is already known to be infected with HBV or HIV, testing for the source individual's known HBV or HIV status need not be repeated. Results of the source individual's testing will be made available to the exposed employee, and the employee will be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

The exposed employee's blood will be collected as soon as feasible and tested after consent is obtained. If the employee consents to baseline blood collection but does not give consent at that time for HIV serologic testing, the sample will be preserved for at least 90 days. If, within 90 days of the exposure incident, the employee elects to have the baseline sample tested, such testing will be done as soon as feasible.

Post-Exposure and Follow Up

Novel Geo-Environmental, Inc. will provide, within 15 days of a medical evaluation of the potential exposure to bloodborne pathogens, the written opinion of the evaluating healthcare provider concerning the potential exposure. The healthcare professional's written opinion for Hepatitis B vaccination will be limited to whether Hepatitis B vaccination is indicated for an employee, and if the employee has received such vaccination. The healthcare professional's written opinion for post-exposure evaluation and follow-up will be limited information that the employee has been informed of the results of the evaluation; and that the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment. All other findings or diagnoses will remain confidential and will not be included in the written report. Counseling will also be offered to the employee(s) involved in the potential exposure incident.

Training

- The employee will be trained in this procedure at the time of initial hire or initial assignment and then annually after initial training.
- Training will include the explanation of bloodborne pathogens, means of exposure, methods to control exposures, clean-up of blood and other potentially infectious materials, personal hygiene, labeling, HBV vaccination, incident reporting, and exposure follow-up.
- Training Records will be maintained for a period of three years after the date of training. All training records will be available to the Assistant Secretary and the Director (OSHA) for examination and copying.

Medical and Exposure Records

- Medical records will be maintained for the duration of employment plus 30 years.
- Exposure records will be maintained for 30 years from date of last exposure.
- Medical records and Exposure records requested by an employee or designated representative will be made available within 15 working days of the written request. If the access cannot be provided within the 15 working days, Novel Geo-Environmental, Inc. will notify in writing the employee or designated representative requesting the record of the reason for the delay and the earliest date when the record can be made available.
- The initial copy of the records will be provided without cost to the employee or representative. Access to copying or printing of the records will be made available without cost to the employee or representative for copying the record. If necessary, the medical record may be loaned to the employee or representative for a reasonable time in order to copy the file.
- Any subsequent requests for medical records for the same employee a reasonable charge can be charged the requesting employee or designated representative.
- Records will be available according to 29CFR1910.1020(h) if the company ceases to exist.

Appendix A

HEPATITIS B VACCINATION DECLINATION FORM

Employee Name (print): _____

Employee ID#: _____

I understand that due to my occupational exposure to blood or other potential infectious materials I may be at risk of acquiring Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to myself. However, I decline the Hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If, in the future, I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Employee Signature

Date

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Confined Space Entry Safety			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-007	Pages	10	Rev. 4.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for the safe entry into Permit-Required and Non-Permit-Required Confined Spaces. This procedure details the steps to take to safely enter a space, alternative entry procedures, the reclassification of the confined space, and training requirements.

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. during operations that require the entry into a confined space as defined in this procedure.

Definitions

Acceptable Entry Conditions - the conditions that must exist in a confined space to allow entry and to ensure that employees involved with a confined space entry can safely enter into and work within the space.

Air Testing - the process by which the atmospheric hazards that may confront entrants of a permit space are *evaluated initially* to determine if Acceptable Entry Conditions are present immediately prior to entry. This usually requires the use of a pump on an air monitor.

Air Monitoring - the process by which the atmosphere within a permit space is *continuously monitored* using a calibrated direct-reading instrument/monitor to determine if Acceptable Entry Conditions are present during the entry operations. In the direct-reading instrument/monitor, the oxygen content will be tested first, then combustible gases and vapors, then the anticipated toxic gases and other atmospheric contaminants.

Confined Space - a space that meets all three of the following characteristics:

1. It is large enough and so configured that an employee can bodily enter and perform assigned work; and
2. It has limited or restricted means for entry or exit (examples of spaces with limited means of entry include tanks, vessels, silos, storage bins, hoppers, vaults, and pits); and
3. It is not designed for continuous employee occupancy.

Entry - the action by which a person passes through an opening into a confined space or a permit-required confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.

Permit-required Confined Space (permit space) - a space that is classified as a confined space as it meets all three specifications for being identified as a confined space and it also has one or more of the following characteristics:

- a. It contains or has a potential to contain a hazardous atmosphere; or
- b. It contains a material that has the potential for engulfing an entrant; or

- c. It has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or
- d. It contains any other recognized serious safety or health hazard.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Work Area Evaluation

All work areas in which employees have the potential to perform work will be evaluated for the characteristics of a confined space and a permit-required confined space (permit space). This evaluation will be conducted by a manager or a designate. Prior to the evaluation of the work areas, the manager or designate will be trained on identifying confined spaces and permit-required confined spaces.

Permit-required Confined Space Identification

All confined spaces classified as permit spaces will be identified by appropriate signs indicating that the spaces are Permit- Required Confined Spaces and entry is permitted only by this procedure. The signs will be placed at each potential entry point into the permit space.

Assigned Duties

The Entry Supervisor is the person responsible for determining if Acceptable Entry Conditions are present at a permit space where Entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required by this procedure. The following duties and responsibilities are assigned:

- Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure
- Verifies, by checking that the appropriate entries have been made on the permit, that all tests specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before signing the permit and allowing Entry to begin
- Terminates the Entry and cancels the permit as required by this procedure
- Verifies that rescue services are available and that the means for summoning them are operable
- Removes unauthorized individuals who enter or who attempt to enter the permit space during entry operations
- Determines that entry operations remain consistent with terms of the entry permit and that acceptable entry conditions are maintained. This determination is conducted when the responsibility for the permit space is transferred between Entry Supervisors and periodically according to the hazards and operations performed within the space.

The Attendant is the individual(s) stationed outside only one permit space who monitors the Entrants and who performs all Attendant's duties assigned in this procedure. The following duties and responsibilities are assigned:

- Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, possible behavioral effects, and consequences of the exposure
- Continuously maintain an accurate count of Entrants in the permit space
- Monitors only one confined space at a time
- Remains outside the permit space during entry operations until relieved by another Attendant
- Communicates with Entrants as necessary to monitor Entrants and to alert Entrants of the need to evacuate the space; Communication methods can be visual, hand signals, or via radio
- Monitors activities inside and outside the permit space to determine if it is safe for Entrants to remain in the space
- Orders the Entrants to evacuate the permit space immediately under the following conditions:
 - If a condition is detected that makes the permit space no longer meet the Acceptable Entry Conditions
 - If the behavioral effects of hazard exposure are detected
 - If a situation outside the space that could endanger the Entrants is detected
 - If the Attendant cannot effectively and safely perform all the duties
- Summon rescue and other emergency services as soon as it is determined that Entrants may need assistance to escape from permit space hazards
- Takes the following actions when unauthorized persons approach or enter a permit space while entry is underway:
 - Warn the unauthorized persons that they must stay away from the permit space;
 - Advise the unauthorized persons that they must exit immediately if they have entered the permit space
 - Inform the Entrants and the Entry Supervisor if unauthorized persons have entered the permit space
- Performs non-entry rescues as specified by the employer's rescue procedure
- Performs no duties that might interfere with the Attendant's primary duty to monitor and protect the authorized entrants.

The Entrant(s) is/are the employee(s) who is/are authorized by a Manager of Novel Geo-Environmental, Inc. or the designated Entry Supervisor to enter a permit space. The following duties and responsibilities are assigned:

- Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure
- Properly use personal protective equipment and other equipment such as monitors, ventilation, communications, lighting, barriers, and rescue equipment
- Communicate with the Attendant as necessary to enable the Attendant to monitor Entrant status and to enable the Attendant to alert Entrants of the need to evacuate the space
- Alert the attendant whenever:
 - The Entrant recognizes any warning sign or symptom of exposure to a dangerous situation
 - The Entrant detects a prohibited condition
- Exit from the permit space as quickly as possible whenever:
 - An order to evacuate is given by the Attendant or the Entry Supervisor
 - The Entrant recognizes any warning sign or symptom of exposure to a dangerous situation
 - The Entrant detects a prohibited condition
 - An evacuation alarm is activated

Entrants or their representative may participate in and review calibrated air monitoring data before entry into a confined space. Entrants or their representative request additional monitoring or air testing at any time.

Acceptable Entry Conditions

Entry into permit spaces is only after all of the following conditions are met:

- Oxygen level is at between 19.5% and 23.5%

- Combustible gases and vapors are in not in excess of 10% Lower Explosive Limit (LEL)
- Other substances in the atmosphere do not exceed the OSHA PEL. If no OSHA PEL is available, the ACGIH TLV will be followed.
 - Hydrogen Sulfide (ACGIH TLV) is 10 ppm
 - Carbon Monoxide (NIOSH REL) is 35 ppm
- Appropriate measures have been taken to control the unexpected start-up, or release of hazardous energy in accordance with the Control of Hazardous Energy (Lockout/Tagout) Procedure.

IDLH Conditions

Company employees will not work in Immediately Dangerous to Life and Health (IDLH) conditions.

Air Testing Results

Entrants or their representative may participate in and review calibrated air testing and monitoring data before entry into a confined space. Entrants or their representative request additional monitoring or air testing at any time.

Attendant and Multiple Confined Spaces

An Attendant is limited to monitoring one confined space operation/permit at any time. If there are multiple confined space operations occurring, each confined space operation/permit will have a separate Attendant. The reasoning is that one Attendant cannot effectively respond to an emergency in more than one confined space operation at a time.

Permit-required Confined Space Entry

If the space is properly isolated and results of Air Testing are above Acceptable Entry Conditions without local exhaust ventilation in operation, classify the operation as a Permit-Required Confined Space Entry.

For entry into a Permit-required Confined Space (permit space), the following steps will be completed and documented on the Permit-required Confined Space Entry Permit (Appendix A):

1. Isolate and empty the permit space from all hazards. Examples include closing valves, using blank flanges, double block & bleed, blind flange, spool pieces, and vent and drain.
2. Follow the Control of Hazardous Energy (Lockout/Tagout) Procedure to ensure no unexpected start-up or release of stored energy.
3. Ventilate the permit space using natural ventilation or mechanical ventilation such as fans and blowers to ventilate the permit space at a rate of at least four (4) volumes per hour, larger spaces require more ventilation. Make sure air supply is not contaminated by placing the fans and blowers so that the air supply is from fresh air uncontaminated with flammables, toxins, or other contaminants.
4. Conduct an informational briefing led by the Entry Supervisor, all Entrants and Attendants. The briefing will include reviewing the hazards of entry into and work in the permit space. The review of the hazards includes the signs and symptoms of exposure to the anticipated atmospheric contaminants. The personal protective equipment requirements and the rescue plan will be reviewed.
5. Test the air using a calibrated direct-reading instrument/monitor, the oxygen content will be tested first, then check for combustible gases and vapors, then for the anticipated atmospheric contaminants/toxic gases to ensure all are within the Acceptable Entry Conditions. Testing will be performed:
 - Prior to every entry when the space is vacant,
 - After a 10-minute ventilation period (if ventilation is necessary)
 - Hourly, at a minimum, for permit-required confined spaces
 - More frequently, if conditions or suspicions warrant.

All atmospheric testing will be documented on the permit.

Entrants or their representatives are given an opportunity to participate in and review calibrated air monitoring data before entry. Employees, or their representatives, are entitled to request additional monitoring at any time.

Any time an exposure limit is exceeded (PEL or TLV) or the Acceptable Entry Conditions are not met, no matter what the reason, all Entrants will immediately exit the permit space, and no entry will be made until atmospheric conditions are returned to within the Acceptable Entry Conditions.

6. Complete the Permit-required Confined Space Entry permit (Appendix A). The permit must be correctly and completely filled out prior to entry, must be signed by the Entry Supervisor, all of the Entrants, and the Attendant to be a valid permit. Permits are valid for one shift or 12 hours or for the duration of working the space, whichever is shorter. After one shift or 12 hours, the permit must be cancelled by the Entry Supervisor and another permit is initiated.
7. To enter the permit space and proceed with work, an Attendant will be posted near the entrance for the duration of the work. The Attendant will be in constant communication with the Entrants while the job is in progress. The Attendant will maintain the permit for the duration of the work.
8. When the work in the permit space is completed, the Entrants will remove all tools and debris from the permit space. The Entry Supervisor will ensure the space is returned to safe operating condition, and cancel the permit. The cancelled permit will be forwarded to the corporate office to be kept on file for at least one year.

Alternate Procedure for Entry into a Permit-required Confined Space Entry

For entry into a Permit-required Confined Space (permit space) where the only hazard of the permit space is an actual or potential hazardous atmosphere, the following steps will be completed and documented on the Permit-required Confined Space Entry Permit (Appendix A):

1. Isolate and empty the permit space from all hazards. Examples include closing valves, using blank flanges, double block & bleed, blind flange, spool pieces, and vent and drain.
2. Follow the Control of Hazardous Energy (Lockout/Tagout) Procedure to ensure no unexpected start-up or release of stored energy.
3. Ventilate the permit space with continuous forced air ventilation using mechanical ventilation such as fans and blowers to ventilate the permit space at a rate of at least four (4) volumes per hour, larger spaces require more ventilation. This use of continuous ventilation alone must be sufficient to maintain the permit space to meet the requirements of Acceptable Entry Conditions. Make sure air supply is not contaminated by placing the fans and blowers so that the air supply is from fresh air uncontaminated with flammables, toxins, or other contaminants.
4. Test the air using a calibrated direct-reading instrument/monitor, the oxygen content will be tested first, then check for combustible gases and vapors, then for the anticipated atmospheric contaminants/toxic gases to ensure all are within the Acceptable Entry Conditions. Testing will be performed:
 - Prior to every entry when the space is vacant,
 - After a 10-minute ventilation period,
 - Continuous monitoring of the air is necessary to ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere. The results of the air monitoring will be documented every 30 minutes on the permit.

There will be no hazardous atmosphere within the space whenever employee(s) are in the permit space. Employees will not enter the permit space until the forced air ventilation has eliminated any hazardous atmosphere. The continuous forced air ventilation will be so directed as to ventilate the immediate areas where employee(s) are or will be present within the permit space and will continue until all employee(s) have left the permit space.

Any time an exposure limit is exceeded (PEL or TLV) or the Acceptable Entry Conditions are not met, no matter what the reason, all employee(s) will immediately exit the permit space, and no entry will be made until atmospheric conditions are returned to within the Acceptable Entry Conditions.

5. Complete the appropriate sections on the Permit-required Confined Space Entry form (Appendix A). The permit must be correctly and completely filled out prior to entry, must be signed by the employee(s) entering the permit space.
6. When the work in the permit space is completed, the employee(s) will remove all tools and debris from the permit space. The employee(s) will ensure the space is returned to safe operating condition. The permit will be forwarded to the corporate office to be kept on file for at least one year.

This Alternate Procedure will not be utilized when entry into the permit space is necessary to conduct the atmospheric testing in step 4.

The results of the atmospheric monitoring are available to the employee(s) at any time during the entry into the permit space.

This Alternate Procedure does not require identification and use of Entry Supervisor, Attendant, or Entrants, or a formal rescue plan.

Non-Permit-required Confined Space Entry

For entry into a non-Permit-required Confined Space (confined space), the following steps will be completed and documented on the Permit-required Confined Space Entry Permit (Appendix A):

1. Isolate and empty the confined space from all hazards (if necessary). Examples include closing valves, using blank flanges, double block & bleed, blind flange, spool pieces, and vent and drain.
2. Follow the Control of Hazardous Energy (Lockout/Tagout) Procedure to ensure no unexpected start-up or release of stored energy.
3. Evaluate the confined space to determine that the confined space does not:
 - a. Contain or has a potential to contain a hazardous atmosphere; or
 - b. Contains a material that has the potential for engulfing an entrant; or
 - c. Have an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or
 - d. Contain any other recognized serious safety or health hazard.
4. Test the air using a calibrated direct-reading instrument/monitor, the oxygen content will be tested first, then check for combustible gases and vapors, then for the anticipated atmospheric contaminants/toxic gases to ensure all are within the Acceptable Entry Conditions.

Testing will be performed prior to every entry when the space is vacant. The results of the air monitoring will be documented on the permit.

There will be no hazardous atmosphere within the space whenever employee(s) are in the permit space.

Any time an exposure limit is exceeded (PEL or TLV) or the Acceptable Entry Conditions are not met, no matter what the reason, all employee(s) will immediately exit the permit space, and no entry will be made until atmospheric conditions are returned to within the Acceptable Entry Conditions.

5. Complete the appropriate sections on the Permit-required Confined Space Entry form (Appendix A). The permit must be correctly and completely filled out prior to entry, must be signed by the employee(s) entering the permit space.
6. When the work in the permit space is completed, the employee(s) will remove all tools and debris from the permit space. The employee(s) will ensure the space is returned to safe operating condition. The permit will be forwarded to the corporate office to be kept on file for at least one year.

This Non-Permit-required Confined Space Entry Procedure does not require identification and use of Entry Supervisor, Attendant, or Entrants, or a formal rescue plan.

Reclassification of a Permit-Required Confined Space

A confined space classified as a permit-required confined space may be reclassified as a non-permit confined space under the following condition:

1. The permit space poses no actual or potential atmospheric hazards and if all hazards within the confined space are eliminated without entry into the confined space. The permit space may be reclassified as a non-permit confined space for as long as the non-atmospheric hazards remain eliminated.

Control of atmospheric hazards through forced air ventilation does not constitute elimination of the hazards.

If it is necessary to enter the permit space to eliminate hazards, such entry will be performed according to this procedure with the space classified as a permit space. If testing and inspection during that entry demonstrate that the hazards within the permit space have been eliminated, the permit space may be reclassified as a non-permit confined space for as long as the hazards remain eliminated.

The reclassification will be documented on the Confined Space Entry Permit (Appendix A) The Permit will be made available to all Entrants.

If hazards arise within a permit space that has been reclassified to a non-permit space, each Entrant will immediately exit the space. The space will be reevaluated to determine whether it must be reclassified as a permit space.

Rescue Plans

General Information:

- The local fire department may not be equipped or properly trained to perform specific confined space rescue operations.
- Safety Data Sheet's for substances that an injured Entrant(s) may have been exposed to must be provided to the medical facility treating the injured worker.
- If the host operator is designated to provide rescue services for the company, the agreement of services must be included in the contract for the job.

The following Rescue Plan will be followed for Permit-required Confined Space Entry: Non-entry rescue will be utilized. Non-entry rescue consists of the Entrant(s) wearing a full body harness with a retrieval line (life line) attached at the center of the entrant's back near shoulder level. The other end of the retrieval line will be attached to a mechanical device or fixed point outside the permit space in such a manner that rescue can begin as soon as the rescuer becomes aware that rescue is necessary.

A mechanical device will be utilized to retrieve Entrant(s) from vertical type permit spaces more than 5 feet deep.

The Attendant or Entry Supervisor will notify the local fire department for additional rescue assistance on an as-needed basis. The Emergency Procedures will be followed according to the situation.

It may be necessary to develop a more complex Rescue Plan for more Complex Entry Operations

During the informal briefing, a review of the procedure for no-entry rescue and/or contacting rescue service will be conducted. The Entry Supervisor will verify that rescue services are available.

The following Rescue Plan will be followed for the Alternate Procedure for Entry into a Permit-required Confined Space Entry: The other employees in close proximity to the confined space will notify the local fire department for additional rescue assistance on an as-needed basis. The Emergency Procedures will be followed according to the situation. There is no requirement for the use of lifelines and full-body harnesses in this plan.

Management, at their discretion, may require the Rescue Plan for the Alternate Procedure for Entry into a Permit-required Confined Space Entry be the same as Rescue Plan will be followed for Permit-required

Confined Space Entry. This would be for circumstances such as the accumulation of an unknown hazardous atmosphere or if an employee experiences a medical emergency. This determination will be made during the planning process prior to confined space entry operations beginning.

The following Rescue Plan will be followed for Non-Permit-required Confined Space Entry: The other employees in close proximity to the confined space will notify the local fire department for additional rescue assistance on an as-needed basis. The Emergency Procedures will be followed according to the situation. There is no requirement for the use of lifelines and full-body harnesses in this plan.

Management, at their discretion, may require the Rescue Plan for the Non-Permit-required Confined Space Entry be the same as Rescue Plan will be followed for Permit-required Confined Space Entry. This would be for circumstances such as the accumulation of an unknown hazardous atmosphere or if an employee experiences a medical emergency. This determination will be made during the planning process prior to confined space entry operations beginning.

No rescue services or planning are needed for IDLH conditions as employees are not permitted to work in IDLH conditions.

Multiple Contractors Site

Novel Geo-Environmental, Inc. Management or designate will communicate and coordinate with other contractors on the work site to coordinate entry operations when employees of more than one employer are working simultaneously as Authorized Entrants in a permit space, so that employees of one employer do not endanger the employees of any other employer.

Training

Employees will be trained on this entire procedure so that when completed, the employees will be able to function in any capacity deemed by a Manager of Novel Geo-Environmental, Inc. as an Entry Supervisor, Attendant, and/or Entrant. The training will ensure that this procedure is understood by the employees and that the knowledge and skills required to follow this procedure are acquired by the employees.

Additional and specific exchange of information is needed at each pre-entry informational briefing according to the tasks that the employees will be assigned.

This training will be provided to all employees having the potential to be involved in a confined space entry listed in this procedure. The training will be given prior to the employee being assigned duties, before there is a change in assigned duties, whenever there is a change in permit space operations that presents a hazard about which an employee has not previously been trained, and whenever a Manager of Novel Geo-Environmental, Inc. has reason to believe either that there are deviations from the permit space entry procedures or that there are inadequacies in the employee's knowledge or use of this procedure.

The training will establish employee proficiency and understanding. The Instructor will certify that employee training has been accomplished and is being kept up to date. The certification will contain each employee's name and dates of training for documentation.

Permit Review Process

All Confined Space Entry Permits, once completed, will be forwarded to the corporate office to be kept on file for at least one year. Each permit will be reviewed by the Safety Manager to ensure the adequacy of the overall program and revise the program as necessary. The review of the permits and program, using the canceled permits, ensure that employees participating in entry operations are protected from permit space hazards.

8 Hour Permit Required-Confined Space Entry Permit

Space Identification Number: _____ Description: _____

Client Name: _____

Location of Confined Space: _____

Purpose of Entry/Work Performed: _____

Confined Space Hazards

(Indicate hazard and State how the hazard was eliminated. If hazard doesn't exist enter n/a)

Atmospheric Hazards: ☐ O2 Deficiency ☐ O2 Enrichment ☐ Toxic ☐ Flammable ☐ Radiation ☐ N/A

Other _____

Mechanical Hazards: ☐ Agitators ☐ Blenders ☐ Fan Blades ☐ Pumps ☐ Drive Chains ☐ N/A

Other _____

Chemical Hazards: ☐ Acids ☐ Caustics ☐ Skin Irritant ☐ VOC's ☐ Oxidizers ☐ H₂S ☐ N/A

Other _____

Electrical Hazards: ☐ Lines and Cables ☐ High Voltage ☐ Transformers ☐ Exposed Terminals ☐ N/A Other _____

Engulfment Hazards: ☐ Liquids ☐ Plastics/Grains ☐ Inwardly Converging Walls ☐ Sloping Floors ☐ N/A

Other _____

Ignition Hazards: ☐ Open Flames ☐ Heating Sources ☐ Welding/Cutting/Grinding ☐ Sparks ☐ N/A

Other _____

Process Hazards: ☐ Pressurized Fluids ☐ Chemicals ☐ Hydraulic Fluid ☐ Traffic Hazards ☐ Cranes ☐ N/A

Other _____

Environmental Hazards: ☐ Heat ☐ Cold ☐ Ice ☐ Insects ☐ Vermin ☐ Slippery Surfaces ☐ Terrain ☐ N/A

Other _____

Noise Hazards: ☐ Loud Equipment ☐ Ambient Noise Levels ☐ N/A

Other _____

Potential Other Hazards: _____

Client Contact's Name: _____ Date: _____

Time: _____ Signature: _____

List Emergency Phone Numbers

Fire: _____ Ambulance: _____ Nearest Hospital: _____

Name	Sign Initials	Entrant	Attendant	Rescue

MUST BE POSTED NEAR CONFINED SPACE WORK AREA AND RETURNED TO SAFETY

Start Time: _____ Finish Time: _____

CONTINUOUS MONITORING SHOULD BE CONDUCTED AS NEEDED

	Acceptable Conditions	Initial Result ____AM/PM	Result ____AM/PM	Result ____AM/PM	Result ____AM/PM
Oxygen - Min	>19.5	_____	_____	_____	_____
Oxygen - Max	<23.5	_____	_____	_____	_____
Flammability	<10% LEL/LFL	_____	_____	_____	_____
H ² S	<10 ppm	_____	_____	_____	_____
Toxic/VOCs		_____	_____	_____	_____
Cl ²	<0.05 ppm	_____	_____	_____	_____
CO	<35 ppm	_____	_____	_____	_____
SO ²	<2 ppm	_____	_____	_____	_____
Heat	°F/°C	_____	_____	_____	_____
Radiation	50μR/hr	_____	_____	_____	_____
Tester Initials		_____	_____	_____	_____

Preparation for Entry

Pre-entry briefing (Review all hazards, procedures, emergency information, SDSs)

Notify all persons in the immediate area of permit/hazard condition.

Notification of affected process, department, and approval for entry.

Procedures Required: _____ Lockout/Tagout Verification

Barriers

Ventilate

Atmospheric Test

Equipment required for entry and work:

Ventilation:

PPE: _____

Respiratory Protection: _____

Atmospheric Testing/Monitoring:_____ Type of Monitor:_____

Communication: _____

Rescue Equipment: _____

Other: _____

Additional Permits Required:

Hotwork	Line Breaking	Other

AUTHORIZATION BY ENTRY SUPERVISOR(S)

I certify that all precautions have been taken and necessary equipment is provided for safe entry and work in confined space.

Print Name

Signature

Date _____

Time

MUST BE POSTED NEAR CONFINED SPACE WORK AREA AND RETURNED TO SAFETY

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Disciplinary Action Program			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-008	Pages	3	Rev. 2.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for the administering of discipline in case of violations to items such as, yet not limited to, work rules, safety procedures, safe work procedures, verbal direction from a supervisor or other member of management.

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. regardless of position or title.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Senior management holds all employees responsible and accountable for safety within their respective areas.

Site Manager

- Responsible for enforcing the safety manual and for issuing disciplinary action as required by this procedure for their site and ensuring all assets are made available for compliance with the plan.

Employees

- It is the responsibility of every person employed by Novel Geo-Environmental, Inc. to work in a safe and efficient manner.
- The safety manual provides procedures to help ensure that safe work practices are observed.

Requirements

Discipline will be “fair, soon, certain and significant”.

A violation of state, federal or local laws in any of the work rules or procedures may result in additional action by governing authorities.

A violation of or the failure to abide by the safety policies and/or procedures or client-specific policies and/or procedures will be considered on a case-by-case basis and the appropriate action will be taken by the Supervisor.

Procedure

Disciplinary Actions

Employees who knowingly violate safety policies and/or procedures or client specific policies and/or procedures will be subject to appropriate disciplinary actions administered systematically in the effort to correct and prevent future occurrences.

Employees in Supervisory positions or members of management are responsible for enforcing the company's safety goals, objectives and procedures. Failure to do so will subject such employees to the disciplinary actions. The following guidelines will be followed:

1st Offense

Verbal warning, written warning, suspension or termination depending on the severity of the offense

2nd Offense

Written warning, suspension or termination depending on the severity of the offense

3rd Offense

Suspension or termination depending on the severity of the offense

DOCUMENTATION AND COMMUNICATION

Verbal warnings, written warnings, suspensions, and terminations will be documented using the "Disciplinary Action Form" (Appendix). A copy of each warning will be placed in the employee's personnel file.

SERIOUS SAFETY VIOLATIONS

Novel Geo-Environmental, Inc. reserves the right to terminate any employee on the first offense for serious safety violations that could or have resulted in injury to the employee or to another employee as a result of the employee's actions.

Training

The employee will be trained in this procedure at the time of initial hire and whenever a Manager of Novel Geo-Environmental, Inc. has reason to believe the employee needs to be retrained due to observed or perceived inadequacies in the employee's knowledge or use of this procedure.

Disciplinary Action Form

Employee name _____

Date & Time _____

(Check the appropriate Offense and the type of Disciplinary Action)

Offense Disciplinary Action

First _____ Written _____ Suspension _____ Termination _____

Second _____ Written _____ Suspension _____ Termination _____

Third _____ Suspension _____ Termination _____

Duration of Suspension:

Eligible for rehire: Yes / No; If Yes, when?

You are being issued this Disciplinary Action Form for the following reason(s):

Please do whatever is necessary to ensure this offense does not happen again. By repeating this offense or any other offense will make it necessary to take further disciplinary action which may include suspension and/or termination without any further notice.

Signature of Supervisor/Foreman

Date

Signature of Employee

Date

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Driving and Vehicle Safety			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-009	Pages	8	Rev. 3.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. that operate a vehicle provided (owned, leased, rented, or borrowed) by the company.

Scope

This procedure establishes the minimum requirements for the safe operating of a company provided vehicle including commercial vehicles

Key Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Vehicle Specifications

Vehicles provided by the company will be of the correct size, type, and designed for the specific use. All vehicles will be utilized within the specifications of the vehicle manufacturer.

Operator Qualifications

Employees authorized by management are permitted to operate Company-provided motor vehicles.

Employees authorized by management to operate Company-provided vehicles will maintain a valid driver's license for the vehicle(s) authorized to operate. Operators of on or off-road vehicles will be qualified by possession of a valid, current driver's license for the type of vehicle being driven.

Drivers will have 2 years of driving experience on the vehicle he/she is licensed to drive & regularly drives. Drivers will be appropriately assessed, licensed and trained to operate the vehicle they have been authorized to operate.

Employees driving company vehicles or personal vehicles on company vehicles are required to follow safe driving practices:

- a. Seat belts will always be worn by all occupants whenever the vehicle is in motion.

- b. Obey all federal and local driving laws or regulations inclusive of the speed limit.
- c. Immediately report any restriction or change to their driving privileges to your Manager.
- d. Defensive driving will be practiced to continually assess conditions and hazards and remain prepared for any challenge that may approach them.
- e. When speaking with a passenger, always keep your eyes on the road.
- f. Both hands will remain on the wheel at all times.
- g. Backing is prohibited whenever practicable. Where backing is required, drivers, when parking, should make every effort to park the vehicle in a manner that allows the first move when leaving the parking space to be forward.
- h. Drivers must have either a reversing alarm, use a spotter or walk around the truck/trailer prior to backing.
- i. Passenger compartments are to be free from loose objects that might endanger passengers in the event of an incident. Any vehicle with non-segregated storage will be equipped with a cargo net or equivalent to separate the storage area.
- j. Signs, stickers or labels are to be fitted in such a manner that they do not obstruct the driver's vision or impede the driver's use of any controls.
- k. No passengers are to ride in pick-up truck beds at any time on any locations or roadways.
- l. Slow down around construction, large vehicles, wildlife, fog, rain, snow, or anything that adds a hazard to your driving.
- m. Drive for conditions, not just the speed limit.
- n. Alcohol or illegal drugs are not allowed to be in a company, client or leased vehicle at any time.
- o. Drivers will not operate a motor vehicle while under the influence of alcohol, illegal drugs, or prescription or over-the counter medications that might impair their driving skills.
- p. Make sure dirt or snow is removed from lights on all sides of the vehicle and roof.
- q. Brush or clean off snow or ice on all windows to ensure complete vision.
- r. Check to ensure the license plates and inspection tag on vehicle are current.
- s. Ensure that there is a first aid kit and inspected fire extinguisher in the company vehicle.
- t. Ensure driver is rested and alert for driving.
- u. Drivers (CDL and non-CDL) are to follow the DOT requirements for driving time.

Vehicle Requirements

- a. All vehicles will be fit for the purpose and will be maintained in safe working order.
- b. No vehicle less than 2,200 pounds is to be used on public roads.
- c. Tire type and pattern is to be recommended by the vehicle or tire manufacturer for use on the vehicle in the area of operation. Tires, including spares if full size, are to be of same type, profile and tread pattern, except when the vehicle or tire Manufacturer recommends a different type for certain axles.
- d. Vehicles are to be fitted with a spare wheel and changing equipment to safely change a wheel, or a suitable alternative.
- e. Vehicles longer than 20 feet or with restricted rear view (i.e. pickup trucks that are fully loaded) are to be fitted with an audible reversing alarm.
- f. All light duty vehicles are to be equipped with an adjustable left, right and central rear-view mirrors
- g. All vehicles are to be equipped with a multipurpose fire extinguisher with a capacity of at least 2 lb. The fire extinguisher will be securely mounted on a bracket and located so that it is easily accessible in an emergency without becoming a hazard in case of an incident.
- h. All drivers of light vehicles will carry a high visibility jacket or vest for use in case of emergency stops.
- i. All light duty vehicles carry a minimum of one collapsible hazard warning triangle set.
- j. Vehicles that require the use of wheel chocks will be equipped with chocks.
- k. Vehicles (light vehicles, heavy vehicles and trailers) may not be modified without the endorsement of the manufacturer.

Carrying Loads

All materials in the back of trucks and on trailers will be properly secured during travel or moving of the vehicle. The securing of loads is the sole responsibility of the driver. All loads will be within the legal requirements and within the manufacturers' specifications.

Trailer

- A. Items must be secured to prevent movement.
- B. Trailers will be inspected prior to use.
- C. All safety warning devices will be operable on the trailer.
- D. Trailer hitch must be appropriately put in place with pins, locks, and chains applied.
- E. All state requirements will be met for trailer registration or licensing.

Vehicle Loading and Offloading

- A. Only stable or safely arranged loads will be handled. Caution shall be exercised when handling off-center loads, which cannot be centered.
- B. Only loads within the rated capacity of the vehicle/ trailer will be handled or hauled.
- C. The brakes of trucks will be set and wheel chocks placed under the rear wheels during loading or offloading activities.
- D. All materials will be fastened or strapped down to prevent movement during transportation.
- E. Any specific route requirements will be followed in relevance to materials hauled and roadway requirements.

Distracted Driving

Drivers are to use hands-free cell phone devices. If hands-free devices are not available, let the call go to voicemail. Once a safe location is reached to pull off of the roadway, the call may be answered or returned. No email, texting or operating any handheld devices are allowed while operating a vehicle.

Drivers are to, so much as is possible, limit distractions by not performing tasks such as manipulating the radio controls or other vehicle controls while operating the company-owned or leased vehicle.

Vehicle Inspections and Maintenance

In order to keep all vehicles in good mechanical repair, the Operator/driver will perform a weekly inspection of the vehicle and documenting the inspection on the Vehicle Inspection Form. Visual vehicle inspections will be completed before each use on all non-CDL vehicles. For major repairs (anticipated that repair will take more than 4 hours), notify the Manager of the potential mechanical problems with the vehicle. If the vehicle is not in good repair, or if the mechanic has not repaired it properly, do not drive the vehicle, and report it to the Manager.

Preventive maintenance such as maintaining fluid levels, tire pressures, and the general condition of the vehicle is the responsibility of the Operator/Driver and are to be checked with deficiencies corrected immediately.

Preventive maintenance such as fluid changes and repairs are the responsibility of Novel Geo-Environmental, Inc. Maintenance records will be supplied by the driver/operator and maintained by the Manager for each vehicle.

The documented weekly inspection will include the fire extinguisher and the first-aid kit. It is the driver's responsibility to keep the vehicle clean and the back of the truck free of loose trash and materials.

For CDL-required vehicles, the pre- and post-inspections will be completed and documented.

Traffic Violations

Employees operating Company-provided vehicles will report all traffic violations and any citation, warning, collision, vehicle damage, or near miss associated with company vehicle operation or while driving on company duties received while operating said vehicle immediately to the Supervisor or Manager. A copy of the violation(s) will be maintained in the employee's personnel file. At the discretion of the Manager, the employee may be subject to discipline. The company will not be responsible for traffic related fines.

Accident Reporting

In case of an accident, the driver is to notify the Supervisor or Manager and gather the necessary insurance information from the other persons involved. The accident will be documented on a Vehicle Accident Report Form.

Journey Management Planning

- Journey Management planning will be completed by employees before they perform any driving on company business.
- Employees will notify their supervisor of their travel plans. This includes where they are going, when they should be getting there and when they plan to return.
- Drivers must carry a reliable method of communication (cell phones, CB radio, etc.) in case of emergency. Drivers should always carry a cell phone, especially when traveling in rural areas.
- Driving directions will be obtained before traveling to an unfamiliar destination. Before taking a trip to an unfamiliar location each employee will ensure they have printed driving directions available. Do not plan to read directions from a smartphone while driving. A GPS device may be used as an aid, yet printed directions should be kept as a back-up.
- Check fuel level to be certain the destination can be reached.

Potential journeys involving driving and/or road transport should be screened, assessed, and discussed with the Supervisor or Manager relative to hazards, risks and costs considering the following items:

- Road travel should be limited whenever practicable. Try to complete multiple tasks in single trips to reduce the amount of driving for improved safety and efficiency. If the trip is being taken to meet with someone, determine if the meeting can be done over the phone instead.
- Driving during adverse weather conditions should be avoided, whenever practicable. Before leaving on a trip, ensure that weather conditions are safe for driving. Ensure the vehicle being used is adequate for the weather conditions. Make sure emergency supplies are in the vehicle, and the driver has a cell phone in case of emergency.
 - In particularly harsh weather conditions, consider cancelling or rescheduling the trip.
- Road travel is completed during daylight hours, whenever practicable. Driving should be done during daylight hours rather than after dark whenever possible. Reduce speed when driving at night. Be aware of the potential for wildlife to be on the road, especially when driving at dusk or dawn
- Is a fit-for-purpose vehicle for the expected route and conditions available (for example, a four-wheel drive vehicle, etc.)?
- Rest breaks should be taken to reduce fatigue. When driving long distances sufficient breaks should be taken to prevent fatigue. When driving alone and having trouble staying awake, pull off the road and get out of the vehicle for fresh air, or take a power nap. If driving late at night, talk to your manager to get a hotel room and starting fresh the next day. If two licensed drivers are in the vehicle, take turns driving. Get plenty of rest before beginning your journey.

Travel time should take into consideration the actual time needed to arrive safely at your destination. Consider the following and plan accordingly:

- Length of travel time to include rest breaks, extra time for road construction, inclement weather, other vehicle accidents, other stops that may need to be made.
- Route to travel staying on bonded routes, if required. Be familiar with the route having written directions and/or a map, using GPS only as a back-up system.
- Plan for a hotel if needed. Contact your Supervisor or Manager during the planning process and to get authorization.

Commercial Vehicle Operations

A Commercial Driver's License (CDL) is required to operate company vehicles, commercial motor vehicle, meeting any of the following descriptions:

- a combination of vehicles with a gross vehicle weight rating of 26,001 or more pounds, provided the vehicle being towed is in excess of 10,000 pounds,
- a single vehicle with a gross vehicle weight rating of 26,001 or more pounds,

All drivers will receive a road test prior to hiring or as a contingency to hiring with the road test being administered by a qualified person designated by the company to provide the road test and accompanying evaluation.

Drivers are required to perform an inspection on commercial motor vehicle(s) operated after each day's work and prepare a report identifying the vehicle and any defects or deficiencies. If a driver operates more than one vehicle during the day, a report must be prepared for each vehicle operated. Drivers are not required to prepare a report if no defect or deficiency is discovered. Before a driver can operate a vehicle, any defect or deficiency listed on the driver vehicle inspection report that would likely affect the safe operation of the vehicle be repaired and made safe. The repair will be noted on the Driver Vehicle Inspection Report (DVIR) or note that repair is unnecessary before the vehicle is operated. All company commercial motor vehicles will be inspected, at least, once every 12 months by a qualified mechanic per FMCSA requirements. Inspection will be documented and kept on the vehicle.

All drivers of commercial vehicles will maintain their commercial driver's license per state requirements. All drivers will be medically cleared every two years to drive and must carry the necessary medical card indicating medical clearance. All drivers holding a CDL will have their motor vehicle record (MVR) checked annually. The company will maintain a driver file on each driver which includes all required records of driver qualification and will be retained for 3 years.

Drivers holding a CDL will adhere to the hours of service as stipulated by FMCSA. Drivers will not use a hand-held mobile phone while operating a commercial motor vehicle, hands-free devices are acceptable so long as they do not distract the driver while operating the commercial vehicle. Texting or typing of any kind as well as watching videos are prohibited while operating a commercial motor vehicle.

Drivers are specifically prohibited from driving while impaired by illness, fatigue, drugs, alcohol, or other substances.

Traffic Control

Novel Geo-Environmental, Inc. shall develop, in writing, and implement a traffic protection plan for its workers at a worksite if any of them may be exposed to a hazard from vehicular or pedestrian traffic that may endanger the safety of any worker. It shall include the following control measures:

- Effective means of traffic control shall be provided whenever the unregulated movement of vehicular traffic constitutes a hazard to workers.

- Traffic control shall include barricades and cones as the primary control and, where required, signs, flagmen or other techniques and devices made necessary by the prevailing circumstances.
- Operations or equipment, encroaching on the traveled way, shall be protected by barricades and cones as the primary control and, where required other devices.
- Novel Geo-Environmental, Inc. must train workers in the traffic control procedures.
- Novel Geo-Environmental, Inc. will ensure that before a worker is designated as a flag person, the worker is trained in the safe work procedures for the safe control of traffic operations and wears the appropriate high visibility outer clothing and/or equipment.
- If a worker at a project on a highway may be endangered by vehicular traffic unrelated to the project, the project shall make use of as many measures as necessary to adequately protect the worker.
- A worker who is required to set up or remove traffic control measures on a roadway or a shoulder of a roadway shall be a competent worker, shall be equipped with the appropriate high visibility apparel, shall not perform any other work while setting up or removing the measures and shall be given adequate written and oral instructions in a language that he or she understands, with respect to setting up or removing the measures.

Training

Training Requirements

The employee will be trained in this procedure at the time of initial hire or initial assignment of a company provided vehicle and whenever a Manager of Novel Geo-Environmental, Inc. has reason to believe the employee needs to be retrained due to observed or perceived inadequacies in the employee's knowledge or use of this procedure.

Forms

Company Vehicle Inspection Form
Driver Vehicle Inspection Report (DVIR)

Appendix A
Date

COMPANY VEHICLE INSPECTION FORM

Vehicle No. _____ Month of _____

Check boxes accordingly: ☐ OK ☒ Needs attention or repair. ☐ N/A
(Write 'N/A' if item does not apply to vehicle)

ENGINE OFF

ENGINE RUNNING

	Week	1	2	3	4	5
Engine Oil Level Use dipstick – Add if needed <i>Record quarts added:</i>		☒	☒	☒	☒	☒
Fuel Level Check gauge – Add if needed		☒	☒	☒	☒	☒
Visual Inspection Walk around – tires, wheel lugs, fluid leaks, glass, mirrors, housekeeping, check hydraulic sight glass		☒	☒	☒	☒	☒
Brakes Operate foot and parking/emergency brake		☒	☒	☒	☒	☒
Hydraulics/Lifting Devices Operate bucket, forks, lifting devices, steering, etc. Check for visible damage to lifting devices (such as cracks in forks).		☒	☒	☒	☒	☒
Safety/Warning Devices Brake lights, horn, strobe lamp, back-up alarm, safety flag, seat belt, etc.		☒	☒	☒	☒	☒
ALL ITEMS IN THIS BOX MUST BE 'OK' OR VEHICLE MUST BE TAGGED OUT						
Lights (must be 'OK' if running outside after dark) Visual for all		☒	☒	☒	☒	☒
Wipers Operate, blade condition		☒	☒	☒	☒	☒
Exhaust System Excessive noise, visual damage		☒	☒	☒	☒	☒
Battery Condition Electric trucks – read gauge (if equipped)		☒	☒	☒	☒	☒
Operator Initials *Please list remarks on back*						

Appendix B
Date

DRIVER'S VEHICLE INSPECTION REPORT

AS REQUIRED BY THE D.O.T. FEDERAL MOTOR CARRIER SAFETY REGULATIONS

CARRIER: _____

LOCATION: _____

DATE: _____ TIME: _____ A.M. _____ P.M.

TRACTOR/ ODOMETER BEGIN: _____
TRUCK NO.: READING END: _____

CHECK ANY DEFECTIVE ITEM AND GIVE DETAILS UNDER "REMARKS"

Prt = Pre-Trip			Pot = Post-Trip			RR = Requires Repair		
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Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Electrical Safety			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-010	Pages	8	Rev. 3.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

The purpose of this program is to set forth procedures for the safe use of electrical equipment, tools, and appliances and to eliminate all injuries resulting from possible malfunctions, improper grounding and/or defective electrical tools.

Scope

This program applies to all Novel Geo-Environmental, Inc. employees, temporary employees, and contractors when work is performed on owned premises and non-owned or operated sites.

Definitions

Affected Personnel - Personnel who normally use and work with electrical equipment, tools, and appliances, but who do not make repairs or perform lock out/tag out procedures.

Appliances - Electrical devices not normally associated with commercial or industrial equipment such as air conditioners, computers, printers, copiers, coffee pots, microwave ovens, toasters, etc.

Circuit Breaker - A device designed to open and close a circuit by non-automatic means and to open the circuit automatically on a predetermined over current without injury to itself when properly applied within its rating.

Competent Person - one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

Disconnecting Means - A device, or group of devices, or other means by which the conductors of a circuit can be disconnected from their source of supply.

Disconnecting Switch - A mechanical switching device used for isolating a circuit or equipment from a source of power.

Double Insulated Tool - Tools designed of non-conductive materials that do not require a grounded, three wire plug.

Ground - Connected to earth or some conducting body that serves in place of the earth.

Grounded Conductor - A conductor used to connect equipment or the grounded circuit of a wiring system to a grounding electrode or electrodes.

Ground Fault Circuit Interrupter (GFCI) - A device whose function is to interrupt the electric circuit to the load when a fault current to ground exceeds some predetermined value that is less than that required to operate the over current protective device of the supply circuit. Novel Geo-Environmental, Inc. shall use GFCIs in lieu of an assured grounding program.

Insulated - A conductor encased within material of composition and thickness that is recognized as electrical insulation.

Premises Wiring - That interior and exterior wiring, including power, lighting, control, and signal circuit wiring together with all of its associated hardware, fittings, and wiring devices, both permanently and temporarily installed, which extends from the load end of the service drop, or load end of the service lateral conductors to the outlet (s). Such wiring does not include wiring internal to appliances, fixtures, motors, controllers, motor control centers, and similar equipment.

Qualified Person - One that has been trained in the repair, construction and operation of electrical equipment and the hazards involved.

Strain Relief - A mechanical device that prevents force from being transmitted to the connections or terminals of a cable or extension cord.

Class I Locations - Are those in which flammable gases or vapors are or may be present in the air in quantities sufficient to produce explosive or ignitable mixtures.

Class 1 Division 1 - Is a location (a) in which hazardous concentrations of flammable gases or vapors may exist under normal operating conditions; or (b) in which hazardous concentrations of such gases or vapors may exist frequently because of repairs or maintenance operations or because of leakage; or (c) in which a breakdown or faulty operation or equipment or processes might release hazardous concentrations of flammable gases or vapors, and might also cause simultaneous failure of electrical equipment.

Class 1 Division 2 - Is a location (a) in which volatile flammable liquids or flammable gases are handled, processed, or used, but in which the hazardous liquid, vapors, or gases will normally be confined within closed containers or closed systems from which they can escape only in case of accidental rupture or breakdown of such containers or systems, or in of abnormal operation of equipment or (b) in which hazardous concentrations of gases or vapors are normally prevented by positive mechanical ventilation, and which might become hazardous through failure or abnormal operations of the ventilating equipment; or (c) that is adjacent to a Class 1, Division 1 location, and to which hazardous concentrations of gases or vapors might occasionally be communicated unless such communication is prevented by adequate positive-pressure ventilation from a source of clean air, and effective safeguards against ventilation failure are provided.

Class II locations - Class II locations are those that are hazardous because of the presence of combustible dust. Class II locations include the following:

Class II, Division 1 - A Class II, Division 1 location is a location (a) in which combustible dust is or may be in suspension in the air under normal operating conditions, in quantities sufficient to produce explosive or ignitable mixtures; or (b) where mechanical failure or abnormal operation of machinery or equipment might cause such explosive or ignitable mixtures to be produced, and might also provide a source of ignition through simultaneous failure of electric equipment, operation of protection devices, or from other causes, or (c) in which combustible dusts of an electrically conductive nature may be present.

NOTE: This classification may include areas of, areas where metal dusts and powders are produced or processed, and other similar locations that contain dust producing machinery and equipment (except where the equipment is dust-tight or vented to the outside).

- These areas would have combustible dust in the air, under normal operating conditions, in quantities sufficient to produce explosive or ignitable mixtures.
- Combustible dusts that are electrically nonconductive include dusts produced in the handling and processing produce combustible dusts when processed or handled.
- Dusts containing magnesium or aluminum are particularly hazardous and the use of extreme caution is necessary to avoid ignition and explosion.

Class II, Division 2 - A Class II, Division 2 location is a location in which: (a) combustible dust will not normally be in suspension in the air in quantities sufficient to produce explosive or ignitable mixtures, and dust accumulations are normally insufficient to interfere with the normal operation of electrical equipment or other apparatus; or (b) dust may be in suspension in the air as a result of infrequent malfunctioning of handling or processing equipment, and dust accumulations resulting there from may be ignitable by abnormal operation or failure of electrical equipment or other apparatus.

NOTE: This classification includes locations where dangerous concentrations of suspended dust would not be likely but where dust accumulations might form on or in the vicinity of electric equipment. These areas may contain equipment from which appreciable quantities of dust would escape under abnormal operating conditions or be adjacent to a Class II Division 1 location, as described above, into which an explosive or ignitable concentration of dust may be put into suspension under abnormal operating conditions.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.
- Management will also periodically evaluate and verify compliance.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Inspections

- Electrical equipment, tools, and appliances must be inspected prior to each use.
- The use of a hard fixed GFCI or a portable GFCI adapter shall be used with all portable hand tools, electric extension cords, drop lights and all 110 volt equipment.
- Faulty equipment, tools, or appliances shall be removed from service immediately and tagged "Out of Service", dated and signed by the employee applying the tag.

Repairs

- Only Qualified Personnel, who have been authorized by the department supervisor or manager, may make repairs to supply cords on electrical tools and to extension cords.
- The names of employees authorized to make repairs will be posted in the workplace.
- Only certified electricians shall be allowed to make repairs to electrical equipment and wiring systems.
- The supervisor obtaining the services of a certified electrician is responsible to verify the electrician's credentials.

- Employees shall not enter spaces containing exposed energized parts unless qualified and proper illumination exists to enable employees to work safely.
- Employees shall not wear conductive apparel such as rings, watches, jewelry, etc. (unless they are rendered non-conductive by covering, wrapping, or other insulating means) while working on or near open energized equipment this includes batteries on trucks, forklifts, phone backup systems or other such equipment.
- If employees are subject to handle long dimensional conductor objects (ducts or pipes), steps for safe work practices shall be employed to ensure the safety of workers.

Extension Cords

- Use only three-wire, grounded, extension cords and cables that conform to a hard service rating of 14 amperes or higher, and grounding of the tools or equipment being supplied.
- Only commercial or industrial rated-grounded extension cords may be used in shops and outdoors.
- Cords for use other than indoor appliances must have a rating of at least 14 amps.
- Cords must have suitable strain relief provisions at both the plug and the receptacle ends.
- Work lamps (drop light) used to power electrical tools must have a 3 wire, grounded outlet, unless powering insulated tools.
- Adapters that allow three wire, grounded prongs, connected to two wire non-grounded outlets are strictly prohibited.
- Cords must have a service rating for hard or extra-hard service and have S, AJ, ST, SO, SJO, SJT, STO, or SJTO printed on the cord.
- Cords may not be run through doorways, under mats or carpets, across walkways or aisles, concealed behind walls, ceilings or floors, or run through holes in walls, or anywhere where they can become a tripping hazard.
- High current equipment or appliances should be plugged directly into a wall outlet whenever possible.
- All extension cords shall be plugged into one of the following:
 - A GFCI outlet;
 - A GFCI built into the cord;
 - A GFCI adapter used between the wall outlet and cord plug.
- All extension cords and or electrical cords shall be inspected daily or before each use, for breaks, plug condition and ground lugs, possible internal breaks, and any other damage. If damage is found, the extension cord or electrical cord shall be removed from service and repaired or replaced.
- Extension cords shall not be used on compressor skid to operate heat tapes or any other type of equipment on a temporary basis. Heat tapes or other equipment shall be hard wired per applicable electrical codes.

Outlets

- Outlets connected to circuits with different voltages must use a design such that the attachment plugs on the circuits are not interchangeable.

Multiple Outlet Boxes

- Multiple outlet boxes must be plugged into a wall receptacle.
- Multiple outlet boxes must not be used to provide power to microwave ovens, toasters, space heaters, hot plates, coffeepots, or other high-current loads.

Double Insulated Tools

- Double insulated tools must have the factory label intact indicating the tool has been approved to be used without a three wire grounded supply cord connection.
- Double insulated tools must not be altered in any way, which would negate the factory rating.

Switches, circuit breakers, and disconnects

- All electrical equipment and tools must have an on and off switch and may not be turned on or off by plugging or unplugging the supply cord at the power outlet.
- Circuit breaker panel boxes and disconnects must be labelled with the voltage rating.
- Each breaker within a breaker panel must be labelled for the service it provides.
- Disconnect switches providing power for individual equipment must be labelled accordingly.

Ladders

- Only approved, non-conductive ladders, may be used when working near or with electrical equipment, which includes changing light bulbs.
- Ladders must be either constructed of wood, fiberglass, or have non-conductive side rails.
- Wood ladders should not be painted, which can hide defects, except with clear lacquer.
- When using ladders they shall be free from any moisture, oils, and greases.

Energized and Overhead High Voltage Power Lines & Equipment

- A minimum clearance of 10 feet from high voltage lines must be maintained when operating vehicular and mechanical equipment such as forklifts, cranes, winch trucks, and other similar equipment.
- When possible, power lines shall be de-energized and grounded or other protective measures shall be provided before work is started.
- Minimum approach distance to energized high power voltages lines for unqualified employees is 10 feet.
- Minimum approach distance for qualified employees shall be followed per 29 CFR 1910.333(c)(3)(i) Qualified – Table S5 Selection and Use of Work Practices - Approach Distances for Qualified Employees – Alternating Current).

Confined or Enclosed Work Spaces

- When an employee works in a confined or enclosed space that contains exposed energized parts, the employee shall isolate the energy source and turn off the source and lock and tag out the energy source (Only qualified electricians can work on an exposed energy source).
- Protective shields, protective barriers or insulating materials, as necessary shall be provided.

Enclosures, Breaker Panels, and Distribution Rooms

- A clear working space must be maintained in the front, back and on each side of all electrical enclosures and around electrical equipment for a safe operation and to permit access for maintenance and alteration.
- Conductive materials and equipment that are in contact with any part of an employee's body shall be handled in a manner that will prevent them from contacting exposed energized conductors or circuit parts.
- A minimum two-foot working floor space in front of panels and enclosures shall be painted yellow.
- Employees may not enter spaces containing exposed energized parts unless illumination is provided that enables the employees to work safely.
- Housekeeping in distribution rooms must receive high priority to provide a safe working and walking area in front of panels and to keep combustible materials to the minimum required to perform maintenance operations.
- All enclosures and distribution rooms must have "Danger: High Voltage – Authorized Personnel Only" posted on the front panel and on entrance doors.
- Flammable materials are strictly prohibited inside distribution rooms (Boxes, rags, cleaning fluids, etc.)

Lock Out/Tag Out

- Only authorized personnel may perform lock out/tag out work on electrical equipment and will follow NGE-HSE-026, Novel Geo-Environmental, Inc.'s Control of Hazardous Energy – Lock out/Tag Out Program.
- Affected personnel will be notified when lock out/tag out activities are being performed in their work area.

Contractors

- Only approved, qualified electrical contractors may perform construction and service work on Novel Geo-Environmental, Inc. or client property.
- It is the Management/Supervisors responsibility to verify the contractor's qualification.

Fire Extinguishers

- Approved fire extinguishers must be provided near electrical breaker panels and distribution centers.
- Water type extinguishers shall not be located closer than 50 feet from electrical equipment.

Electric Shock-CPR:

- If someone is discovered that has received an electric shock and is unconscious, first check to see if their body is in contact with an electrical circuit. Do not touch a person until you are sure there is no contact with an electrical circuit.
- When it is safe to make contact with the victim, begin CPR if the person's heart has stopped or they are not breathing.
- Call for help immediately.

Electric Welders

- A disconnecting means shall be provided in the supply circuit for each motor-generator arc welder, and for each AC transformer and DC rectifier arc welder which is not equipped with a disconnect mounted as an integral part of the welder.
- A switch or circuit breaker shall be provided by which each resistance welder and its control equipment can be isolated from the supply circuit. The ampere rating of this disconnecting means may not be less than the supply conductor ampacity.

Equipment Grounding

- All gas compressors, air compressors, separators, vessels, etc. shall be grounded by means of using a lug and ground strap, nominal in size to a ½" bolt or larger, attached to a ground rod six feet or longer.
- Equipment bonding jumpers shall be of copper or other corrosion-resistance material.
- The transfer of hazardous or flammable material from a metal or plastic container with a flash point of 100 degrees F or less shall have a ground strap from the container and attached to the skid or a ground rod placed in the ground.

Assured Grounding

OSHA requires that employers shall use either ground fault circuit interrupters (GFCI) or an assured equipment grounding conductor program to protect personnel from electrical shock while working.

- Novel Geo-Environmental, Inc. shall use GFCI's in lieu of an assured grounding program.

Ground Fault Circuit Interrupters

All 120-volt, single-phase 15 and 20 ampere receptacle outlets on construction or maintenance sites, which are not part of the permanent wiring of the building or structure and which are in use by employees, shall have approved ground fault circuit interrupters for personnel protection.

- All hand portable electric tools and extension cords shall use a GFCI.

- Additionally, approved GFCI's shall be used for 240-Volt circuits in the same service as described above.
- GFCI's must be used on all 120 volt, single-phase 15 amp and 20 amp receptacles within 6 feet of a sink, damp areas or on installed outdoor equipment.
- The GFCI must be the first device plugged into a permanent receptacle.
- The GFCI must be tested before each use.

Assured Equipment Grounding Conductor Program

An Assured Equipment Grounding Conductor Program covers all cord sets, receptacles not a part of the permanent wiring of a structure and equipment connected by cord and plug on all construction and maintenance sites.

This written description of an Assured Equipment Grounding Conductor Program would be kept at the jobsite for inspection and copying by OSHA and any affected employee.

Removing Equipment:

- All equipment found damaged or defective or which fails any of the prescribed inspections or tests may not be used until repaired or replaced. All defective or failed equipment must be tagged with a red "do not operate tag" until repaired and tested or rendered unusable and discarded.

Daily Visual inspections – The following shall be visually inspected before each day's use for external defects (such as deformed or missing pins or insulation damage) and for indication of possible internal damage:

- Cord sets;
- Attachment caps;
- Plug and receptacle of cord sets;
- Any equipment connected by cord and plug; and
- Damaged items shall not be used until repaired or discarded.

Continuity Testing – Testing must ensure continuity and electrically continuous. The tester shall use either a continuity tester or an ohmmeter for testing equipment grounding conductors on the following:

- All cord sets;
- Receptacles that are not a part of the permanent wiring of the building or structure; and
- All plug-connected equipment required to be grounded.

Grounding Conductor Testing – The tester shall use either a continuity tester or an ohmmeter for testing. Each receptacle and plug of the following shall be tested for correct attachment of the equipment grounding conductor and the equipment grounding conductor shall be connected to its proper terminal:

- All cord sets;
- Receptacles that are not a part of the permanent wiring of the building or structure; and
- All plug-connected equipment required to be grounded.

Test Frequency – All required tests shall be performed with the following frequency:

- Before first use;
- Before equipment is returned to service following any repairs;

- Before equipment is used after any incident that can be reasonably suspected to have caused damage; and
- At intervals not to exceed 3 months, except that cord sets and receptacles that are fixed and not exposed to damage shall be tested at intervals not to exceed six months.

All tests shall be documented to identify each receptacle, cord set and cord and plug-connected equipment that passed the test, the date of the test and the individual responsible for the test. Records shall be made available at each job site for inspection by employees and OSHA.

All tested cord sets and cord and plug-connected equipment shall be marked, one or both ends, with colored tape to denote the month that the tests were performed. The below color code chart that must be followed for marking.

Month #	Month	Color of Tape to Apply to Cords
1	Jan	Red
2	Feb	Yellow
3	Mar	Green
4	Apr	Blue
5	May	Brown
6	Jun	White
7	Jul	Start over with Red and repeat

Training

All regular full time and temporary employees will be trained in this program initially prior to assignment to work related tasks and whenever a Manager of Novel Geo-Environmental, Inc. has reason to believe the employee needs to be retrained due to observed or perceived inadequacies in the employee's knowledge or use of this procedure.

Employees who face a risk of electric shock, but who are not qualified persons, shall be trained and familiar with electrically related safety practices.

Employees shall be trained in safety related work practices that pertain to their respective job assignments.

Employees shall be trained on clearance distances.

Safe work practices shall be employed to prevent electric shock or other injuries resulting for either direct or indirect electrical contacts when work is performed near or on equipment or circuits which are or may be energized.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Emergency Action Plan			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-011	Pages	35	Rev. 3.0
Procedure Owner	Safety Manager	Effective Date	02-21-23	

Purpose

This Emergency Action Plan (Plan) provides information and procedures in accordance with state and federal regulations regarding means to prevent and minimize hazards to human health or the environment in case of emergencies.

This Plan will be implemented immediately in the event of an emergency.

This Plan will be available in the following locations during all operating hours:

- Supervisor Truck – hard copy and associated forms
- Corporate electronic network

Scope

This Plan describes the general procedures to be used by employees, sub-contractors, and visitors of Novel Geo-Environmental, Inc. to plan and prepare for an emergency and to respond to an emergency.

Definitions

Emergency - a significant event beyond the scope of on-site personnel training, or injury requiring medical treatment beyond the scope of on-site personnel training, or a fire on site, a rig fire or loss of well control.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.
- The senior site representative present at the time of the emergency will keep detailed notes during the emergency

Emergency Plan Coordinator

- Coordinate all emergency response efforts and establish a safe area command center
- Activate internal facility alarms and notify facility personnel as applicable.
- Notify Emergency Response Agencies identified in Site-specific Safety Plan.
- Notify other company management representatives as needed to address a particular emergency
- Take all reasonable measures and commit resources needed to carry out the Plan
- Alter, terminate, or suspend the emergency response and evacuate personnel if circumstances warrant such action
- Limit the number of personnel in the emergency response to those actively involved in the response
- Ensure that employees use appropriate PPE
- Ensure that employees receive training adequate to execute the Plan
- Ensure that operations underway during the emergency response are properly monitored, controlled, and terminated if circumstances warrant such action

- Provide further information or explanation of duties under the plan
 - Name: Grace Aiken
 - Title: Manager of Administrative Services
 - Contact Information: Cell: 412-302-3020

Plan Administrator

- Responsible for developing and maintaining the Plan
- Ensure that the Plan is reviewed and updated as required.
- Ensure that the Plan is distributed as required.
- Ensure that all employees, contractors, sub-contractors, and visitors are familiar with the Plan, and understand how to react in case of an emergency.
 - Name: Melissa Heike
 - Title: Sr. Consultant
 - Contact Information: Cell: 724-316-0955

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Emergency Contact Information

The list of Emergency Contacts including their name and cell phone number will be posted and/or available to all employees at each facility, job trailer, and/or jobsite using the “Emergency Personnel Names and Phone Numbers” in the Job/Site-specific Emergency Action Plan Information Packet (Appendix A) of this Plan. The specific location of the information will be communicated to workers on every JSA and during the review of the JSA.

The emergency action plan will be in writing, kept in the workplace, and made available for affected company employees to review. For companies in which there are ten or fewer employees, the emergency action plan may be communicated orally.

This information will be provided to all personnel (employees, contractors, sub-contractors) on a jobsite either as a hard copy sheet or verbally as part of a tailgate safety meeting before they begin work on the jobsite. The workers need to be made aware of where the information is kept on the jobsite if they do not get a hard copy sheet.

Revisions

This Plan will be revised when any one or more conditions warrant such a revision:

- Personnel and/or responsibilities listed in the Plan change
- Operational changes that increase the potential for fires, explosions or change the response necessary in an emergency
- Other such factors that indicate the Plan needs to be revised
- Drills or inspections indicate the Plan needs to be revised
- Any part of this Plan fails to function properly during an emergency
- As applicable state or federal regulations are revised

Emergency Reporting

The following types of emergencies are to be reported by site personnel:

- Medical
- Fire
- Severe Weather
- Bomb Threat
- Chemical Spill
- Structural Climbing/Descending
- Extended Power Loss

- Other emergencies (such as, yet not limited to terrorist attack/hostage taking, workplace violence)

Evacuation Routes

Evacuation route maps are to be posted in each work area, jobsite, job trailer, and/or facility. The following information is marked on evacuation maps:

1. Emergency exits
2. Primary and secondary evacuation routes
3. Locations of fire extinguishers
4. Fire alarm pull stations' location
5. Assembly points

Site personnel should know at least two evacuation routes.

Job/Site-specific Emergency Action Plan Information Packet

Every jobsite and facility will have completed Job/Site-specific Emergency Action Plan Information Packet (Appendix A) completed specifically for the facility or jobsite by the Safety Manager or designee. The Site Manager is responsible to ensure the completed Job/Site-specific Emergency Action Plan Information Packet is received from the Safety Manager or designee. Together with this Plan, the completed Job/Site-specific Emergency Action Plan Information Packet will provide the necessary information for workers, contractors, subcontractors, and visitors to know how to respond to an emergency.

The contents of the Job/Site-specific Job/Site-specific Emergency Action Plan Information Packet (Appendix A) is:

- Emergency Personnel Names and Phone Numbers
- Emergency Phone Numbers
- Utility Company Emergency Contacts
- Onsite Personnel Currently Certified in First aid and CPR
- Spill Control Information
- Telephone Bomb Threat Checklist

The completed Job/Site-specific Emergency Action Plan Information Packet can be given to each worker, contractor, subcontractor, and visitor in individual packets or be readily available by being placed in the job trailer where other notices are posted or stored in the Supervisor's truck job box with the location told to the workers at each safety meeting.

Medical Emergency

This section of the Plan describes the procedures to be used at job sites by its employees, contractors, sub-contractors, and visitors to prepare for and respond to medical emergencies, i.e., injuries to personnel at a job site or facility.

Notify the Immediate Supervisor

In the event of an injured or ill person or persons, the injured or ill person(s) will receive medical treatment and the immediate Supervisor will be notified as soon as possible of the injury. The notification can be face-to-face, cell phone, two-way radios, or other means of communication available at the time.

The immediate Supervisor will initiate the remainder of the Plan.

Notify the Operator Representative

When applicable to the oil & gas industry, in the event of an injured person or persons, the Operator Representative of the site will be notified immediately of the injury by the immediate Supervisor. The notification can be face-to-face, cell phone, two-way radios, or other means of communication available at the time.

First aid/CPR Personnel

One person on each crew on every shift, at a minimum, will be trained and have a valid certification in first aid and CPR.

Each contractor and subcontractor will have one person per crew per shift, at a minimum, trained and have a valid certification in first aid and CPR.

All employees trained in first aid and CPR that is American Red Cross or equivalent may voluntarily provide first aid or CPR. At a minimum, employees trained in first aid and CPR will initiate emergency response procedures or otherwise notify emergency services for medical assistance when needed.

Persons trained and certified in First aid/CPR are listed on the "Onsite Personnel Currently Certified in First aid and CPR" in the Job/Site-specific Emergency Action Plan Information Packet. Employees authorized to render first aid will always observe universal precautions.

First aid Kits

Each company location (office, warehouse, yard, etc.) will have a fully stocked, OSHA compliant first aid kit containing the necessary supplies according to the hazards of the tasks performed by the employees. The location of the first aid kits will be clearly and readily identified.

First aid kits will be inspected monthly by a specifically designated person to ensure the contents of the first aid kits remain OSHA compliant and applicable to the type of injuries on the worksite. The inspection will be noted on the inspection form inside the first aid kit. It is the responsibility of the person doing the inspection to report needed items to their Supervisor to ensure the first aid kit is fully stocked.

Each company vehicle will be equipped with a fully stocked, OSHA compliant first aid kit containing the necessary supplies according to the hazards of the tasks performed by the employees. The location of the first aid kits will be clearly and readily identified.

First aid kits will be inspected monthly by the vehicle Operator or other specifically designated person to ensure the contents of the first aid kits remain OSHA compliant and applicable to the type of injuries on the worksite. The inspection will be noted on the vehicle inspection form. It is the responsibility of the vehicle operator to report needed items to their Supervisor to ensure the first aid kit is fully stocked.

Self-First aid

Employees are encouraged to render self-first aid or assist the injured employee in administering self-first aid. Self-first aid reduces the potential for exposure of other employees to bloodborne diseases.

Emergency Eyewash

Where there is the potential for corrosive materials to injure an employee, the means to quickly flush the eyes with appropriate solution will be provided at each jobsite. This requires that there be flushing facilities, mobile or permanent, that provides continuous flow of tepid water for a minimum of 15 minutes.

Notify Off-site Emergency Services

The immediate Supervisor or designate will notify the off-site emergency services utilizing the information in the Job/Site-specific Emergency Action Plan Information Packet (Appendix A).

Provide the following information to the emergency services:

- a. Nature of medical emergency,
- b. Location of the emergency (address, building, room number), and
- c. Your name and phone number from which you are calling.

The immediate Supervisor or designate will task a person to go to the entrance of the parking lot, building, or the intersection of public road and the lease road to lead the Emergency Services to the job site and/or location of the injured/ill personnel.

Secure the Area to Provide for the Safety of the Responders

Equipment in the immediate affected area will be shut-down in an orderly manner using Emergency Shut-down Procedures for each piece of equipment by the equipment Operator. The equipment will be secured in such a manner so as not to create a hazard to the emergency responders.

Transport of Injured/Ill Personnel

Injured or Ill Personnel with Life-threatening Injuries

Ambulance – Injured or ill personnel with life-threatening injuries or illnesses will be transported to the nearest hospital or medical facility by a ground ambulance from a local professional or volunteer service dispatched from the emergency services dispatcher.

Persons Trained in First Aid/CPR - In the event that the injuries or illness are severe enough in the opinion of the senior person trained in first aid/CPR so as to not wait for the arrival of an ambulance or air evacuation services, the injured or ill personnel may be transported to the nearest hospital or medical facility by, at least, two persons trained in first aid/CPR with the necessary medical supplies to treat the injured personnel during transport using a company vehicle in reliable condition. The first aid/CPR trained workers will have the means and ability to communicate directly via two-way radio or cell phone or satellite phone with the emergency services dispatchers. The transport should be coordinated with the ambulance or air evacuation dispatcher so as to rendezvous, whenever possible, with advanced medical care providers at a designated point on the route so as to transfer the care and further transportation of the injured or ill personnel to the advanced medical providers.

Injured or Ill Personnel with NO Life-threatening Injuries or Illness - may be transported to the nearest hospital or medical facility by a person designated by the immediate Supervisor or Manager using a company vehicle equipped with a first aid kit. The driver must have the means and ability to communicate directly via two-way radio or cell phone, text message, or satellite phone with the emergency services dispatchers, if necessary, during transport.

Notify Off-site Management

Management that are off-site should be notified as quickly as possible whenever there has been an injured person or persons that require transport off-site for further medical treatment. Emergency contact information will be found on the “Emergency Personnel Names and Phone Numbers” in completed Job/Site-specific Emergency Action Plan Information Packet.

Fire Response

This section of the Plan describes the procedures to be used at job sites by its employees, contractors, sub-contractors, and visitors to prepare for and respond to fires at a job site.

Examples and locations of fires include the mechanical equipment, equipment such as generators or hydraulic units, condensate tanks, personnel trailers, pipeline leaks, compressor fire, other unit fires, and forest/field fires.

This Plan does not include response to well fires in which the well-control is outside of normal operating conditions; these are not out of control or potential for out of control well issues.

Sound an Alarm

In the event of a fire, a pre-designated alarm signal will be activated. All personnel will be told of the pre-designated alarm signal upon arriving at the job site. If an alarm signal is not available, the personnel will be notified about the fire emergency by voice, radio, PA system, paging phone, or other methods which will be communicated to the workers during each safety meeting.

Evacuation

At the sound of the pre-designated alarm signal or otherwise notified, all workers in the affected area will evacuate the affected area following the shortest evacuation route to the pre-designated assembly point. The assembly point will be designated by a sign. A secondary assembly point will be designated with a sign that is perpendicular to the prevailing wind.

Upon being notified about the fire emergency, occupants must:

- Leave the building using the designated escape routes.
- Assemble in the designated area (refer to the Job/Site-specific Emergency Action Plan Information Packet)
- Remain outside until the competent authority (Designated Official or designee) announces that it is safe to reenter.

Area/Floor Monitors must ensure that all employees have evacuated the area/floor and report any problems to the Emergency Coordinator at the assembly area.

Assistants to physically-challenged should assist all physically challenged employees in emergency evacuation.

Designated Official, Emergency Coordinator, or Supervisors must perform one or more of the tasks listed:

- Disconnect utilities and equipment unless doing so jeopardizes his/her safety.
- Coordinate an orderly evacuation of personnel.
- Perform an accurate head count of personnel reported to the designated area.
- Determine a rescue method to locate missing personnel.
- Provide the Fire Department personnel with the necessary information about the facility.
- Perform assessment and coordinate weather forecast office emergency closing procedures

Accountability

All persons on the job site including, yet not limited to, workers, visitors, subcontractors, and delivery persons in the affected area will be accounted for using the sign-in roster and visual confirmation. The sign-in roster is located at the front door or front desk or at the Site Security trailer at the entrance to the job site.

Portable Fire Extinguisher Use

Incipient (Beginning or Small) Stage Fire

Fires that are considered by the worker to be a small or an incipient (beginning) stage fire may be extinguished using a maximum of two portable fire extinguishers of the correct type and size located in the general area.

Fire Extinguisher Use for Escape

Portable fire extinguishers may be used to develop or maintain an escape route. When necessary, multiple portable fire extinguishers may be used to develop and/or maintain an escape route.

Other Than (Beginning or Small) Stage Fire

Fires that are beyond that of a small or incipient (beginning) stage fire, workers are to sound the alarm and evacuate the affected area, accounting for all affected personnel, shutting down and/or securing affected equipment, notifying Emergency Services, and notifying the immediate Supervisor.

Fight the fire ONLY if:

- The Fire Department has been notified.
- The fire is small and is not spreading to other areas.
- Escaping the area is possible by backing up to the nearest exit.
- The fire extinguisher is in working condition and personnel are trained to use it.

Shutting Down and/or Securing Equipment in Affected Area

Equipment in the immediate affected area will be shut-down in an orderly manner using Emergency Shut-down Procedures for each piece of equipment by the equipment Operator. The equipment will be secured in such a manner so as not to create a hazard to the emergency responders.

Shutting Down and/or Securing Equipment Not Affected by the Fire

Equipment in the immediate affected area that is not affected by the fire will be shut-down upon direction from the Supervisor in an orderly manner using Emergency Shut-down Procedures by the equipment Operator for each piece of equipment. The equipment will be secured in such a manner so as not to create a hazard to the emergency responders.

Contact Emergency Responders

The immediate Supervisor or designate or highest-ranking employee will notify the off-site emergency services utilizing the information in the completed Job/Site-specific Emergency Action Plan Information Packet (Appendix A).

Notify Off-site Management

Management that are off-site should be notified as quickly as possible whenever there has been a fire beyond an incipient (beginning) stage and/or when emergency services are contacted to come to the site in response to a fire. Emergency contact information will be found on the "Emergency Personnel Names and Phone Numbers" in completed Job/Site-specific Emergency Action Plan Information Packet.

Weather and Natural Emergencies

Thunder/Lightning Storm

This section of this Plan describes the procedures to be used at job sites by its employees, contractors, sub-contractors, and visitors to prepare for and conduct operations during lightning and thunderstorms.

A thunderstorm, also known as an electrical storm, a lightning storm, thundershower or simply a storm has lightning and thunder. Thunderstorms are usually accompanied by strong winds, heavy rain and sometimes snow, sleet, hail, or no precipitation at all.

Meteorological terms used are:

Severe Thunderstorm Watch: indicates when and where severe thunderstorms are likely to occur.

Severe Thunderstorm Warning: issued when severe weather has been reported by spotters or indicated by radar. Warnings indicate imminent danger to life and property to those in the path of the storm.

Monitoring Weather Conditions

Weather forecasts will be monitored by the Supervisor and Site Manager for Severe Thunderstorm Watches and Warnings. This should be done if there are large clouds, dark clouds or if distant lightning is seen or faint thunder is heard.

Weather can be monitored on NOAA weather radio, commercial radio, and the internet. Be sure that the information source you are monitoring is for your area.

Severe Thunderstorm Watch and Severe Thunderstorm Warning

If a Severe Thunderstorm Watch or Severe Thunderstorm Warning is issued:

- Be prepared to cease operations and take cover.
- Be alert to thunder and lightning in the area.
- Secure outdoor objects that could blow away.
- Outdoor activities should be suspended/postponed if there is a Thunderstorm Warning.

Ceasing Outdoor Operations

Because lightning can strike up to 10 miles from a storm, you should seek safe shelter as soon as you hear thunder or see lightning. Outdoor operations will be stopped (ceased or suspended) when it is determined the approaching thunderstorm is 10 miles or less away from the job site. To determine the distance that an approaching storm is away from the job site, use a lightning meter or similar storm detection device or the Flash to Bang Method below:

Flash to Bang Method

If thunder is heard...	The lightning is...
5 seconds after a flash	1 mile away
10 seconds after a flash	2 miles away

15 seconds after a flash	3 miles away
20 seconds after a flash	4 miles away
25 seconds after a flash	5 miles away
30 seconds after a flash	6 miles away
40 seconds after a flash	8 miles away
50 seconds after a flash	10 miles away

It should be noted that “heat lightning” is lightning from a thunderstorm too far away for thunder to be heard. However, the storm may be heading toward the job site.

Lightning may precede rain; rain should not be the sign that operations should cease.

Take Cover

As soon as outdoor operations are stopped, ceased, or suspended, personnel should take cover in a safe location which include fully enclosed buildings with electrical wiring and plumbing. If safe building structures are not accessible, workers are to seek shelter in hard-topped metal motor vehicles with rolled up windows.

If outside without access to any safe locations described above, do what is necessary to decrease the risk of being struck by doing the following:

- Avoid isolated tall trees, hilltops, utility poles, cell phone towers, cranes, large equipment, ladders, scaffolding, or rooftops
- Avoid open areas, such as fields. Never lie flat on the ground
- Retreat to dense areas of smaller trees that are surrounded by larger trees, or retreat to low-lying areas (e.g., valleys, ditches) but watch for flooding
- Avoid water, and immediately get out of and away from bodies of water (e.g., pools, lakes).
- Avoid wiring, plumbing, and fencing. Lightning can travel long distances through metal
- Stay away from all metal objects, equipment, and surfaces that can conduct electricity
- Do not shelter in sheds, pavilions, tents, or covered porches as they do not provide adequate protection from lightning

A search for any missing individuals should not be done until 30 minutes after the last observed lightning or thunder.

During the Storm

When indoors during lightning:

- Stay away from doors and windows.
- Do not use corded phones or headsets for phones.
 - Cell phones and cordless phones may be used safely in a thunderstorm.
- Turn off and unplug appliances, computers, power tools, TVs.
- Avoid using plumbing. Plumbing fixtures can conduct electricity.
- Lightning may strike exterior electric lines inducing shocks to inside equipment. Use battery operated radio for updates on the storm.

Resuming Operations

Operations and other outdoor activities should not resume until 30 minutes after the last observed lightning or thunder.

Injured Personnel

First aid/CPR will be provided per this Plan. As a point of reference, injured persons do not carry an electrical charge after being struck by lightning. Emergency medical services will be summoned, if necessary.

Notify Off-site Management

Management that is off-site should be notified as quickly as possible whenever there has been an injury or substantial damage. Emergency contact information will be found on the "Emergency Personnel Names and Phone Numbers" in completed Job/Site-specific Emergency Action Plan Information Packet.

Flood on Site

This section of the Plan describes the procedures to be used at job sites by its employees, contractors, sub-contractors, and visitors to prepare for and respond to a flood on site.

A flood is a temporary covering by water of land not normally covered by water.

A flash flood is a rapid flooding of low-lying areas. It may be caused by heavy rain associated with a storm or melt water from ice or snow. Flash floods can also occur after collapse of a dam or ice dam or debris dam. Flash flood is distinguishable from a regular flood by a timescale less than six hours.

Meteorological terms used are:

Flood Watch: Flooding is possible

Flash Flood Watch: Flash flooding is possible

Flood Warning: Flooding is occurring or will occur soon. If advised to evacuate, do so immediately.

Flash Flood Warning: Flash flood is occurring. Seek higher ground immediately.

Monitoring Weather Conditions

Weather forecasts should be monitored if heavy rains occur.

Weather can be monitored on NOAA weather radio, commercial radio, and the internet. Be sure that the information source you are monitoring is for your area.

Survey the Site

The site should be surveyed. Any streams and drainage channels that could flood should be identified. These areas should be monitored in heavy rains.

Flood Watch or Flash Flood Watch

If a Flood Watch or Flash Flood Watch is issued and flooding is possible on the site, the site should be secured. Care should be taken to:

- Not leave any loose equipment around the site. Bring any equipment into sheds or secure from flood waters.
- Secure any critical documents in a box for removal, as needed.
- Be prepared to remove computers, if necessary.
- Charge all electronic equipment such as cell phones and radios.
- Be prepared to cease operations and evacuate.

Flood Warning or Flash Flood Warning

If a Flood Warning or Flash Flood Warning is issued and flooding is possible on the site, the site should be secured.

Personnel should be prepared to evacuate the site if ordered to do so by government authorities.

Flammable Combustible Storage Tanks

If a Flood Watch is issued:

- Verify that the liquid level within an above ground vertical tank is not below the expected flood stage. Add inventory to the tank so that the inventory within the tank is not below the expected flood stage.
- Verify that no horizontal tank will have more than 70% of its storage capacity submerged at the expected flood stage. If so, secure the tank or move the tank to higher ground if possible.

Site Evacuation

If ordered to evacuate by authorities, operations should cease. The equipment or facilities should be secured. Utilities should be turned off at switches and valves.

If time allows, personnel should:

- Pack rain gear and clothes.
- Pack water and food for at least one day.
- Take electronic communication equipment.
- Take critical documents.

The Supervisor or Manager will designate a rally point or assembly point off site. The rally point should be in higher ground.

Personnel should evacuate the site when instructed by the Supervisor or Manager. If possible, vehicles should be driven off the site as a group and meet at the designated rally point/assembly point.

The Supervisor will account for all personnel at the rally point. If someone is missing, cell phones or radios should be used to contact the person. Do not return to the site. Police should be notified that a person is missing. No one should leave the rally point without informing the Supervisor or Manager.

Evacuation Safety Guidance

Do not walk-through moving water. Six inches of moving water can make you fall. If you have to walk in water, walk where the water is not moving. Use a stick to check the firmness of the ground in front of you. Do not drive into flooded areas. If floodwaters rise around your car, abandon the car and move to higher ground if you can do so safely. A foot of water will float many vehicles. Two feet of rushing water can carry away most vehicles including SUVs and pick-ups.

Returning to the Jobsite

Personnel should return to the site when it is safe to do so and at the direction of the Supervisor or Manager. Personnel should be sure that flood waters are subsiding. Weather broadcasts should continue to be monitored to verify any additional rain will not cause flooding again.

The Supervisor or Manager will verify with emergency management authorities if there is doubt that the site is safe for return.

Guidelines for Returning to Site

The following are guidelines for returning to the site after a flood:

- Avoid flood waters-water may be contaminated.
- Avoid moving water.
- Verify that access roads were not weakened by the flood waters.
- Stay away from any downed power lines.
- Stay out of any structures that are surrounded by flood waters.
- Verify that no damage or shifting has occurred on any building supports.
- Verify that all septic systems are intact.
- Clean and disinfect anything that got wet

Operations should be resumed after inspection of the site by the Supervisor or Manager indicates that there is no damage that would make operating unsafe.

The jobsite will be inspected to verify that no release of a chemical has occurred. The appropriate plan should be activated to respond to any release.

Notify Off-site Management

Management that is off-site should be notified as quickly as possible whenever there has been an evacuation of the site. Emergency contact information will be found on the "Emergency Personnel Names and Phone Numbers" in completed Job/Site-specific Emergency Action Plan Information Packet.

Winter Storms, Blizzards, and Extreme Cold

This section of this Plan describes the procedures to be used at job sites by its employees, contractors, sub-contractors, and visitors to prepare for and respond to severe winter weather.

A winter storm is an event in which precipitation exists that only occurs at cold temperatures, such as snow or sleet, or a rainstorm where ground temperatures are cold enough to allow ice to form (i.e., freezing rain).

Meteorological terms used are:

Freezing Rain: Rain that freezes when it hits the ground, creating a coating of ice on roads, walkways, trees, and power lines.

Sleet: Rain that turns to ice pellets before reaching the ground. Sleet causes moisture on roads to freeze and become slippery.

Winter Storm Watch: A winter storm is possible.

Winter Storm Warning: A winter storm is occurring or will occur in your area.

Blizzard Warning: Sustained winds in gusts to 35 miles per hour or greater and considerable amount of falling or blowing snow (reducing visibility to less than a quarter of a mile) are expected to prevail for a period of three hours or longer.

Frost/Freeze Warning: Below freezing temperatures are expected.

Monitoring Weather Conditions

Weather forecasts should be monitored in winter months for winter storms and extreme cold.

Weather can be monitored on NOAA weather radio, commercial radio, and the internet. Be sure that the information source you are monitoring is for your area.

Winter Weather Watches and Warnings

If winter weather watches or warnings are issued or if weather forecasts indicate adverse winter weather (snow, sleet, freezing rain, extreme cold) are due within the next 24 hours:

- Be prepared to cease operations.
- Secure outdoor objects that could blow away.
- Move any items that might interfere with snow removal.
- Verify the site has rock salt to melt ice and sand to improve traction.
- Verify that snow shovels are available.
- Verify that snow removal equipment is functioning and ready to remove snow.
- Verify there is sufficient fuel for the generators.

Scheduling Outdoor Work

Schedules should be adjusted, if possible, to do outdoor work before the storm. Outdoor activities should be postponed, if possible, during a storm.

Dress for Weather

Several layers of clothing should be worn. The outer layer should be water repellent. A cold weather liner should be inserted in hard hats. Gloves should be worn. Waterproof shoes or boots should be worn.

Warm clothing should be kept nearby indoor workstations so that the clothing can be available if an evacuation from the workstation is needed.

Overexertion

Overexertion should be avoided when shoveling snow. Stretching exercises should be done before shoveling.

Anyone shoveling snow should be monitored every 10 minutes.

Suspending Outdoor Activities

Outdoor activities should be suspended if visibility is such that equipment or buildings are not visible if walking to them. Disorientation is possible during a blizzard. If you cannot see your destination, do not walk to it. Stay inside.

People moving outdoors during the storm should have a radio or phone.

Ice on Walking/Working Surfaces

Ice cleats or grips should be worn if walking outside during freezing rain or sleet storms. Ice grips/cleats should also be worn if ice forms because snow/ice has melted and then temperatures drop to below freezing.

Keep Vehicles Ready During a Storm

All vehicles should be backed into parking places so that the way out is to pull forward. Vehicles should be kept clean during a storm in case an evacuation by vehicle is necessary. Cleaning vehicles should be done only if it is safe to do so, i.e., no blizzard conditions and no ice on the ground.

Keeping Track of Employees

During severe winter weather, personnel are to be accounted for periodically. The time-period will depend on the severity of conditions. A period of 30 minutes is to be used but the period may be shortened in blizzard and extreme cold. All employees should have phones or radios.

If a person is unaccounted, a search should be initiated. A search team of at least two people should try to locate the missing person. If visibility is poor, ropes should be tied to an object and to the searchers so that the searchers can make their way back to a starting point.

If the unaccounted person is found and is unable to walk, he should be kept warm until he can be moved inside. First aid should be provided, and emergency services summoned.

Ceasing Operations

Operations will cease when conditions are such that continued operation is or is expected to be unsafe for operation. The Supervisor or Manager will make the decision to cease operations.

If conditions are acceptable and site operations allow, employees may leave the site and go home or to a hotel.

Incoming employees should be called to delay coming into the site until notified.

If travel is judged to be unsafe, personnel should shelter in place until outdoor work is judged to be safe.

Leaving the Site

If the Supervisor determines that the site should be left, personnel should try to leave as a group. No one should be the "last" person to leave. At least two people should be the last persons to leave. This will verify that vehicles started and that all employees were actually inside a vehicle.

General Guidance

If indoors:

- Stay calm and await instructions from the Emergency Coordinator or the designated official.
- Stay indoors!
- If there is no heat:
 - Close off unneeded rooms or areas.
 - Stuff towels or rags in cracks under doors.
 - Cover windows at night.
- Eat and drink. Food provides the body with energy and heat. Fluids prevent dehydration.
- Wear layers of loose-fitting, lightweight, warm clothing, if available.

If outdoors:

- Find a dry shelter. Cover all exposed parts of the body.
- If shelter is not available:
 - Prepare a lean-to, wind break, or snow cave for protection from the wind.
 - Build a fire for heat and to attract attention. Place rocks around the fire to absorb and reflect heat.

- Do not eat snow. It will lower your body temperature. Melt it first.

If stranded in a car or truck:

- Stay in the vehicle!
- Run the motor about ten minutes each hour. Open the windows a little for fresh air to avoid carbon monoxide poisoning. Make sure the exhaust pipe is not blocked.
- Make yourself visible to rescuers.
 - Turn on the dome light at night when running the engine.
 - Tie a colored cloth to your antenna or door.
 - Raise the hood after the snow stops falling.
- Exercise to keep blood circulating and to keep warm.

After Storm Activities

Operations and other outdoor activities may begin as soon as is safe to do so after the storm stops. Snow should be removed to allow movement of people and vehicles. Sand and /or salt should be applied for ice.

Injured Personnel

Emergency medical services should be summoned if there were any injuries that require more than first aid.

Notify Off-site Management

Management that is off-site should be notified as quickly as possible whenever there has been an injury, substantial damage, or evacuation of the site. Emergency contact information will be found on the "Emergency Personnel Names and Phone Numbers" in completed Job/Site-specific Emergency Action Plan Information Packet.

Tornado Response

This section of the Plan describes the procedures to be used at job sites by its employees, contractors, sub-contractors, and visitors to prepare for and to respond to tornadoes.

A tornado is defined as a violently rotating column of air extending from a thunderstorm to the ground. The most violent tornadoes are capable of tremendous destruction with wind speeds of 250 mph or more. Damage paths can be in excess of one mile wide and 50 miles long.

Meteorological terms used are:

Tornado Watch: tornadoes are possible.

Tornado Warning: a tornado has been sighted or indicated by weather radar.

Monitoring Weather Conditions

Weather forecasts will be monitored for Tornado Watches and Warnings by the Supervisor and Site Manager. This should be done especially if skies are dark and wet weather appears to be likely. Tornadoes generally occur near the trailing edge of a thunderstorm.

Weather can be monitored on NOAA weather radio, commercial radio, and the internet. Be sure that the information source you are monitoring is for your area.

If a tornado has been sighted in the area, the tornado's movements should be monitored:

- On the Weather Channel website (the Weather Channel website lists tornado sightings and locations.)
- On the internet using MapQuest to plot movement
- By plotting the tornado's movement using a highway map

Tornado Watch and Tornado Warning

If a Tornado Watch or Tornado Warning is issued, personnel are to:

- Be prepared to cease operations
- Secure outdoor objects that could blow away and cause damage.
- Take cover if tornado is headed toward the site.

Outdoor activities will be suspended/postponed if there is a Tornado Warning.

Look for Approaching Storms

Tornadoes may strike quickly with little or no warning.

Personnel should be alert to the following danger signs:

- Dark sky-often greenish sky.
- Large Hail.
- A large dark, low-lying cloud (particularly if rotating).
- Loud roar, similar to a freight train.

If approaching storms or any of the danger signs are seen, personnel are to prepare to take shelter immediately.

If taking shelter is a possibility, rain gear, long sleeved jackets, gloves, and hard hat should be obtained. A cell phone and/or radio should be obtained.

Jackets and hard hats may offer some protection from flying debris.

Ceasing Operations

Operations will be ceased/stopped when a tornado is sighted, or weather forecasts indicate that the tornado is heading to the job site.

Take Cover

As soon as operations are suspended, personnel are to carefully monitor if it is apparent that a tornado is definitely approaching the job site. Take cover in any of the following areas/locations:

Indoors

- An underground area, such as a basement, sturdy building, or storm cellar, is best.
- Small interior room or hallway on the lowest floor possible
 - Stay away from doors, windows, and outside walls
 - Stay in the center of the room, and avoid corners because they attract debris
- Rooms constructed with reinforced concrete, brick or block with no windows and a heavy concrete floor or roof system overhead
 - Avoid auditoriums, cafeterias and gymnasiums that have flat, wide-span roofs.

Outdoors

- Seek shelter in a basement, a sturdy building, or storm cellar.
- Try to drive in a vehicle, using a seat belt, to the nearest shelter.
- If flying debris is encountered while in a vehicle, do one of two things:
 - Stay in the vehicle with the seat belt on, keeping your head below the windows and covering it with your hands or a blanket, or
 - Exit the vehicle and get into a ditch or other area which is noticeable lower than the roadway, lie flat in that area and cover your head with your hands. Wear your hard hat and gloves, if available.
- Get into a ditch or other area which is noticeable lower than the roadway, lie flat in that area and cover your head with your hands. Wear your hard hat and gloves, if available.

A trailer or mobile home is not acceptable cover. Mobile homes, even if tied down, offer little protection from tornadoes.

The Supervisor will account for all personnel. If someone is missing, cell phones / radios should be used to contact the person. A search for all unaccounted personnel should be initiated after the tornado passes. If the person is not located, emergency response authorities should be notified.

The weather should be monitored since other storms may be in the area.

After Storm Activities

Operations and other outdoor activities may begin after the tornado is passed.

Injured Personnel

Emergency medical services should be summoned if there were any injuries that require more than first aid.

Notify Off-site Management

Management that is off-site should be notified as quickly as possible whenever there has been an injury, substantial damage, or evacuation of the site. Emergency contact information will be found on the "Emergency Personnel Names and Phone Numbers" in completed Emergency Action Plan Information Packet.

Earthquake Response

This section of the Plan describes the procedures to be used at job sites by its employees, contractors, sub-contractors, and visitors to prepare for and to respond to earthquakes.

An earthquake is a sudden, rapid shaking of the ground caused by the shifting of rocks deep underneath the earth's surface. Earthquakes can happen without warning and can result in injuries and damage to property and roads. Earthquakes can cause fires, tsunamis, landslides, or avalanches.

General Guidance

- Stay calm and await instructions from the Emergency Coordinator or the designated official.
- Keep away from overhead fixtures, windows, filing cabinets, and electrical power.
- Assist people with disabilities in finding a safe place.
- Evacuate as instructed by the Emergency Coordinator and/or the designated official.
- If an earthquake happens, protect yourself right away.
- If you are in a car, pull over and stop. Set your parking brake.
- If you are in bed, turn face down and cover your head and neck with a pillow.
- If you are outdoors, stay outdoors away from buildings.
- Do not get in a doorway.
- Do not run outside.

Stay Safe During an Earthquake: Drop, Cover, and Hold On

Drop: Wherever you are, drop down on to your hands and knees. If you're using a wheelchair or walker with a seat, make sure your wheels are locked and remain seated until the shaking stops.

Cover: Cover your head and neck with your arms. If a sturdy table or desk is nearby, crawl underneath it for shelter. If no shelter is nearby, crawl next to an interior wall (away from windows). Crawl only if you can reach better cover without going through an area with more debris. Stay on your knees or bent over to protect vital organs.

Hold on: If you are under a table or desk, hold on with one hand and be ready to move with it if it moves. If seated and unable to drop to the floor, bend forward, cover your head with your arms and hold on to your neck with both hands.

Ceasing Operations

Operations will be ceased/stopped immediately when an earthquake is felt or otherwise communicated to workers.

After Earthquake Activities

- Expect aftershocks to follow the main shock of an earthquake.
- Check yourself to see if you are hurt and help others if you have training.
- If you are in a damaged building, go outside and quickly move away from the building. Do not enter damaged buildings.
- If you are trapped, protect your mouth, nose, and eyes from dust. Send a text, bang on a pipe or wall or use a whistle instead of shouting to help rescuers locate you.
- If you are in an area that may experience tsunamis, go inland or to higher ground immediately after the shaking stops.
- Text messages may be more reliable than phone calls.
- Once you are safe, listen to local news reports for emergency information and instructions via battery-operated radio, TV, social media or from cell phone text alerts.
- Be careful during post-disaster cleanup of buildings and around debris. Do not attempt to remove heavy debris by yourself. Wear protective clothing, including a long-sleeved shirt, long pants, work gloves and sturdy, thick-soled shoes during cleanup.
- Register on the American Red Cross "Safe and Well" website so people will know you are okay.

Injured Personnel

Emergency medical services should be summoned if there were any injuries that require more than first aid.

Notify Off-site Management

Management that is off-site should be notified as quickly as possible whenever there has been an injury, substantial damage, or evacuation of the site. Emergency contact information will be found on the "Emergency Personnel Names and Phone Numbers" in completed Job/Site-specific Emergency Action Plan Information Packet.

Hurricane

This section of the Plan describes the procedures to be used at job sites by its employees, contractors, sub-contractors, and visitors to prepare for and to respond to hurricanes.

A hurricane is weather system of organized thunderstorms and sustained winds of, at least, 74 mph which originates in the ocean and then makes landfall causing significant damage. Hurricanes are categorized from 1 to 5 based upon the maximum-sustained wind speed with the higher the category, the greater the hurricane's potential for property damage. Hurricane season, generally, begins on June 1 and ends on November 30 each year.

Meteorological terms used are:

Hurricane Warning - indicate that hurricane conditions (sustained winds of 74 mph or higher) are expected somewhere within the specified area. Because hurricane preparedness activities become difficult once winds reach tropical storm force (sustained winds of 39 to 73 mph), the hurricane warning is issued 36 hours in advance of the anticipated onset of tropical-storm-force winds to allow for important preparation.

Hurricane watch - means that hurricane conditions (sustained winds of 74 mph or higher) are possible within the specified area. A hurricane watch is issued 48 hours in advance of the anticipated onset of tropical-storm-force winds in an area.

Monitoring Weather Conditions

Weather forecasts will be monitored for Hurricane Watches and Warning by the Supervisor and Site Manager.

Weather can be monitored on NOAA weather radio, commercial radio, and the internet. Be sure that the information source you are monitoring is for your area.

Actions once a hurricane watch has been issued

- Stay calm and await instructions from the Emergency Coordinator or the designated official.
- Moor any boats securely or move to a safe place if time allows.
- Continue to monitor local TV and radio stations for instructions.
- Move early out of low-lying areas or from the coast, at the request of officials.
- If you are on high ground, away from the coast and plan to stay, secure the building, moving all loose items indoors and boarding up windows and openings.
- Collect drinking water in appropriate containers

Actions once a hurricane warning has been issued

- Be ready to evacuate as directed by the Emergency Coordinator and/or the designated official.
- Leave areas that might be affected by storm tide or stream flooding.
- Plan to take cover

Take Cover

As soon as operations are suspended, personnel are to take these actions during a hurricane:

- Take cover in any of the following areas/locations:
 - Remain indoors and monitor weather conditions from safe areas protecting from wind, blowing rain and flying debris. Consider the following as safe areas though an individual may need immediate evacuation due to flooding:
 - Small interior rooms on the lowest floor and without windows
 - Hallways on the lowest floor away from doors and windows,
 - Rooms constructed with reinforced concrete, brick, or block with no windows.
- Plan for the potential for flooding during or immediately following the hurricane, plan to get to higher areas or ground as soon as it is safe to do so.

Injured Personnel

Emergency medical services should be summoned if there were any injuries that require more than first aid.

Notify Off-site Management

Management that is off-site should be notified as quickly as possible whenever there has been an injury, substantial damage, or evacuation of the site. Emergency contact information will be found on the "Emergency Personnel Names and Phone Numbers" in completed Job/Site-specific Emergency Action Plan Information Packet.

Security and Workplace Violence

This section of the Plan describes the procedures to be used at job sites by its employees, contractors, sub-contractors, and visitors to prepare for and to respond to security breaches and workplace violence.

Security is the degree of protection against danger, damage, loss, and criminal activity. Security, as a form of protection, is structures and processes that provide or improve security as a condition.

OSHA defines workplace violence as "Workplace violence is violence or the threat of violence against workers. It can occur at or outside the workplace and can range from threats and verbal abuse to physical assaults and homicide deaths."

Unauthorized Personnel on Site

Accidental and intentional intruders are to be politely challenged and asked to leave, if safe to do so. A description of the intruder is to be obtained as well as the intruder's vehicle and license number, if safe to do so.

The incident should be reported to the Supervisor or Manager.

If the person becomes argumentative, you should:

- Try to stay calm

- Listen attentively
- Maintain eye contact
- Be courteous
- Be patient
- Try to keep the situation in your control
- Do not touch the individual

If an intruder is seen arguing with an employee on site, the Supervisor or Manager will be notified. Law enforcement will be called while the intruder is still on site.

After the person (intruder) leaves, the vehicle license number will be noted. A description of the person and the vehicle will be written down. Law enforcement will be notified if not already done.

Notify Off-site Management

Management that is off-site should be notified as quickly as possible whenever there has been an injury, substantial damage, or threat. Emergency contact information will be found on the "Emergency Personnel Names and Phone Numbers" in completed Job/Site-specific Emergency Action Plan Information Packet.

Fight Between Site Personnel or Between Site Personnel and an Outsider

If individuals start a physical fight, personnel should urge them to stop, however, do not attempt to intervene physically. If the fighting does not stop, law enforcement will be called for assistance.

It is critical that the police take charge of any incident that can or does involve physical harm.

Police are to assume control of any violent encounter that occurs on site. Police are to be asked to escort the individuals off site. Site personnel should assist as directed by the police.

First aid, if needed, should be given when the site personnel stop fighting. Transport any injured site personnel needing additional medical treatment to the hospital.

Medical assistance should be summoned if the outsider is injured and needs any medical attention. Note: first aid supplies only may be given to the outsider.

If the outsider does not appear to be injured, the outsider should be asked to leave the site.

If the outsider leaves, obtain the license number and description of vehicle. This information, along with local addresses if known by site personnel, should be given to police.

If police are not present at the time, all individuals will be asked to leave the site. If they leave, license numbers and descriptions of the vehicles should be obtained.

Violence Involving Weapons

Threats involving weapons may come from site personnel or outsiders. These threats may include a person or persons on site with a weapon or an "active shooter" situation.

Law enforcement will be contacted immediately if an individual:

- Has a weapon and
- Makes threats to any one on site or
- Behaves in a manner that causes site personnel to fear for anyone's safety

The Supervisor or Manager will be notified.

Do not attempt to intervene physically, grab the weapon, or deal with the situation yourself. It is critical that the police take charge of any incident that can or does involve physical harm.

If possible, keep a line open to police after the police are called. The more information the police receive, the more likely they can bring a potentially violent situation to a safe conclusion

The police will assume control of any violent encounter on site, especially one that involves weapons. Site personnel should assist as directed.

Evacuation

If a person is on site with a weapon and is threatening or making onsite personnel feel unsafe, operations will cease.

Personnel are to watch for a chance to escape and get to safety as quickly as possible. A safe point off site to assemble would include any of the following public locations: police station, fire station, town hall, retail establishment, or similar location.

Personnel are to leave in a vehicle, if possible. Personnel are to notify their Supervisor or Manager of their location and their physical condition. The Supervisor or Manager will request medical attention come to the individual if needed. If personnel cannot connect to their Supervisor or Manager, they should call the police.

The Supervisor or Manager will give instructions as information becomes available.

The Supervisor or Manager will take a head count. Unaccounted personnel are to be called on their cell phones. Police should be notified if any personnel are not accounted for.

Personnel are to evacuate to the entrance of the facility or jobsite if they are unable to evacuate in a vehicle. Personnel should take cover in any nearby buildings or in the woods. Do use a radio to inform the Supervisor or Manager of your location since the individual with a weapon may have access to a radio. Use a cell phone to contact your Supervisor or Manager. They will give you instructions.

Personnel are not return to the job site unless told to return by the Supervisor or Manager.

Medical services are to be used for any personnel that have been injured and require attention beyond first aid.

Resume Operation

The jobsite is to be occupied as soon as the Supervisor or Manager or a police officer informs personnel that it is safe to do so. Operations will not resume until it is safe to do so.

Notify Off-site Management

Management that is off-site should be notified as quickly as possible there has any violent acts on the site. Emergency contact information will be found on the "Emergency Personnel Names and Phone Numbers" in completed Job/Site-specific Emergency Action Plan Information Packet.

Bomb Threat

This section of the Plan provides information and procedures to respond to a bomb threat and/or the discovery of a bomb on site.

Packages That May Be Bombs

If a suspicious package arrives on site or is found on site, do not move the package. Contact police and tell them that you have a package that you believe may be a bomb.

Parcels that should make you suspicious:

- Are unexpected or from someone unfamiliar to you.
- Have information on the source such as no return address or have identification that can't be verified as legitimate.

- Are marked with restrictive endorsements such as “Personal,” “Confidential,” or “Do not X-ray.”
- Have protruding wires or aluminum foil, strange odors, or stains.
- Show a city or state in the postmark that doesn’t match the return address.
- Are of unusual weight given their size or are lopsided or oddly shaped.
- Are marked with threatening language.
- Have inappropriate or unusual labeling.
- Have excessive postage or packaging material, such as masking tape and string.
- Have misspellings of common words.
- Are addressed to someone no longer with your organization or are otherwise outdated.
- Have incorrect titles or titles without a name.
- Are not addressed to a specific person.
- Have hand-written or poorly typed addresses

Housekeeping Program

Housekeeping procedures should minimize out of place items that will make a bomb easier to spot.

Inspection and Monitoring Program

Personnel should periodically check for suspicious packages during walks around the jobsite.

If a package is sighted that might be a bomb, immediately clear personnel from the area in which the package is located.

Notify the immediate Supervisor and be prepared to evacuate all personnel if required.

Inform all personnel on site that a suspicious package has been discovered and that this Plan will be activated.

Use personal (person to person) contact to notify all personnel. **Do not use radios or other wireless devices (cell phones) as these instruments might set off an explosive device.**

Turn off all radios or other wireless devices such as cell phones.

Cease operations as directed to do so by the Supervisor, Manager, or police.

Inform all personnel to evacuate the site, if directed to do so by the Supervisor, Manager, or police.

Bomb Threat Telephone Call

If a bomb threat is received, the following should be done by the person answering the telephone:

- Get as much information from the caller as possible
- Keep the caller on the line and record everything that is said
- Complete the “Telephone Bomb Threat Checklist” in Appendix A

Bomb Threat Call Response

The Supervisor or Manager will be notified when a bomb threat is received.

The Supervisor or Manager will notify off-site management as soon as possible about the bomb threat.

If the Supervisor or Manager believes the threat is credible, personnel are to be told to evacuate to the site assembly point. Radios or other wireless devices (cell phones) should not be used as these instruments might set off an explosive device.

Police will be called and asked for assistance.

Any unexplained packages should be noted. **The packages should not be touched or moved.**

In the event of total evacuation, all operations will cease. All personnel will go to the assembly point. If possible, take a coat in cold weather.

Personnel are not to leave the jobsite without first informing their immediate Supervisor or Manager. Once a person has been accounted for, he or she may be directed to evacuate the premises entirely by the Supervisor or Manager or the highest-ranking government official on site.

If a person is not accounted for, a search and rescue should not be initiated. **Radios or other wireless device such as a cell phone should not be used.** Inform police that a person is missing. Do not go back into the site to locate the individual.

Bomb Search

- Police are to be called. Medical and fire response services should be requested to stand by.
- Evacuate the site completely at the direction of the Supervisor, Manager or police.
- Operations are not to be resumed until police gives approval that it is safe to do so.

Bomb Explosion

- Should a bomb explode on site, get under a sturdy table or desk if you are in a building and things are falling around you.
- When they stop falling, leave the building quickly watching for weakened floors and stairways. Be watchful of falling debris.
- If weather is cold, take a coat if possible.
- All operations are to cease.
- Police, fire, and medical services are to be called.
- All personnel should go to the assembly point.
- Other plans such as fire or spill should be initiated as needed.
- Personnel are not leave the jobsite without first informing their immediate Supervisor or the Manager.
- Once a person has been accounted for, he or she may be directed to evacuate the premises entirely by the Supervisor or Manager or the highest-ranking government official on site.
- If a person is not accounted, a search and rescue should not be initiated by site personnel. Inform emergency response authorities that a person is missing. Do not go back into the site to locate the individual.

Notify Off-site Management

Management that is off-site should be notified as quickly as possible about a bomb threat or an explosion due to a bomb on the site. Emergency contact information will be found on the "Emergency Personnel Names and Phone Numbers" in completed Job/Site-specific Emergency Action Plan Information Packet.

Other Emergencies

Fall Rescue

This section of the Plan provides information and procedures to rescue a person who has fallen while wearing a fall protection harness and is suspended in the harness.

Orthostatic Intolerance Using Fall Arrest Equipment

Orthostatic intolerance may be experienced by workers suspended in a harness following a fall. Suspended workers must be rescued as soon as possible.

Orthostatic intolerance may be defined as "the development of symptoms such as light-headedness, palpitations, tremulousness, poor concentration, fatigue, nausea, dizziness, headache, sweating, weakness and occasionally fainting during upright standing". Research indicates that suspension in a fall arrest device can result in unconsciousness, followed by death, in less than 30 minutes.

Summon Medical and Rescue Services

Immediately summon medical and rescue services. Even if the person is rescued, before rescue services are summoned, medical services should be summoned.

Rescue Pre-Planning

Planning for fall-rescue will be done prior to the project being started. The fall rescue methods are discussed during the tailgate meeting and review of the Job Safety Analysis (JSA) as well as specifically listed on the JSA.

Self-Rescue

If the person is conscious, self-rescue should be attempted. This can be done by suspending a rope ladder or placing an extension ladder for the suspended person to use for self-rescue. The extension ladder or rope ladder should be secured. The suspended person should grab onto the ladder and support some weight by placing a foot on the ladder.

The person should descend the ladder. The activated fall arresting device may be disconnected if the fall arresting device would restrict downward movement.

Moving the person quickly into a horizontal position is likely to cause a large volume of deoxygenated blood to move to the heart, if the worker had been suspended for an extended period. The heart may be unable to cope with the abrupt increase in blood flow, causing cardiac arrest.

It is vital the person be transported to the hospital as soon as rescue has been accomplished. Some authorities recommend that the person be transported with the upper body raised.

Self-Rescue Not Possible

If self-rescue is not possible, or if rescue cannot be performed promptly, the suspended person should be coached to “pump” one or both legs frequently to activate the muscles and reduce the risk of venous pooling. Footholds, for example the foot ladder, can be used to alleviate pressure, delay symptoms, and provide support for “muscle pumping”.

Rescue by Site Personnel or Emergency Services

Summon Medical and Rescue Services

Immediately summon medical and rescue services upon activation of a fall protection harness that leaves a person suspended. Even if the person is rescued using on site resources, medical services should be summoned and the person transported to the hospital.

Some authorities recommend that the person be transported with the upper body raised.

Using Personnel On-Site for Rescue

Rescue should be done if:

- There are individuals on site trained to rescue a suspended person.
- The individuals are confident that a rescue can be done before emergency services arrive.
- The suspended person shows signs of orthostatic intolerance and waiting for emergency services may cause serious trauma.
- The site has the necessary equipment to rescue (ladders, aerial lifts, similar equipment) a person suspended in a harness.
- Those involved in the rescue are to be protected from falling using PFAS or other fall protection equipment.

When rescue has been done, **the person should not be moved into a horizontal position.** The person should be transported to the hospital.

First aid should be provided until advanced medical care arrives.

Emergency Services Rescue Suspended Person

Notify emergency rescue and medical services as soon as a safety harness has been activated and a person is suspended in a harness. This should be done even if the site has the capability of performing a rescue.

Emergency service would provide additional resources and any rescued person should be transported to a hospital.

Upon arrival of the emergency services, the most senior emergency responder will assume control of the rescue. Site personnel should assist as directed.

Employee Training Program

Facility personnel will be trained in:

- Recognizing the symptoms of orthostatic intolerance
- Facilitating self-rescue by a person suspended in a harness
- The use of a ladder or aerial lift to perform rescue
- Ensuring the person is not moved into a horizontal position after rescue
- Ensuring that the rescued person is hospitalized

At least two persons should be trained in rescuing a suspended person using the means and equipment predetermined and then listed on the Job Safety Analysis (JSA).

Loss of Electrical Power

This section of the Plan describes the procedures to be used at job sites by its employees, contractors, sub-contractors, and visitors to prepare for and to respond to a loss of electrical power at the jobsite.

Power Loss on Jobsite

Operations that are not safe without electrical power will be ceased until power is restored.

All electrical equipment should be set to the safe position so that when the power is restored the equipment will not start-up unexpectedly. Unnecessary electrical equipment and appliances should be turned off in the event that power restoration would surge causing damage to electronics and effecting sensitive equipment.

Facilities with freezing temperatures should turn off and drain the following lines in the event of a long-term power loss:

- Fire sprinkler system
- Standpipes
- Potable water lines
- Toilets

Equipment that contains fluids that may freeze due to long term exposure to freezing temperatures should be moved to heated areas, drained of liquids, or provided with auxiliary heat sources. Add propylene-glycol to drains to prevent traps from freezing, if needed.

Activities during Power Loss

Activities not requiring power should continue if it is safe to do so. If lighting is an issue during this time, personnel should use flashlights.

Activities after Power Restoration

Operations should resume when there is sufficient power.

All activities may continue when power is restored.

Electronic equipment should be brought up to ambient temperatures before energizing to prevent condensate from forming on circuitry.

Fire and potable water piping should be checked for leaks from freeze damage after the heat has been restored to the facility and water turned back on.

Chemical Spill on Site

This section of the Plan describes the procedures to be used at job sites by its employees, contractors, sub-contractors, and visitors to prepare for and to respond to a chemical spill or release power at the jobsite.

The location on specific jobsites of Spill Containment and Security Equipment, Personal Protective Equipment (PPE), and Safety Data Sheets (SDS) are listed in the "Spill Control Information" in completed Job/Site-specific Emergency Action Plan Information Packet.

The name, phone number, and contact person for the Spill Clean-up Company for specific jobsite is listed in the "Spill Control Information" in completed Job/Site-specific Emergency Action Plan Information Packet.

Large Chemical Spill Actions

- Immediately notify the designated official and Emergency Coordinator.
- Contain the spill with available equipment (e.g., pads, booms, absorbent powder, etc.).
- Secure the area and alert other site personnel.
- Do not attempt to clean the spill unless trained to do so.
- Attend to injured personnel and call the medical emergency number, if required
- Call a local spill cleanup company or the Fire Department (if arrangement has been made) to perform a large chemical (e.g., mercury) spill cleanup.
- Evacuate building as necessary

Small Chemical Spill Actions

- Notify the Supervisor.
- If toxic fumes are present, secure the area (with caution tapes or cones) to prevent other personnel from entering.
- Deal with the spill in accordance with the instructions described in the SDS.
- Small spills must be handled in a safe manner, while wearing the proper PPE.
- Review the general spill cleanup procedures.

Follow additional guidance in the Spill Prevention and Response Plan (if developed)

Hydrocarbon Gas/Vapor Release

This list is not all-inclusive though is to be used as an overall plan to address similar incidents.

In or Near Buildings

1. Evacuate the building when appropriate.
2. Close valve (s) to isolate, if appropriate, and can be done safely.
3. Eliminate possible sources of ignition.
4. Ventilate the building.

Hydrocarbon Vapor Clouds

1. Incidents may occur which result in an uncontained hydrocarbon vapor cloud over a pipeline, compressor or pump station (e.g., discharge line rupture or vessel rupture).
2. Upon detection of a combustible concentration of vapor in an ambient atmosphere, compressors or pump should be shut down.
3. Areas in the immediate vicinity and/or downwind of the release should be evacuated.
4. The Area Supervisor/ Manager should account for all personnel, initiate actions to isolate the release and extinguish ignition sources, including vehicles.

5. Depending upon the conditions, (e.g., wind direction, size of release) the Area Supervisor/ Manager may initiate a total area evacuation.
6. Portable combustible gas indicators shall be utilized in determining safe evacuation routes and gathering points.
7. Upon identification of the source of release, appropriate measures will be taken to isolate and control the release and contacts will be made to obtain assistance. if necessary, by contacting a Safety & Health Representative.

The area Emergency Action Plan will remain in effect until safe operation is restored.

Training

Employees will be trained on the Emergency Action Plan upon initial hire, when there are changes to the Emergency Action Plan or changes to responsibilities within the Emergency Action Plan, or when it is determined by a Supervisor or Manager that knowledge is lacking in the implementation of any portion of this Emergency Action Plan.

All personnel (employees, contractors, sub-contractors) that will be on a Novel Geo-Environmental, Inc. jobsite will be provided with the information in Job/Site-specific Emergency Action Plan Information Packet (Appendix A) before they can work on the jobsite.

Appendix A

JOB/SITE-SPECIFIC EMERGENCY ACTIONS PLAN INFORMATION PACKET

Complete only the applicable sections and forms that apply specifically to the jobsite or facility.

JOB/SITE-SPECIFIC
EMERGENCY ACTIONS PLAN
For

Facility Name: Pennsylvania Office

Facility Address: 171 Montour Run Road, Moon Township, PA 15108

Date Prepared: 09/26/2022

JOB/SITE-SPECIFIC
EMERGENCY ACTIONS PLAN
For

Facility Name: West Virginia Office

Facility Address: 650 MacCorkle Avenue West, St. Albans, WV 25177

Date Prepared: 09/26/2022

EMERGENCY PERSONNEL NAMES AND PHONE NUMBERS

DESIGNATED RESPONSIBLE OFFICIAL – Pennsylvania Office:

Name: Amy Veltri

Phone: 412-719-6300

EMERGENCY COORDINATOR:

Name: Grace Aiken

Phone: 412-302-3020

OFF-SITE PERSONNEL EMERGENCY CONTACT INFORMATION

Gene Stuthers

Phone: 412-622-4118

Grace Aiken

Phone: 412-302-3020

Date: 09/26/2022

EMERGENCY PERSONNEL NAMES AND PHONE NUMBERS

DESIGNATED RESPONSIBLE OFFICIAL – West Virginia Office:

Name: John Nottingham Phone: 304-541-1505

EMERGENCY COORDINATOR:

Name: Grace Aiken Phone: 412-302-3020

OFF-SITE PERSONNEL EMERGENCY CONTACT INFORMATION

Gene Brown Phone: 304-389-7865

Grace Aiken Phone: 412-302-3020

Date: 09/26/2022

EMERGENCY SERVICES PHONE NUMBERS – Pennsylvania Office

AMBULANCE: 911

FIRE DEPARTMENT: (911) or 412-262-5004

POLICE: (911) or 412-262-5000

BUILDING MANAGER (NGE): Amy Veltri

Phone: 412-719-6300

Date: 09/26/2022

EMERGENCY SERVICES PHONE NUMBERS – West Virginia Office

AMBULANCE: 911

FIRE DEPARTMENT: (911) or 304-348-8111

POLICE: (911) or 304-348-8111

BUILDING MANAGER (NGE): John Nottingham

Phone: 304-541-1505

Date: 09/26/2022

EMERGENCY SERVICES PHONE NUMBERS – Specific Job Site

AMBULANCE: _____

FIRE DEPARTMENT: _____

POLICE: _____

SECURITY (If applicable): _____

BUILDING MANAGER (If applicable): _____

Date: ____/____/____

UTILITY COMPANY EMERGENCY CONTACTS – Specific Job Site
(Specify name of the company, phone number, and point of contact)

ELECTRIC COMPANY: _____

Phone: _____

Point of Contact: _____

WATER: _____

Phone: _____

Point of Contact: _____

GAS (if applicable): _____

Phone: _____

Point of Contact: _____

TELEPHONE: _____

Phone: _____

Point of Contact: _____

Date: ____/____/____

ONSITE PERSONNEL CURRENTLY CERTIFIED IN FIRST AID AND CPR – Pennsylvania Office

Call the following personnel currently certified in First aid/CPR to provide assistance:

Name: Gene Stuthers Phone: 412-622-4118

Name: Kirk Eastham Phone: 304-224-5025

Name: Don Hacker Phone: 412-719-4815

Date: ____/____/____

ONSITE PERSONNEL CURRENTLY CERTIFIED IN FIRST AID AND CPR – West Virginia Office

Call the following personnel currently certified in First aid/CPR to provide assistance:

Name: Alan Lupardus Phone: 304-531-2338

Name: Jared Adkins Phone: 304-942-3898

Name: Brandon Wallace Phone: 937-205-1076

Date: ____/____/____

ONSITE PERSONNEL CURRENTLY CERTIFIED IN FIRST AID AND CPR – Specific Job Site

Call the following personnel currently certified in First aid/CPR to provide assistance:

Name: _____ Phone: _____

Name: _____ Phone: _____

Name: _____ Phone: _____

Date: ____/____/____

SPILL CONTROL INFORMATION – Pennsylvania Office

The following are the locations of:

Spill Containment and Security Equipment: First Floor Storage Room

Personal Protective Equipment (PPE): First Floor Storage Room

Safety Data Sheets (SDS): Safety Desk – First Floor

Spill Clean-up Company: Allegheny County Hazmat Station 450 Phone: 412-473-3000

Date: 09/26/2022

SPILL CONTROL INFORMATION – West Virginia Office

The following are the locations of:

Spill Containment and Security Equipment: Garage Area

Personal Protective Equipment (PPE): Main Floor by Mike Frame's Office

Safety Data Sheets (SDS): Main Floor by Mike Frame's Office

Spill Clean-up Company: Clean Harbors in Nitro, WV Phone: 304-755-0105

Date: 09/26/2022

SPILL CONTROL INFORMATION – Specific Job Site

The following are the locations of:

Spill Containment and Security Equipment: _____

Personal Protective Equipment (PPE): _____

Safety Data Sheets (SDS): _____

Spill Clean-up Company: _____ Phone: _____

Date: ____/____/____

TELEPHONE BOMB THREAT CHECKLIST***Be calm, be courteous, listen, do not interrupt the caller.***

Time of call:	Date of call:
Number at which call is received:	
Name of person taking the call:	

Questions to Ask:**Pretend to have difficulty hearing – Keep the caller talking – Ask many questions**

When is bomb going to explode?	
Where is the bomb right now?	
What does it look like?	
What kind of bomb is it?	
What will cause it to explode?	
Did you place the bomb?	
Why did you place a bomb here?	
What is your name?	
What is your address?	
Are you male or female?	
What is your race?	
How old are you?	

Exact Wording of the Threat:**Describe the Caller's Voice: (check all that apply)**

Calm		Crying		Deep	
Angry		Normal		Ragged	
Excited		Distinct		Whispered	
Slow		Slurred		Laughing	
Rapid/Fast		Nasally		Raspy	
Soft		Stutter		Disguised	
Loud		Lisp		Accent	
Cracking voice		Deep breathing		Clearing Throat	
Familiar voice:		Who did it sound like?			

Background Sounds: (check all that apply)

Street noises		Office Machinery		Factory Machinery	
House noises		PA System		Animal noises	
Music		Clear		Static	
Motor		Local		Long Distance	

Threat Language (check all that apply):

Well spoken (educated)			Taped (message read by threat maker?)	
Incoherent/Irrational			Foul language/profanity	

Notify your Supervisor immediately!

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Fall Protection			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-012	Pages	4	Rev. 3.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for the elimination of fall hazards and for the preventing of falls on the worksite.

Scope

This procedure applies to all Novel Geo-Environmental, Inc. employees during operations that require employees to have a walking-working surface at or above 4 feet from a lower level for any and all tasks.

Definitions

Walking-working surface(s) are any horizontal or vertical surface on or through which an employee walks, works, or gains access to a work area or workplace location. Examples of such are platforms, walkways, ladders, stairs, ramps, or tops of tanks or equipment.

Hole means a gap or open space in a floor, roof, horizontal walking-working surface, or similar surface that is at least 2 inches (5 cm) in its least dimension.

Competent Person is one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them. For the purpose of this procedure, a Competent Person must be designated by the Manager and have sufficient knowledge and experience to be able to identify anchor points (tie-off points) able to withstand a minimum of 5,000 pounds.

Qualified Person describes a person who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience has successfully demonstrated the ability to solve or resolve problems relating to the subject matter, the work, or the project.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Fall protection, either by standard railings, hole covers, or the use of PFAS, is required when workers have a walking-working surface at or above 4 feet from a lower level for any and all tasks.

Fall hazards will be eliminated, whenever possible, through the use of standard guardrails or hole covers. When the hazard cannot be eliminated, employees will use a Personal Fall Arrest System (PFAS).

Employees will be tied-off to an anchor point one-hundred percent of the time (100% tie-off) when using PFAS.

All incidents involving a fall to the same level or to a lower level will be investigated with corrective actions implemented per the NGE-HSE-023 Incident Investigation procedure.

Hazard Assessment

The Supervisor or designate will perform a hazard assessment at the respective worksite to determine the presence of fall hazards. The Supervisor or designate will determine the method(s) to eliminate the fall hazards or to otherwise protect the employees according to this procedure. The Supervisor or designate will advise all employees of proper fall protection methods according to this procedure. Proper fall protection methods are either a standard rail or floor hole cover.

When a specific Fall Protection Plan is needed, it will be developed by a Qualified Person.

Standard Railing

A standard railing will consist of top rail, intermediate rail, and posts, and will have a vertical height of 42 inches plus/minus 3 inches, nominal, from upper surface of top rail to floor or platform. The intermediate rail will be approximately halfway between the top rail and the floor, platform, runway, or ramp.

Standard railings will meet all applicable industry and regulatory standards of construction.

Floor Hole Covers

Floor covers will be used to protect floor holes. Floor covers must be able to withstand at least twice the anticipated weight to be placed on the cover. The cover must be fastened or so held in place so as not to be easily moved or removed.

Safety Monitoring System

Safety Monitoring Systems are Not a preferred form of fall protection for NGE employees, however if a safety monitoring system were to be used, it would be based on the following guidelines.

A competent person will be assigned to recognize fall hazards, warn employees if they are unaware of a fall hazard or is acting in an unsafe manner, be on same working surface and in visual sight, stay close enough for verbal communication and not have other assignments that would take monitors attention from the monitoring function.

Equipment Standards

The following are minimum standards for company employees, contractors, and subcontractors personal fall protection systems:

- Fall protection equipment will be specifically designed and designated for employee fall protection only and not to hoist materials.
- Fall protection equipment will meet the requirements of applicable ANSI and/or OSHA requirements.
- When purchasing equipment and materials for use in fall protection systems all applicable requirements will be met.
- Anchor points used for attachment of personal fall arrest equipment will be independent of any other anchor point and capable of supporting at least 5,000 pounds per employee attached.
- Systems used by an employee having a combined person and tool weight more than 310 pounds will be provided so that proper protection is provided for such heavier loads.
- The attachment point of the lanyard to the full-body harness will be located at the D-ring in the center of the wearer's back near shoulder level.
- Personal fall arrest systems and components subjected to impact loading or used in a fall will be immediately removed from service and will not be used again for employee protection until inspected and determined by a Competent Person to be undamaged and suitable for reuse.
- Provide for prompt rescue of employees in the event of a fall or assure that employees can rescue themselves.
- Personal fall arrest systems will be inspected prior to each use for wear, damage, deterioration, with defective components being removed from service.
- Personal fall arrest systems will not be attached to guardrail, nor will they be attached to hoists, crane hooks, or other parts of a crane.

Personal Fall Arrest System (PFAS)

- All Personal Fall Arrest System (PFAS) equipment will meet applicable industry and regulatory standards.
- The Personal Fall Arrest System (PFAS) will consist of a full body harness, connecting device (lanyard), and anchor point (tie-off point).
- The harness will be a full-body harness. The harness will be worn correctly with all straps positioned, connected and tightened according to the manufacturers' instructions.
- The connecting device (lanyard) will be a personal retractable lifeline (fall limiter), or retractable lifeline, or 4 ft shock absorbing double-legged lanyard.
- The personal retractable lifeline (fall limiter) or a retractable lifeline are the preferred connecting devices and will be used whenever possible.
- Only lanyards designed specifically for the purpose can be used to tie-back onto themselves.
- The snap-hooks will be double locking and be able to withstand 5,000 pounds of force from any direction or position as determined by the manufacturers' markings.

- Anchor points (tie-off points) will be located overhead, or as high as possible and must be able to withstand a minimum of 5,000 pounds of force. Building owner must provide written confirmation indicating the anchor points meet the requirements.
- When the use of a personal retractable lifeline (fall limiter) or retractable lifeline is not possible, the 6 ft shock absorbing double-legged lanyard will be used.
- All employees using PFAS will inspect all of the components prior to each use for cuts, frays, oil/solvents, and also will check hardware. Damaged components will be taken out of service and reported to the Manager.
- PFAS components will be stored in such a manner as to not damage the equipment. Examples of acceptable storage include in cabinets specifically and exclusively for fall protection equipment or hanging the components so as to not be damaged from sharp objects, dirt, oil, grease or other agents that may damage or weaken the equipment.

Incident Investigations

The Manager will conduct incident investigations in the event of a fall, near miss or other serious incident per the NGE-HSE-023 Incident Investigation.

Incident investigations will be conducted to evaluate the fall protection plan for potential updates to practices, procedures or training to prevent reoccurrence.

Changes to the fall protection program will be implemented if deemed appropriate from incident corrective actions.

Rescue Plans

Rescue Plans will be developed and communicated to employees involved in the use of fall protection equipment, specifically PFAS, and employees that may be involved in the rescuing of the workers. The Rescue Plan will be as stated in the NGE-HSE-001 Emergency Action Plan in the Fall Rescue section.

Training

Employees will receive training on this procedure upon initial hire. Only those employees trained in fall protection recognition and the use of Personal Fall Arrest Systems (PFAS) are expected to perform activities requiring the use of such equipment.

Retraining on this procedure will be conducted as necessary to ensure workers remain knowledgeable and proficient in the use of fall protection, and the recognition of fall and equipment hazards per this procedure.

Training will be conducted and documented prior to the initial use of PFAS. Retraining will be documented also.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Fatigue Management			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-013	Pages	3	Rev. 3.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

To ensure our employees recognize the effect of fatigue as related to safely being able to perform work and to establish guidelines for work hours and equipment to reduce fatigue in our business and at our client locations.

Scope

The scope of this program applies to all Novel Geo-Environmental, Inc. facilities and job locations and is applicable to all Novel Geo-Environmental, Inc. projects and operations.

Definitions

Fatigue - the state of feeling very tired, weary or sleepy resulting from insufficient sleep, prolonged mental or physical work, or extended periods of stress or anxiety. Boring or repetitive tasks can intensify feelings of fatigue. Fatigue can be described as either acute or chronic.

Acute Fatigue - Usually has an identifiable cause and a likely remedy. Acute fatigue results from short-term sleep loss or from short periods of heavy physical or mental work. The effects of acute fatigue are of short duration and usually can be reversed by sleep and relaxation.

Chronic Fatigue - Lasts much longer than Acute Fatigue. Chronic fatigue syndrome is the constant, severe state of tiredness that is not relieved by rest. The symptoms of chronic fatigue syndrome are similar to the flu, last longer than six months and interfere with certain activities. The exact cause of this syndrome is still unknown.

Signs of Fatigue - Tiredness, sleepiness, irritability, depression, giddiness, loss of appetite, digestive problems, increased susceptibility to illness.

Fit State – (aka Fit for Duty) is the worker is not exhibiting signs of fatigue to the point of being unsafe to perform their respective tasks.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.
- Management will also periodically evaluate and improve work tasks to control fatigue.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.
- Employees must present in a fit state free from alcohol and drugs;
- Employees must not chronically use over-the-counter or prescription drugs to increase mental alertness.
- Employees are prohibited from taking any substance known to increase fatigue in that employee, including fatigue that sets in after the effects of the drug wear off.
- Workers will report tiredness/fatigue to supervision and supervisors will take appropriate action to assist the worker.
- Employees must report fatigue/tiredness and lack of mental acuity to supervision. Supervision must take appropriate actions to prevent loss.
- Employees need to be rested prior to starting work.
- Employees need to monitor their own performance and take regular periods of rest to avoid continuing work when tired.

Procedure

The guiding principles of fatigue management will be incorporated into the normal management functions of the business and include the following:

- Employees must be in a fit state to undertake work
- Employees must be fit to complete work
- Employees must take minimum periods of rest to safely perform their work

These principles will be managed through:

- The appropriate planning of work tasks, including driving, vehicle and equipment maintenance, loading
- and unloading and other job-related duties and processes
- Providing appropriate equipment to help reduce stress and fatigue
- Regular medical checkups and monitoring of health issues as required by applicable regulations
- The provision of appropriate sleeping accommodations where required
- Ongoing training and awareness of employee health and fatigue issues

Supervisors must take all possible precautions to prevent worker fatigue. These items include, but are not limited to:

- Employees must be given appropriate time to rest. This includes time during the work shift as well as time off of work.
- Work load should be spread evenly amongst workforce. This will require that each job be evaluated and more strenuous jobs be spread out and employees rotated.
- Eliminate awkward positions and strenuous work when possible. Encourage employees to ask for help lifting loads and use ergonomically friendly equipment.

- Limit fluctuation, in so much as is possible, of an employees' shifts as much as possible. The length of each shift should be limited to 12 hours whenever possible. Employees who work a steady shift will adapt and be able to get a better-quality rest period.
- Limit stress as much as possible. Mental stress can cause fatigue as well as physical stress.
- Talk with all employees each day so their fitness for duty can be evaluated.
- Engage employees in the decision-making process to engage them in their work.
 - All employees must take responsibility for being fit for duty. Fatigue is no exception.
 - Employees must notify supervisors when fatigue is not manageable.
 - Employees need to make the most of rest periods and time off of work.
 - Try to get a consecutive 8 hours of sleep every night.
 - Avoid overloading of caffeine and sugar.
 - Ask for help when needed.

Training

Novel Geo-Environmental, Inc. is committed to ensuring that all employees are competent to perform their tasks including:

- Fatigue management and health issues.
- Novel Geo-Environmental, Inc. will provide initial and annual training on how to recognize fatigue, how to control fatigue through appropriate work and personal habits and reporting of fatigue to supervision.

A record of individual fatigue management training and competency will be maintained.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Fire Prevention and Fire Protection			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-014	Pages	2	Rev. 3.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for the prevention of fires, controlling of ignition sources, and use and maintenance of fire extinguishers.

Scope

Applies to all Novel Geo-Environmental, Inc. employees and all Novel Geo-Environmental, Inc. locations.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Employee Use Designation

Employees are to voluntarily engage in the extinguishing of an incipient (beginning or small) stage fire. All other types of fires will have the employee(s) evacuating the immediate area to a muster point and sounding the fire alarm.

General Fire Prevention Rules

- Vehicles will not be located, parked, or stopped within 100 feet, where practical and possible, of a wellhead or other source of natural gas or other flammable gas or liquid. The vehicle's engine will be turned off to eliminate an ignition source.
- Smoking is prohibited by Novel Geo-Environmental, Inc. employees except in designated areas. Specific areas will be designated by signs.
- Smoking is prohibited at or in the vicinity of vehicle service areas, storage areas, and where "No Smoking" or similar signs are posted.
- Flammable liquids are not to be stored or transported inside the cab of vehicles.
- All materials will be stored, labeled and handled with regard to their fire characteristics including the separation of flammable and combustible materials.
- Storage will not obstruct, or adversely affect, means of exit from any building or facility.
- Opened flammable/combustible materials, other than that required for daily use, are not to be stored inside any building.
- All containers, materials, and equipment used in the transferring of flammable and/or combustible materials will be properly grounded and bonded to control static electricity.

- Gasoline will be stored in containers approved by DOT or meeting OSHA requirements in quantities of 5 gallons or less per can.

Location of Fire Extinguishers

- Fire extinguishers will be located on each company vehicle and equipment. The fire extinguishers will be easily accessible and the location clearly marked.
- Fire extinguishers will also be located in the On-site Company Representatives quarters. The fire extinguishers will be of the correct type and size, easily accessible, and the location clearly marked.

Inspection and Maintenance of Fire Extinguishers

1. Fire extinguishers will be inspected monthly by the vehicle operator and will be noted on the vehicle inspection form. The On-site Company Representative will inspect the fire extinguishers in their quarters on a monthly basis and indicating it on the inspection tag. Inspections include checking the pin for placement, the pressure gauge to be in the green or "Charged" area, the condition of the discharge hose, and to turn the fire extinguisher upside down twice to ensure the powder inside stays in a flowing condition.
2. Fire extinguishers will be inspected annually by qualified personnel in accordance with the latest edition of NFPA-10.
3. Fire extinguishers will be reported to and turned into the Supervisor or Manager for replacement once the seal is broken for any reason—a broken seal is a "discharged extinguisher" no matter how much or how little is used.

Selection of Fire Extinguisher

Fire extinguishers will be selected based on the type of fire they are designed to extinguish:

- Class A - Fires involving ordinary combustible materials such as wood, paper, cloth & plastics etc.
- Class B - Fires involving flammable liquids, gasses or greases
- Class C - Fires in which an energized electrical current is present and a non-conducting extinguishing agent must be used.
- Class D – Fires involving combustible metals such as magnesium, titanium, sodium and potassium.

Class ABC dry-powder will be the most commonly used.

Training

Employees because they voluntarily engage in the extinguishing of an incipient (beginning) stage fire will be trained in fire extinguishers. Training will be conducted annually on the different types, operations, care, capabilities, and limitations of portable fire extinguishers as well as the hazards of an incipient stage fire.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Housekeeping & General Waste Management			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-016	Pages	3	Rev. 2.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for the maintaining of a safe and organized work area to reduce the potential for slips, trips, and falls and to promote compliant waste management during construction and operations.

Scope

This procedure applies to all Novel Geo-Environmental, Inc. employees at all respective sites

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Novel Geo-Environmental, Inc. will coordinate with the project site or owner to ensure proper disposal of wastes or scrap materials. Novel Geo-Environmental, Inc. must ensure the owner client is aware of whether wastes and scrap materials will be taken off site by Novel Geo-Environmental, Inc. or will be disposed of on the owner client's site.

Offices

- Office areas are to be kept neat and orderly.
- All aisles, emergency exits, fire extinguishers, etc., will be kept clear (a minimum of three feet on either side) of material storage (temporary and permanent) at all times.
- Storage areas will be kept orderly at all times. When supplies are received, the supplies will be stored properly.
- Spills will be cleaned-up immediately and wastes disposed of properly.
- All waste receptacles will be lined with a plastic trash bag to avoid direct contact while handling.
- All wastes will be handled in a manner that reduces environmental impact.
- Keep file and desk drawers closed when not attended to avoid injuries. Open only one drawer at a time to prevent tipping of file cabinets.
- At the end of the business day, turn off all office equipment (area heaters, lamps, coffee-maker, etc.) and lights to save energy and prevent fires.

- All space heaters are to be un-plugged at the end of the day to assure they have been turned-off.

Housekeeping and Waste Management

- Visually inspect the work area before beginning work. Make sure the work area is safe, orderly condition when the job is being performed and when the job is complete.
- Report any housekeeping problems that you cannot immediately correct to your Supervisor or Manager.
- Prior to project commencement, the amount of waste and scrap will be estimated so as to ensure for adequate waste removal containers. Notify the Manager of the removal of waste and scrap from the site when the site container is full.
- Waste and scrap materials will be stored, disposed of properly and safely in designated containers and, as a minimum, according to the site requirements. The On-site Company Representative has overall responsibility for waste disposal.
- Waste and scrap material will not be so stacked or placed in containers that it will fall out of the container during movement or transport. To reduce the potential for the waste and scrap materials to blow, fall, or otherwise come out of the container, the container may need to be covered with a tarp or cover during storage, movement, or transport.
- Handling of the waste and scrap materials will include the use of PPE according to the Personal Protective Equipment procedure.
- Waste and scrap materials will be, when possible, separated into recyclable and re-useable materials, and those materials not reusable or recyclable will be disposed of properly.
- Storage shelves are not to be overloaded beyond capacity, items will be stored so as to not fall or shift.
- Walking areas and work areas are not to have items in those areas that would cause a slip, trip or fall hazard.

Rest Room Facilities

Rest room facilities are provided as a convenience for all employees.

- Employees are expected to clean up after themselves as a common courtesy to fellow employees.
- All refuse and waste materials will be placed in the recognized waste containers for disposal.

Material Storage

Proper storage procedures are required for dry, raw materials, flammables and compressed gases storage to prevent fires, keep exits and aisles clear and avoid injuries and illnesses.

General rules for material storage are as follows:

- Materials may not be stored any closer than 18 inches to walls or sprinkler heads
- A minimum of 3 feet side clearance will be maintained around doorways and emergency exits. Passageways and aisle will be properly marked and a minimum of six feet in width
- Materials may not be stored in aisles or passageways
- Aisles and passageways will be kept clear of debris
- All spills of materials will be immediately cleaned-up by the person responsible
- Stock will be stacked in a manner top prevent fall

Flammable Storage

- Fuels, solvents and other flammables will be stored in OSHA-approved cabinets
- Flammables may not be stored in open containers

- Flammable storage areas will be kept dry and well ventilated. No storage of combustible materials, open flames or exposed electrical components are permitted in the flammable storage area.

Training

Employees will be trained on this procedure initially and as needed to remind workers to manage waste properly.

- General instruction on disposal of non-hazardous wastes, trash or scrap materials
- Minimization methods to reduce waste
- Recycling methods
- If wastes generated are hazardous then employees shall be trained to ensure proper disposal and compliance with regulations.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Hand & Power Tools			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-017	Pages	4	Rev. 2.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

The purpose This procedure establishes the minimum requirements for the use, inspection, maintenance, and replacement of hand and power tools.

Scope

This program is applicable to all Novel Geo-Environmental, Inc. employees using hand and power tools in the course of performing their tasks.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Requirements

PPE

Proper PPE will be correctly utilized and worn when using hand and power tools as specified in the Personal Protection Equipment Procedure.

General Use

- Only tools provided by Novel Geo-Environmental, Inc. will be used; personal tools are not permitted without prior authorization Novel Geo-Environmental, Inc.. If a specific tool is needed, talk with the Supervisor or Manager.
- All hand and power tools will be maintained in good, operating, and safe condition.
- Tools will be inspected before each use. Any tool found to be defective – not in a good, operating, and safe condition – will be removed from service.
- Use the proper tool for the job to be performed.
- Follow manufacturers' instructions and/or safe work practices when utilizing hand tools.
- Place tools and equipment back in their proper place when not in use.
- Keep close track of tools when working at heights; may need to use tether or safety strap.
- Select ergonomic tools for your work task when movements are repetitive and forceful.

Portable Power Tools

- Portable power tools must have the guards in place that were supplied by the manufacturer. The guards must be used and placed according to the manufacturer's instructions.

- Use explosion proof and non-sparking tools/equipment where potentially explosive atmospheres may exist.
- Any electrical tools with frayed cords or with ground pins missing will be tagged out of service.
- All portable power tools will be grounded or double insulated and free of electrical or mechanical defects.
- Disconnect tool from power source to change drill bits, blades, etc.
- Be sure the power tool is off and has stopped rotating before putting it down.
- All tools will be used with the correct shield, guard, or attachment recommended by the manufacturer.
- The use of electric cords for hoisting or lowering tools will not be permitted.

Non-Powered Hand Tools

- When using hammers, sledges or other driving tools, use a tool holder for the chisel, bar or other tool/equipment being struck.
- Wrenches, including crescent, pipe, end and socket wrenches, will not be used when jaws are sprung to the point that slippage occurs.
- The wooden handles of tools will be kept free of splinters or cracks and will be kept tight in the tool.
- All observers must stand clear of any individual performing sledge work.
- Check the clearance overhead and behind before starting to perform sledge work.
- Do not use handle extensions or cheater bars on wrench handles; use the largest wrench available.
- Never step or jump on wrenches when additional force is needed.
- The operator will make sure that the jack used has a rating sufficient to lift and sustain the load.

Compressed Air

- Do not use an air hose to blow off particles on clothing, hair or skin.
- The air hose must be so equipped as to not allow more than 30 psi at the nozzle when dead-headed.
- Horseplay with compressed air will not be tolerated.
- Hoses and lines should be rated to meet the maximum operating pressure of the equipment.
- Use the Proper PPE: eye protection, and hearing protection.
- Never point compressed air at yourself or another individual.
- Keep air hoses off the floor where they become tripping hazards.
- Before attempting to disconnect a hose from an airline, the air should be cut off, and the remaining air bled from the line.
- Before using compressed air, check the air hose for damage or signs of failure.
- The manufacturer's safe operating pressure for hoses, pipes, valves, filters, and other fittings will not be exceeded,

Cutting Tools

- Cutting tools are to be kept sharp.
- Use the proper cutting tool for the job at hand.
- Always cut away from yourself.
- When possible secure the material to be cut to keep it from spinning or slipping.

Pneumatic Tools

- Pneumatic tools will be secured to the hose with safety clips or retainers to prevent accidental disconnection.
- Use proper personal protective equipment when using tools.
- Compressed air for tooling must be clean and dry.

- Keep tooling clean and lubricated.
- Use only manufacture specified attachments.
- Secure work with clamps or a vise, freeing both hands to operate the tool.

Powder Actuated Tools

- Powder actuated tools will be used ONLY by trained and certified employees.
- Powder actuated fastening tools will be tested each day before loading to ensure that the safety devices are in proper working condition. Any tool found not to be in proper working order will be immediately removed from service until repairs are made.
- Powder actuated fastening tools will not be used in an explosive or flammable atmosphere.
- Fasteners will not be driven into soft materials unless such materials are backed by a substance that will prevent the pin or fastener from passing completely through and creating a flying missile hazard on the opposite side.
- Employees using powder actuated fastening tools must use personal protective equipment.
- Before using a tool, the operator will inspect it to determine that it is clean, that all moving parts operate freely and that the barrel is free from obstructions.
- When a tool develops a defect during use, the operator will immediately cease to use it.
- Tools will not be loaded until just prior to the intended firing time and the tool will not be left unattended while loaded.
- The tool, whether loaded or empty, will not be pointed at any person, and hands will be kept clear of the open barrel end.

Inspection

Always inspect hand tools prior to use and do not use broken, damaged, or unsafe hand or power tools. Remove them from service, tag them as out of service, and notify your Supervisor/Foreman.

Ensure that electric hand tools are properly insulated and grounded. Check cords for cuts prior to each use.

Maintenance

Hand and power tools will be repaired by a qualified person or manufacturers' representative.

Do not, under any circumstances, alter tools from the manufacturers' specifications.

Replacement

Hand and power tools that are deemed unsafe will be taken out of service and repaired or replaced by Novel Geo-Environmental, Inc. at the discretion of management.

Electrical Safety

Ground-fault Circuit Interrupters (GFCI) will be placed between any electrical cord and power source during construction operations.

Vehicle-mounted generators will be equipped with ground-fault circuit interrupters (GFCI).

Training

Employees will be trained on the proper use, inspection, and maintenance of all hand and power tools according to the manufacturers' instructions and per safe operating conditions.

This training will be conducted prior to the workers use of the tools and whenever a Manager of Novel Geo-Environmental, Inc. has reason to believe the employee needs to be retrained due to observed or perceived inadequacies in the employee's knowledge or use of this procedure.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Hazard Communication			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-018	Pages	5	Rev. 4.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for communicating to all employees the physical and health hazards of hazardous chemicals used at the jobsite or work area, the symptoms if over exposed to a hazardous chemical, and the means to protect themselves from over exposure.

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. working with hazardous chemicals.

Definitions

Hazardous chemical - any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified.

Health hazard - a chemical which is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard. The criteria for determining whether a chemical is classified as a health hazard are detailed in Appendix A to 1910.1200 Health Hazard Criteria.

Physical hazard - a chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or in contact with water emits flammable gas. See Appendix B to 1910.1200 Physical Hazard Criteria.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

List of Hazardous Chemicals

Novel Geo-Environmental, Inc. has a list of all hazardous chemicals known to be present at the facility and on the jobsite, including company vehicles, which will be maintained up to date at all times. The names of the chemicals on the list will be the same as on the Safety Data Sheet (SDS) and the same as on the label on the hazardous chemicals facility.

The Chemical Inventory List is updated as necessary and at least annually by the Safety Manager and is available for review by all employees.

Safety Data Sheets

Safety Data Sheets on all hazardous chemicals used in the workplace will be available to all employees. The Safety Data Sheets will be in English. The Safety Data Sheets will be maintained with the most up-to-date revision available.

Safety Data Sheets will have the information required by OSHA, as a minimum. Safety Data Sheets will be acquired by the department manager at the time of acquisition of the hazardous chemical(s) and when SDS are revised by the manufacturer, distributor, or importer.

Safety Data Sheets for each hazardous chemical will be readily accessible during each work shift to employees when they are in their work area(s).

The latest revision of Safety Data Sheets for all hazardous chemicals on each company vehicle will be maintained in a binder in that company vehicle to be readily accessible to the operator and/or passenger(s) of the vehicle.

Copies of all Safety Data Sheets for all hazardous chemicals to which employees may be exposed will be maintained at the local office and will be available for immediate review to obtain the required information in an emergency. This includes copies of all SDS on the company vehicles.

Labels and Other Forms of Warning

Labels are an appropriate group of written, printed, or graphic informational elements concerning a hazardous chemical that are affixed to, printed on, or attached to the immediate container of a hazardous chemical, or to the outside packaging.

Each container of hazardous chemicals leaving the workplace must be labeled, tagged or marked with the following information:

- Product identifier
- Signal word
- Hazard statement(s)
- Precautionary statement(s)
- Pictogram(s)
- Name
- Address
- Telephone number of the chemical manufacturer, importer, or other responsible party

Label Elements:

1. *Name, Address and Telephone Number* of the chemical manufacturer, importer or other responsible party.

2. *Product Identifier* is how the hazardous chemical is identified. This can be (but is not limited to) the chemical name, code number or batch number. The manufacturer, importer or distributor can decide the appropriate product identifier. The same product identifier must be both on the label and in section 1 of the SDS.
3. *Signal Words* are used to indicate the relative level of severity of the hazard and alert the reader to a potential hazard on the label. There are only two words used as signal words, "Danger" and "Warning." Within a specific hazard class, "Danger" is used for the more severe hazards and "Warning" is used for the less severe hazards. There will only be one signal word on the label no matter how many hazards a chemical may have.
4. *Hazard Statements* describe the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard. All of the applicable hazard statements must appear on the label. Hazard statements may be combined where appropriate to reduce redundancies and improve readability.
5. *Precautionary Statements* describe recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to the hazardous chemical or improper storage or handling. There are four types of precautionary statements: prevention (to minimize exposure); response (in case of accidental spillage or exposure emergency response, and first-aid); storage; and disposal.
6. *Supplementary Information*. The label producer may provide additional instructions or information that it deems helpful.
7. *Pictograms* are graphic symbols used to communicate specific information about the hazards of a chemical. The required pictograms consist of a red square frame set at a point with a black hazard symbol on a white background, sufficiently wide to be clearly visible.

Novel Geo-Environmental, Inc. is responsible for maintaining the labels on all containers, including, but not limited to, tanks, totes, and drums. This means that labels must be maintained on chemicals in a manner which continues to be legible and the pertinent information does not get defaced or removed in any way.

All containers of hazardous chemicals in the workplace will be labeled, tagged or marked with the identity of the hazardous chemical(s) in the container and the appropriate hazard warnings. Words, pictures, symbols, or a combination will be used to communicate the hazards of the chemicals.

Portable containers into which hazardous chemicals are transferred from labeled containers, and which are intended only for the immediate use of the employee who performs the transfer are not required to be labeled. If another employee is to use the hazardous chemical in the portable container, that container is now a secondary container and must be labeled with the name of the hazardous chemical and the hazards of the chemical.

Labels on the original containers are not to be removed until the container is immediately marked with another label with the name of the hazardous chemical and the hazards of the chemical.

All labels will be in English. Assistance will be provided to Non-English-speaking employees.

Multi-Employer Jobsites

Where there is more than one employer on a jobsite, the Manager or designate will inform the other employers of any hazardous chemicals used on the jobsite. The Manager or designate will obtain Safety Data Sheets from the other employers on the jobsite for any hazardous chemical that their workers may be exposed to while conducting operations at the jobsite.

Non-Routine Tasks and Non-Routine Hazardous Chemicals Use

The Manager will inform employees of the hazards and means of eliminating or controlling the hazards of non-routine tasks and non-routine use of hazardous chemicals. Tasks and uses that are, generally, performed infrequently or is outside of normal duties or does not have a documented procedure is considered non-routine.

Consumer Product Exemption

Consumer Product Exemption (ref. 1910.1200(b)(6)(ix)) "Any consumer product or hazardous substance...where the employer can show that it is used in the workplace for the purpose intended by the chemical manufacturer...and the use results in a duration and frequency of exposure which is not greater than the range of exposures that could reasonably be experienced by consumers when used for the purpose intended;"

It is the employer's responsibility to determine if the employee exposure, the frequency of use, and the frequency of exposure is not more than that which would be experienced by a normal consumer.

Explanation: This exemption applies only when: (must meet all requirements)

- The product is being used in the workplace on an occasional use basis and not repeatedly throughout the workday; and
- The occasional use of the product in the workplace does not result in duration and frequency of exposures greater than exposures experienced by normal consumers using it for its intended purpose.

Example: using cleaning products occasionally to clean the desktop or countertop or table top in an office is occasional use and exempt from the HAZCOM program. Using those same cleaning products as a janitor or custodial staff is an occupational use (not normal consumer use) and would not be exempt from the HAZCOM program.

Access to Procedure

This Hazard Communication Program will be maintained at the local offices and made available to all employees, OSHA Representatives, and upon written request, to employee representatives.

Training

Novel Geo-Environmental, Inc. Employees will be trained on this Hazard Communication Program:

- At the time of initial hire or initial assignment, and
- When a new physical or health hazard the employees have not previously been trained about is introduced into their work area or when a new hazardous chemical is brought into the work area or jobsite.
- When any changes are made to OSHA Regulations requiring such training and updates
- Whenever a Manager of Novel Geo-Environmental, Inc. has reason to believe the employee needs to be retrained due to observed or perceived inadequacies in the employee's knowledge or use of this procedure.

Training will provide information covering the categories of hazards (e.g., flammability, carcinogenicity) or specific chemicals. Chemical-specific information must always be available through labels and Safety Data Sheets.

Training will include:

- The specifics of this Hazard Communication Program
- The location and uses of hazardous chemicals in their work areas or jobsites
- The location and availability of the list of hazardous chemicals
- The location of the Safety Data Sheets
- The methods and observations used to detect the presence or release of a hazardous chemical in the work area such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released
- The physical and health hazards of the chemicals in the work area
- The measures employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used
- The labeling system
- The process to obtain a Safety Data Sheet by an employee or employee Representative

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	HAZWOPER and RCRA			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-019	Pages	5	Rev. 3.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for safely responding to an emergency or a potential emergency involving the release of hazardous substances. This procedure also establishes the minimum requirements to ensure proper handling of hazardous wastes for the protection of workers and the personnel training requirements under the Resource Conservation and Recovery Act (RCRA).

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. that handle hazardous waste or have the potential to witness or discover a release of a hazardous substance and who respond in a defensive manner.

Definitions

HAZWOPER - an abbreviated form of Hazardous Waste Operations and Emergency Response, 29CFR1910.120.

Hazardous substance - any substance that can cause harm to the health or safety of a human or cause serious harm to the environment. Examples include chemicals, biological agents or organisms, hazardous waste, or substances listed by the USDOT as a hazardous material under 49 CFR 172.101 and its appendices.

- Methane (natural gas) is listed by USDOT as a hazardous material under 49 CFR 172.101 and appendices and therefore is recognized by OSHA as a hazardous substance.
- Other substances are included in the CFR. Refer to CFR for the complete list.

Emergency Response - when, as a consequence of a release of a hazardous substance, the following conditions, or similar conditions, may develop such situations would normally be considered emergency situations requiring an emergency response effort:

- High concentrations of toxic substances.
- Situation that is life or injury threatening.
- Imminent Danger to Life and Health (IDLH) environments.
- Situation that presents an oxygen deficient atmosphere.
- Condition that poses a fire or explosion hazard.
- Situation that required an evacuation of the area.
- A situation that requires immediate attention because of the danger posed to employees in the area.

Incidental Release - a release of a hazardous substance which does not pose a significant safety or health hazard to employees in the immediate vicinity or to the worker cleaning it up, nor does it have the potential to become an emergency.

Responses to incidental releases of hazardous substances where the substance can be absorbed, neutralized, or otherwise controlled at the time of release by employees in the immediate release area, or by maintenance personnel, are not considered to be emergency

responses within the scope of this standard [29 CFR 1910.120]. Responses to releases of hazardous substances where there is no potential safety or health hazard are not considered to be emergency responses.

Awareness Level Responder - An employee that is simply expected to notify the emergency response team upon discovery of an emergency release and evacuate from the area.

Operations Level Responder - An employee who is responding initially in a defensive manner for the purpose of protecting nearby persons, property, or the environment from the effects of the release, but does not approach the point of release. First responders at the operations level are trained to respond in a defensive fashion without actually trying to stop the release. Their function is to contain the release from a safe distance, keep it from spreading, and prevent exposures.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Upon the witnessing or discovering of the release of a hazardous substance, if a spill or release is considered an emergency situation or injuries have occurred, the following procedures should be implemented:

1. Activate and follow the Novel Geo-Environmental, Inc. Emergency Action Plan.
2. Alert others of the release and summon help;
3. Evacuate immediate area, and provide care to the injured and call 911;
4. Establish site control – do not allow any untrained Novel Geo-Environmental, Inc. employee or untrained employee supervised by Novel Geo-Environmental, Inc. to enter the area of the potential release.
5. If potential fire or explosion hazards exists initiate site evacuation procedures and call 911;
6. Respond defensively to any uncontrolled spills;
7. Use appropriate personal protective equipment when responding to any spill;
8. Attempt to shut off the source of the release if it is remote from the hazardous substance;
9. Eliminate any sources of ignition;
10. Contain the release from a safe distance and keep it from spreading using booms, dikes, pads, etc.
11. Protect drains by use of adsorbent, booms or drain covers located in the trucks, or trailers, or containers onsite;
12. Notify emergency contact(s); (see page3 Emergency Contact Information of the Emergency Action Plan)

Medical Surveillance and Decontamination

The program must be provided at no cost to the employees. All employees who are or may be exposed to hazardous substance or health hazards at or above the established permissible exposure limit, above the published exposure levels for these substances, without regard to the use of respirators, for 30 days or more a year must be provided with medical surveillance.

Air monitoring should be used to identify and quantify airborne levels of hazardous substances. The monitoring should address initial entry, periodic monitoring, possible IDLH conditions and wherever exposures may be a possibility.

A decontamination procedure shall be developed, communicated to employees and implemented before any employees or equipment may enter areas on site where the potential for exposure to hazardous substances exists.

All employees leaving a contaminated area shall be appropriately decontaminated. All contaminated clothing and equipment leaving a contaminated area shall be appropriately disposed of or decontaminated.

Decontamination procedures shall be monitored by the site safety and health supervisor to determine their effectiveness. When such procedures are found to be ineffective, appropriate steps shall be taken to correct any deficiencies.

Decontamination shall be performed in geographical areas that will minimize the exposure of uncontaminated employees or equipment to contaminated employees or equipment. PPE and equipment shall be decontaminated, cleaned, laundered, maintained or replaced as needed to maintain their effectiveness. Employees whose non-impermeable clothing becomes wetted with hazardous substances shall immediately remove the clothing.

Unauthorized employees shall not remove PPE or equipment from change rooms.

Where the decontamination procedure indicates a need for regular showers and change rooms outside of a contaminated area, they shall be provided and meet the requirements of 29 CFR 1910.141

Engineering Controls

Feasible engineering controls include the use of pressurized cabs or control booths on equipment, and/or the use of remotely operated material handling equipment. Engineering controls, work practices and PPE shall be used to reduce and maintain exposure limits.

HAZWOPER Training Requirements – Operations Level

Emergency responders must be trained prior to their participation in emergency response operations and their training must be based on the functions and duties the responders will be expected to perform. Novel Geo-Environmental, Inc. employees will be trained initially and then annually thereafter.

First responders at the awareness level shall have sufficient training to objectively demonstrate competency in the following areas:

1. An understanding of what hazardous substances are, and the risks associated with them in an incident.
2. An understanding of the potential outcomes associated with an emergency created when hazardous substances are present.
3. The ability to recognize the presence of hazardous substances in an emergency.
4. The ability to identify the hazardous substances, if possible.
5. An understanding of the role of the first responder awareness individual in the employer's emergency response plan including site security and control and the U.S. Department of Transportation's Emergency Response Guidebook.
6. The ability to realize the need for additional resources, and to make appropriate notifications to the communications center.

First responders at the operational level shall have received at least eight hours of training or have had sufficient experience to objectively demonstrate competency in the following areas in addition to those listed for the awareness level:

1. Knowledge of the basic hazard and risk assessment techniques.
2. Know how to select and use proper personal protective equipment provided to the first responder operational level
3. An understanding of basic hazardous materials terms.
4. Know how to perform basic control, containment and/or confinement operations within the capabilities of the resources and personal protective equipment available with their unit.
5. Know how to implement basic decontamination procedures.
6. An understanding of the relevant standard operating procedures and termination procedures.

The Hazwoper trainers will be competent and qualified to conduct Emergency Response training. They will have the training and/or academic credentials and instructional experience to demonstrate competency.

Post Emergency Response Operations

After an emergency release, it is often necessary to transition from an emergency response operation to a hazardous substance cleanup operation. In such cases, post-emergency cleanup begins when the individual in charge of the emergency response declares the site to be under control and ready for cleanup.

Employees of the site where the emergency release occurred are typically more familiar with the types of hazardous substances of the site, site conditions, and methods to appropriately protect themselves from the related hazards.

As a result, these employees do not need to be trained in accordance with 1910.120(e). However, these employees do have to complete the training required by 1910.38, 1910.134, 1910.1200, and other appropriate safety and health training made necessary by the tasks they are expected to perform during the cleanup.

Hazardous Waste Generator Classifications

RCRA hazardous waste regulations classify generators of hazardous waste into three categories based on the quantity generated, as follows:

- Conditionally exempt small quantity generators (CESQGs) generate no more than 100 kilograms (220 pounds) of hazardous waste in a calendar month.
- Small quantity generators (SQGs) generate between 100 kilograms (220 pounds) and 1,000 kilograms (2,200 pounds) of hazardous waste in a calendar month.
- Large quantity generators (LQGs) generate more than 1,000 kilograms (2,200 pounds) of hazardous waste in a calendar month.

The regulations refer to small quantity generators as "generators of greater than 100 kg but less than 1,000 kg in a calendar month." Requirements for "generators" always apply to large quantity generators, but may not apply to SQGs or CESQGs.

RCRA Training Requirements

LQGs

For LQGs, the following training requirements must be met:

All facility personnel who are assigned to the management of hazardous waste must complete classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the hazardous waste management regulations.

A person trained in hazardous waste management procedures must conduct the training program. The program must include instructions that teach facility personnel hazardous waste management procedures (including contingency plan implementation) specific to the position for which they are employed.

New employees must be trained within six months of hire or first being assigned to a position requiring training and must not work unsupervised until the training has been completed (40 CFR 265.16(b)).

Annual training reviews (refresher training) must be completed (40 CFR 265.16(c)).

Training records must be maintained for current employees until the closure of the facility and training records must be retained for a period of three years for former employees (40 CFR 265.16(e)). Records must be maintained for both classroom and on-the-job training administered.

Each employer must maintain a written training plan that includes (but is not limited to) the following: a written description of the job title and position description for each position requiring training; a written description of the type and amount of training each position will obtain and documentation of training completed; procedures for using, maintaining, and repairing/calibrating facility emergency and monitoring equipment; communications/alarm systems; emergency response; and shutdown of operations(40 CFR 265.16(d)).

According to 40 CFR 265.16(a)(3), the training must cover the following contingency planning and emergency response topics:

- Procedures for using, inspecting, repairing and replacing emergency and monitoring equipment.
- Key parameters for automatic waste feed cut-off systems.
- Procedures for communicating with other employees and outside emergency response personnel
- Response to fire or explosion.
- Response to leaks or spills or groundwater contamination incidents.
- Shutdown of operations.

Additional training topics typically include, but are not limited to, the following:

- Hazardous waste identification
- Container use, marking, and labeling
- Storage area management
- Personal health and safety and fire safety
- Manifesting and off-site transportation

SQGs

For SQGs, the requirements are not as stringent and only basic training is required. Personnel must be trained so that they are thoroughly familiar with the waste handling and emergency procedures relevant to their position during normal facility operation and emergencies. (40 CFR 262.34) Though it is not a requirement of federal RCRA regulations, SQGs should maintain training records and documentation of training for a period of three years.

CESQGs

RCRA regulations do not have any formal training requirements for CESQGs of hazardous waste. However, it is strongly encouraged to train staff/ individuals who handle hazardous waste and retain records of the training provided.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Hydrogen Sulfide (H ₂ S) Awareness			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-022	Pages	2	Rev. 2.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure communicates the minimum information that an employee or workers supervised by the employees of Novel Geo-Environmental, Inc. will need to work safely in areas with the potential exposure to Hydrogen Sulfide.

Scope

This program applies to all employees of Novel Geo-Environmental, Inc. that have the potential of exposure to Hydrogen Sulfide.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Characteristics

Hydrogen Sulfide is a colorless gas, toxic at low concentrations, highly flammable, heavier than air, liquid soluble, and smells of rotten eggs.

Exposure and Locations – Potential

The locations or sources of Hydrogen Sulfide include natural gas and crude oil, condensate and produced water, drilling operations, work over, production, pipelines, confined spaces, excavation & trenches, production tanks, fracturing tanks, and mud tanks.

Health Hazards

The health effects of overexposure to Hydrogen Sulfide include skin irritation, nausea, eyes irritation, coughing, dizziness, headache, irrational behavior, loss of consciousness, dryness in the nose and throat, and ultimately death.

Physical Hazards

Hydrogen Sulfide has the following physical hazards:

- API Action Level: 10 ppm 8-hour TWA
- OSHA Ceiling Limit (max.) 20 ppm in an 8-hour period or 50 ppm for 10 minutes in an 8-hour period;

- Ceiling Limit = maximum concentration at any point in an 8-hour period
- OSHA IDLH 100 ppm
- Highly flammable - Explosive Range of 4% to 44%
- Automatically ignites at 500 degrees F
- Causes metal fatigue, brittleness, and stress cracking

Detection Systems

When the potential for Hydrogen Sulfide is present in the work areas portable/personal monitors will be used by employees to detect the presence, of among other substances, Hydrogen Sulfide.

The monitors and alarms are to be checked daily including the batteries and calibrated/tested daily per the manufacturer's instructions.

Both the fixed and portable detectors will alarm at a level of 10 ppm of Hydrogen Sulfide.

Personal Protective Equipment (PPE)

For PPE requirements, see the Personal Protection Equipment (PPE) procedure specifically the Respiratory Protection section of the procedure.

Self-contained Breathing Apparatus (SCBA) or supplied-air respirator (SAR) with an escape SCBA will be used to enter work areas with known concentrations of Hydrogen Sulfide at or above 10 ppm.

Emergency Planning

Employees of Novel Geo-Environmental, Inc. are prohibited from working in Hydrogen Sulfide concentrations at or above 10 ppm. The Supervisor or Manager will determine that the work site has the potential for Hydrogen Sulfide and communicate that information to the employees.

Upon the portable monitors alarming at 10 ppm of Hydrogen Sulfide, all employees will evacuate the area according to the site emergency plan to the pre-designated meeting points.

The Supervisor will notify Novel Geo-Environmental, Inc. workers of the site-specific Emergency procedures prior to beginning work on the site.

All nonessential personnel will evacuate the work area and proceed to a safe meeting point

Training

Employees working in areas and locations that have the potential for the presence of or exposure to Hydrogen Sulfide will be trained in this awareness program upon initial assignment to the area and annually thereafter. The training will be documented as to the Instructor, date of training, and topics covered.

References:

- API Recommended Practice 49 - "Recommended Practice for Drilling & Well Servicing Operations Involving Hydrogen Sulfide" (March 2007)
- ANSI/ASSE Z390.1 – 2017 "Accepted Practices for Hydrogen Sulfide (H₂S) Training Programs"

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Incident Reporting & Investigation			
Applicability	Novel Geo-Environmental, Inc – Employees & Subcontractors			
Procedure Number	NGE-HSE-023	Pages	6	Rev. 4.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

The purpose of this program is to have effective procedures for reporting and investigating incidents in order to prevent further occurrences.

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. for the reporting or incidents as defined in this procedure.

Definition

Incident: any unusual event or sequence of events including work-related emergencies, work-related injuries/illnesses, near-misses, vehicle damage, property damage, environmental, or other significant occurrences.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.
- Accompany injured employees to the medical provider for initial treatment.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.
- Immediately report any injury, job related illness, spill or damage to any property to their immediate supervisor.

Safety Manager

- Assists in incident investigations and in identifying root causes, and corrective actions.

Procedure

Incident Reporting

All work-related incidents will be reported to the immediate Supervisor as soon as possible - no later than the end of the shift or workday.

The following must be reported to the employee's supervisor immediately:

- Near miss incidents with the potential to harm people, the environment or assets
- Work related injuries or illnesses; Property damage including vehicle incidents
- Hazardous chemical spillage, loss of containment and contamination
- Non-conformance to safety or environmental rules, policies or standards

Reporting may be made by the affected worker(s) notifying the Supervisor by phone, fax, email, or other means available to the affected worker.

The Supervisor will notify one member of Management listed below in the order listed.

Management Notification

Manager of Administrative Services – Grace Aiken - (412) 302-3020

Manager Environmental Services– Gene Stuthers - (412) 622-4118

Manager Geo-Technical Services – Gene Brown - (304) 389-7865

When at all possible, talk to the above person. Leave a brief and to the point voicemail if necessary.

If applicable, the Client or Operator Representative will be notified within 24 hours of an incident by the Supervisor or other member of management.

Emergency Actions

Emergencies will be handled according to the Emergency Action Plan (NGE-HSE-011).

Employees trained in first aid and CPR that is American Red Cross or equivalent may provide first medical response to an incident.

The immediate Supervisor will take all necessary and immediate corrective actions to ensure other employees are not injured.

The immediate Supervisor will take the necessary actions to prevent further loss from the Incident.

Incident Report

The immediate Supervisor will complete the necessary Incident Report form along with the affected employee(s).

The completed Incident Report will be forwarded to the Manager of Administrative Services for further review and determination if further investigation is needed. The final incident investigation report will consist of findings with critical factors, evidence, corrective actions, responsible parties, and timelines for corrective action completion.

The Safety Manager will assist in making the determination if the incident is an OSHA Recordable Injury.

Results of incident investigations are communicated to employees via email and meetings.

Incident Investigation

1. The immediate Supervisor or designate will take all necessary actions to preserve and protect the scene of the incident until the investigation is completed. All evidence including photos, witness statements, diagrams, involved equipment, environmental factors, weather conditions, illumination, and other pertinent information that may assist in the investigation and determining of the root causes of the incident will be collected and secured by the immediate Supervisor, or designate.

2. Using the Incident Investigation Report form, an investigation will be conducted on all incidents. Depending on the severity and type of incident, the investigation team may range from just the immediate Supervisor and the affected worker to including more persons such as Project Manager, Safety Manager/Consultant and/or manufacturers' representative.
3. The investigation will be conducted to determine the root causes of the Incident. Upon determination of the root causes, Corrective Actions will be developed, implemented, and tracked to completion. Each Corrective Action will have assigned responsible parties with the Corrective Actions being tracked to completion by the Management.
4. Upon review of the completed Incident Investigation Report, Management will determine if further investigation is warranted.
5. All necessary equipment will be available or made available to properly conduct an incident investigation such as, but not limited to, all necessary forms and a digital camera.

OSHA Forms

1. When the occupational injury or illness meets the requirements of OSHA as a Recordable Injury, the injury or illness will be documented on the OSHA 300 log within 7 days of the reporting of injury or illness to the Supervisor. The Manager of Administrative Services will maintain the OSHA 300 log.
2. The Annual Summary (OSHA 300A) will be prepared from the OSHA 300 log, signed by the highest company Executive, and posted in a conspicuous location easily viewable to the employees from February 1 to April 30 of each year.
3. All OSHA-required Recordkeeping Forms (OSHA 300, 300A, and associated Injury Reports) will be maintained for five years from the end of the calendar year the records cover.

Reporting Incidents to OSHA

Incidents resulting in the death of one employee must be reported to OSHA within 8 hours of the incident occurring. The hospitalization of one (1) or more employees, an amputation, or a loss of an eye must be reported to OSHA within twenty-four (24) hours of the incident occurring. The Manager of Administrative Services will report the incident to OSHA. The incident may be orally reported by telephone or in person to the Area Office of the Occupational Safety and Health Administration (OSHA), U.S. Department of Labor that is nearest to the site of the incident. You may also use the OSHA toll-free central telephone number, 1-800-321-OSHA (1-800-321-6742).

Shared Learning

Lessons learned will be reviewed and communicated via the email and meetings. Changes to processes must be placed into effect to prevent reoccurrence or similar events.

In order to communicate incident information and lessons learned from incidents the Manager of Administrative Services shall send the notification to all employees. The form shall be posted on employee bulletin boards, by email and shall be discussed in safety meetings until all employees have been informed of the incident.

Corrective Actions

Incident investigations should result in corrective actions, individuals should be assigned responsibilities relative to the corrective actions, and these actions shall be tracked to closure.

Site Managers are held accountable for closing corrective actions. Corrective actions for safety improvement input are posted at each site and tracked by Manager of Administrative Services or designee to ensure timely follow up and completion.

Corrective actions are also used as needed for revisions to site specific safety plans and the Novel Geo-Environmental, Inc. Safety Management System.

Training

Personnel must be trained in their roles and responsibilities for incident reporting and incident investigation techniques. Training shall occur prior to responsibilities being assigned. Training frequency will be based on the specific area of responsibility but shall not exceed once every two years. Training requirements relative to incident investigation and reporting shall include:

- Awareness
- First Responder Responsibilities
- The Initial Investigation at the Accident Scene
- Managing the Accident Investigation
- Collecting Data
- Analyzing Data
- Developing Conclusions and Corrective Actions
- Reporting the Results

NGE Incident Investigation Report

The Investigation & Report Are To Be Completed And Returned To Safety Department Within 24 Hours of An Incident.

I. Type of Report (mark all that apply)			
_____ Injury	_____ *Medical	_____ Spill/Release	
_____ Illness	_____ First Aid	_____ **Vehicle	
_____ Near Miss	_____ Fire	_____ Equipment/Property	
Date of Incident: _____		Time of Incident: _____ AM or PM	
II. Injured or Involved Person			
Name: _____		Hire Date: _____	
Department: _____		Job Title: _____	
Phone/Ext. _____		Supervisor's Name: _____	
Supervisor's Phone/Ext. _____		Vehicle ID _____	
III. Witnesses (if any)			
Name	Address	Phone/Ext.	
IV. Specific Location of the Incident: (Area/Site/Plant/Street/Department) Print Clearly			
V. Description of Incident (Describe sequence of events leading up to and including the incident. Describe materials, vehicles, equipment and people involved. Attach any photos, drawings, or separate page if necessary.) Print Clearly			
VI. Description of Injury/Illness/Damage: (Print Clearly)			
VII. Immediate Corrective Actions (Describe Treatment Provided and by Whom/Material, Amount, Released to what Media/Additional Reporting Requirements/Attach separate page if necessary.) Print Clearly			

VIII. Root Cause Analysis (What caused or contributed to the Incident? Determine Personal Factors/Job Factors/External Factors. Attach separate page if necessary.) Print Clearly		
IX. Preventing Reoccurrences:		
Actions	Responsible Person	Completion Date
Investigation Completed By (Signature)		Title Date
X Manager/Supervisor Comments:		
Signature:		Date:
XI Safety Review Comments:		
Signature:		Date:
Original: Safety Department Copy to: Manager		
Copy to: President		
Review at next Safety Committee Meeting - Date: _____ Comments:		
** Requires Auto Claim Report to be filled out. * Requires Workers' Compensation Claim Report to be filled out.		

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Ladder and Stairway Safety			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-024	Pages	4	Rev. 3.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for the safe use, operation, and inspections of ladders and fixed industrial stairs.

Scope

This procedure is applicable to all Novel Geo-Environmental, Inc. employees that use or have the potential to use ladders regardless of height.

Definition

Walking-working surface(s) - any horizontal or vertical surface on or through which an employee walks, works, or gains access to a work area or workplace location. Examples of such are platforms, walkways, ladders, stairs, ramps, or tops of tanks or equipment.

Key Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Fixed Industrial Stairs

- Persons using the steps will use, at least, one handrail and take one step at a time.
- Stairs will be constructed so as to carry a load of five times the normal anticipated load, with a minimum load of 1,000 pounds. Stairs will be a minimum of 22 inches wide.
- The tread of the stairs will be slip-resistant. The rise height and tread width will be uniform throughout any flight of stairs.
- Platforms that are part of a stair system will be, at least, as wide as the stairs and a minimum of 30 inches deep as measured in the direction of travel.

- Standard railings will be provided on the open sides of all exposed stairways and stair platforms. Handrails will be provided on, at least, one side of enclosed stairways.
- Every flight of stairs having four or more risers will have a stair railing 30 to 34 inches from the tread. The stair railing will be capable of withstanding a load of, at least, 200 pounds applied in any direction at any point on the stair rail.

Inspection, Care and Safe Work Practices of Ladders

Inspection

To ensure safety and serviceability of the ladders, the following items will be checked by the user prior to each use, and periodically inspected otherwise:

- Ladder rungs, cleats and steps shall be parallel, level and uniformly spaced when the ladder is in position for use.
- Any ladder has developed defects, shall be withdrawn from service for repair or destruction and tagged or marked as "Dangerous, Do Not Use."
- Ladders with broken or missing steps, rungs, or cleats, broken side rails, or other faulty equipment shall not be used; improvised repairs shall not be made.
- All wood parts shall be free from sharp edges and splinters; sound and free from accepted visual inspection from shake, or other irregularities.
- Overall, general condition of the ladder
- The joint between the steps and side rails shall be tight
- All hardware and fittings securely attached
- Movable parts will operate freely without binding, sticking or undue play.
- Metal bearings of locks, wheels, and pulleys will be lubricated as needed
- Frayed or badly worn rope will be replaced.
- The safety feet will be in place, operational, and in good condition.
- Rungs should be kept free of grease and oil.
- Rungs are not broken or missing.
- Rugs are to be uniformly spaced.
- Side rails are not cracked or damaged.
- Weight capacity is shown on the side rail according to the manufacturer.
- There is no evidence of improvised repairs to the ladder.

Ladders – General Use

- When a ladder (portable or fixed) is needed to perform a task, the task will be performed using two workers so that when used the portable ladder may be held initially by a second worker. A second worker will remain on the site until the task requiring the use of any ladder (portable or fixed) is completed.
- Ladder rungs, steps, and cleats are parallel, level, and uniformly spaced when the ladder is in position for use, meet all spacing and clear width/distance requirements, shaped such that employees' feet cannot slide off the end of the rung, and corrugated, knurled, dimpled, coated with skid-resistant material, or otherwise treated to minimize slipping.
- No ladder should be used to gain access unless the top of the ladder will extend at least 3 feet above the step-off point.
- Do not place ladders in front of any doorway or block any doorway unless the doorway is blocked upon, locked, or guarded.
- Do not place ladders on boxes, barrels, or other unstable bases to obtain additional height. Use the ladder with the correct height.
- Ladders will not be used as guys, braces, or skids, or for other than their intended purposes.
- Ladders will not be spliced together to provide long sections or lengthen ladders.

- Ladders will have the correct load capacity for the task.
- Portable ladders are not permitted on tanks and are not to be used to access the top of tanks.
- Each employee faces the ladder when climbing up or down it, each employee uses at least one hand to grasp the ladder when climbing up and down it, and no employee carries any object or load that could cause the employee to lose balance and fall while climbing up or down the ladder.

Ladders – Portable (straight or extension and stepladders)

- Portable (straight or extension) ladders will be set so the pitch (angle) is as close as possible to being a four-to-one ratio (4:1). This ratio is that the feet of the ladder is one foot away from vertical for every four feet of vertical length of the height being climbed.
- Portable (straight or extension) ladders will be placed as to prevent slipping. When the ladder is going to be in place for extended periods of time or used for as the main access point, it will be tied into place to keep from slipping, tipping or falling. When the ladder is not going to be tied into place the ladders must be held at the bottom by an employee to keep it from slipping, tipping or falling.
- Portable (straight or extension) ladders are not to be used in the horizontal position such as scaffolding, platforms or runways.
- Portable (straight or extension) ladders are to be used by one person at a time unless the ladder is specifically manufactured and the capacities are indicated on the ladder by the manufacturer to be used by more than one employee at a time.
- Portable (straight or extension) ladders are to be used according to the maximum weight capacity as identified on the ladder by the manufacturer. Do not overload the ladder.
- Stepladders, regardless of the height, will be used according to the manufacturers' instructions, will be set up so that the spreaders are fully opened and locked.
- Stepladders will be used by one person at a time unless specifically manufactured and identified as a two-person step ladder by the manufacturer.
- On a stepladder, the top two steps will not be used as steps for any persons for any reason using the step ladder.
- Do not use metal ladders in proximity to electrical lines or circuits.
- When ascending or descending a ladder, the worker must face the ladder with three (3) points of contact.

Ladders – Fixed

- Fixed ladders will be designed in accordance with OSHA regulation 29CFR1910.27.
- Fixed ladders extending more than 20 feet and to a maximum of 30 feet will have a protective cage or the climber(s) will use a ladder safety device. All ladder safety devices such as those that incorporate full-body harness, friction brakes, and sliding attachments will meet the design requirements of the ladders which they serve.
- Cages will extend down the ladder to a point not less than 7 feet and not more than 8 feet above the base of the ladder.
- Cages will extend a minimum of 42 inches above the top of any landing or step off point.
- The side rails of step-through or side-step ladder extensions will extend 42 inches above parapets, step-off points, and landings. For step-through ladder extensions, the rungs will be omitted from the extension and will have between 18- and 24-inches clearance between rails.
- The step from the walking-working surface to the bottom rung of the ladder will not be more than 12 inches.
- The step-across distance from the nearest edge of ladder to the nearest edge of equipment or structure will not be more than 12 inches.
- When ladders are used to ascend to heights exceeding 20 feet, landing platforms will be provided for each 30 feet of height or fraction thereof, except that, where no cage or ladder

safety device is provided, landing platforms will be provided for each 20 feet of height or fraction thereof. Each ladder section will be offset from adjacent sections. Where installation conditions require that adjacent sections be offset, landing platforms will be provided at each offset. All landing platforms will be equipped with standard railings and toe boards, arranged as to give safe access to the ladder. Landing platforms will be not less than 24 inches wide and 30 inches long.

Training

Only those employees trained in fall protection recognition and the use of Personal Fall Arrest Systems (PFAS) are expected to perform activities requiring the use of such equipment. Training will be conducted upon initial hire and as needed thereafter.

Only those employees trained in the proper use of ladders according to this program will be permitted to use ladders.

Training will be conducted and documented prior to the initial use of PFAS and/or ladders and whenever a Manager of Novel Geo-Environmental, Inc. has reason to believe the employee needs to be retrained due to observed or perceived inadequacies in the employee's knowledge or use of this procedure.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Lead Safety Awareness			
Applicability	Novel Geo-Environmental, Inc.– Employees & Subcontractors			
Procedure Number	NGE-HSE-025	Pages	2	Rev. 3.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This program establishes criteria and/or methods that will be followed to prevent Novel Geo-Environmental, Inc. employee exposure to lead, dust or fumes.

Scope

This procedure is applicable to all Novel Geo-Environmental, LLC employees.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Lead-related Activities

Novel Geo-Environmental, Inc. will not participate or accept jobs with known or potential for lead exposure. Such jobs or services will be contracted out to others with specific knowledge and experience.

General Notes

- Novel Geo-Environmental, Inc. will not participate or accept jobs with known or potential for lead exposure, the following applies:
 - No other compliance programs are needed for lead safety.
 - Respirators are not needed after initial assessment for Lead.
 - There is no need for a medical surveillance program including blood testing, air monitoring, or employee notifications.
 - No shower or change facilities will be provided.
 - Signs will be posted by the client as needed to warn of the presence of or potential presence of Lead. Novel Geo-Environmental, LLC Employees will not approach, enter, or work in areas known to have a presence of Lead, dust or fumes.

Locations – Potential

Communication with and documentation from the client(s) of Novel Geo-Environmental, Inc. will designate any areas or tasks that has the potential for Lead to be present. Signs will be posted by the client as needed to warn of the presence of or potential presence of Lead.

Novel Geo-Environmental, Inc. employees will not approach, enter, or work in areas known to have a presence of Lead, dust or fumes as designated by appropriate signage.

Contingency Planning

If any employee has reason to believe that they have been exposed to lead at any concentration during their tasks, they will report this potential exposure to the Supervisor/Foreman immediately for further medical evaluation and work environment evaluation. This potential exposure will be documented by the Supervisor using the Incident Report and Investigation Form (NGE-HSE-023).

During the work environment evaluation, should the initial determination or subsequent air monitoring determine that employee exposure was or is at or above the action level (30 micrograms per cubic meter of air over an 8-hr TWA) yet below the Permissible Exposure Limit (50 micrograms per cubic meter of air over an 8-hr TWA), Novel Geo-Environmental, Inc. will repeat air monitoring in accordance with the OSHA Regulation for Lead (29CFR1926.62(ii)) at least every 6 months. The air monitoring will continue on a regular schedule until at least two consecutive measurements, taken at least 7 days apart, are below the action level (30 micrograms per cubic meter of air over an 8-hr TWA) at which time the monitoring for the exposed employee will be discontinued.

Should exposure to lead occur or potentially occur, a site-specific program will be developed with a description of each operation in which there is a potential for exposure to lead, the necessary engineering and work practice controls, required air monitoring, and medical evaluations. The written program will be reviewed annually and revised as needed.

The site-specific program will include the providing of (at no cost to the employee), use, maintenance, and correct wearing of personal protective equipment by the employer such as gloves, hats, vented goggles, shoes or disposable shoe covers. The program will include instructions on weekly cleaning and laundering. Soiled PPE will be repaired, replaced, or disposed of properly on a weekly basis or more often as needed.

Training

All employees will be trained on this procedure at initial hire or initial assignment or at promotion to Supervisor/Management position.

Training will be repeated annually for every field employee. The training will be documented as to the Instructor/Trainer, date of training, and topics covered.

References

29 CFR 1910.1025 & 29 CFR 1926.62

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Control of Hazardous Energy - LOTO			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-026	Pages	12	Rev. 3.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for the controlling of hazardous energy at the source of that energy using energy isolating devices, lockout, or tagout procedures whenever maintenance or servicing is done on machines or equipment. It will be used to ensure that the machine or equipment is stopped, isolated from all potentially hazardous energy sources and locked out or tagged out before employees perform any servicing or maintenance where the unexpected energizing, start-up of the machine or equipment, or the release of stored energy could cause injury.

Scope

This program establishes minimum performance requirements for the control of such hazardous energy which applies to all Novel Geo-Environmental, Inc. employees.

This program covers the servicing and maintenance of machines and equipment where the unexpected energization or start up of the machine or equipment, or the release of stored energy could cause an incident. This procedure applies to performing servicing or maintenance on company-owned equipment and vehicles such as, yet are not limited to, air compressors, abrasive blasting equipment, generators, trucks, excavating equipment, aerial lifts, and forklifts

Definitions

Affected employee - An employee whose job requires them to operate or use a machine or equipment on which service and maintenance is being performed under lockout/tagout, or whose job requires the employee to work in an area in which such servicing or maintenance is being performed.

Authorized employee - A person that performs lockout/tagout procedures on machines or equipment in order to perform servicing or maintenance on that machine or equipment. An affected employee becomes authorized when that employee's duties include performing servicing or maintenance covered under this program.

Energy isolating device - A mechanical device that physically prevents the transmission or release of energy including, but not limited to, the following:

- A manually operated electrical circuit breaker, a disconnect switch, a manually operated switch by which the conductors and no pole can be operated independently, a line valve, a block and any similar device used to block or isolate energy.
- Push buttons, selector switches and other control circuit type devices are not isolating devices.

Energy source - Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy sources.

Lockout - The placement of a lockout device on an energy isolating device in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

Normal production operations - The utilization of a machine or equipment to perform its intended production function. Setting up is any work performed to prepare a machine or equipment to perform its normal production operation. Servicing and/or maintenance which takes place during normal production operations is covered by this procedure if:

- An employee is required to remove or bypass a guard or other safety device; or
- An employee is required to place any part of his or her body into an area on a machine or piece of equipment where work is actually performed upon the material being processed (point of operation) or where an associated danger zone exists during a machine operating cycle.

Minor tool changes and adjustments, and other minor servicing activities, which take place during normal production operations, are not covered by this procedure if they are routine, repetitive, and integral to the use of the equipment for production, provided that the work is performed using alternative measures which provide effective protection.

Other employee - An employee that is not considered an Authorized or an Affected Employee. All employees who are or may be in an area where energy control procedures may be utilized.

Servicing and/or maintenance - Workplace activities such as constructing, setting up, adjusting, inspecting, modifying and maintaining and/or servicing machines or equipment. These activities include lubrication, cleaning or unjamming of machines or equipment and making adjustments or tool changes, where the employee may be exposed to the unexpected energizing or startup of the equipment or release of energy creating a hazard.

Stored Energy or potential energy - Energy stored within a system as a result of the position or configuration of the different parts of that system. It has the potential to be converted into other forms of energy. Examples include springs, elevated machine members, rotating fly wheels, hydraulic systems, and air, gas, steam, or water pressure.

Tagout - The placement of a tagout device on an energy isolating device, in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

General

Only an authorized employee(s) performing servicing or maintenance shall perform lockout or tagout.

Lockout Devices

- Lockout devices, where used, will be affixed in a manner to that will hold the energy isolating devices in a "safe", "neutral", or "off" position.
- Each lockout device will have only one key, extra keys will be immediately destroyed.
- Each Authorized Employee will be place one lockout device on the energy isolating devices as indicated by the Energy Control Plan or follow Group Lockout.
- Lockout devices will meet the specifications in 1910.147(c)(5).
- Lockout devices will be labeled with the name of the Authorized Employee placing the device and will be identified with a label stating any of the following: "Do Not Start" or "Do Not Open" or "Do Not Close" or "Do Not Energize" or "Do Not Operate". If the device does not have such a label on it then a tag will be used with this information on it.

Tagout Devices

- Tagout devices, where used, will be affixed in such a manner as will clearly indicate that the operation or movement of energy isolating devices from the "safe", "neutral", or "off" position is prohibited.
- Where tagout devices are used with energy isolating devices designed with the capability of being locked, the tag attachment will be fastened at the same point at which the lock would have been attached.
- Where a tag cannot be affixed directly to the energy isolating device, the tag will be located as close as safely possible to the device, in a position that will be immediately obvious to anyone attempting to operate the device.
- Tagout devices will meet the specifications in 1910.147(c)(5).
- Tagout devices, where used, will be affixed in such a manner as will clearly indicate that the operation or movement of energy isolating devices from the "safe", "neutral", or "off" position is prohibited. The devices will be labeled with the name of the Authorized Employee placing the device and stating any of the following: "Do Not Start" or "Do Not Open" or "Do Not Close" or "Do Not Energize" or "Do Not Operate".

Lockout is Primary Protection

Lockout is the primary means of protection and will be initiated according to this procedure for de-energizing and isolating equipment from hazardous energy sources. All equipment is to be de-energized and locked out according to this procedure unless specified on the Energy Control Plan, then tags will be used.

Each lockout device will be removed from each energy-isolating device by the Authorized Employee who applied the device.

Lockout

Lockout devices, where used, will be affixed in a manner to that will hold the energy isolating devices in a "safe", "neutral", or "off" position.

Each lockout device will have only one key, extra keys will be immediately destroyed.

Each Authorized Employee will be place one lockout device on each of the energy isolating devices as indicated by the Energy Control Plan unless using Group Lockout procedures.

Each lockout device will be removed from each energy-isolating device by the Authorized Employee who applied the device.

Tagout

Tagout is to be performed only when there is no other means to lockout a piece of equipment. Each tagout device will be removed from each energy-isolating device by the Authorized Employee who applied the device.

Each Authorized Employee will place one tagout device on each of the energy isolating devices as indicated by the Energy Control Plan unless using Group Lockout procedures.

Where tagout devices are used with energy isolating devices designed with the capability of being locked, the tag attachment will be fastened at the same point at which the lock would have been attached.

Where a tag cannot be affixed directly to the energy isolating device, the tag will be located as close as safely possible to the device, in a position that will be immediately obvious to anyone attempting to operate the device.

Out of Service Tags

Tags used with or without the application of locks to isolate equipment for removal from service for reasons other than maintenance or service (i.e., power conservation, inactive equipment, unsafe equipment prior to maintenance/servicing/repair) will be yellow with black print and have the words "CAUTION - DO NOT OPERATE" on both sides. The tag will have a block for explanation, signature, and date on the front. These items will be filled out in all cases.

These "out of service" tags do not require compliance with the provisions of this Control of Hazardous Energy Procedure.

Full Employee Protection

When tagout is used on equipment, tagout devices will be attached where lockout devices would be placed. Tagout must provide for the safety of the workers that is, at a minimum, equivalent to lockout. The Authorized Employee will take additional measures, such as removal of a circuit breaker, spool piece, place a pancake in a pipe line, operate and lockout an energy isolating device upstream from the tagged out energy isolating device, blocking, remove a fuse, or similar actions.

When tagout systems are used, employees will be trained in the limitations of tags and the tagout system.

Specific Energy Control Procedures

Management is responsible for developing specific step-by-step shutdown and startup procedures for a particular machine or piece of equipment in their respective area.

- A written, step-by-step isolation procedure for shutdown and startup shall be prepared for each type of machine or piece of equipment.
- This procedure shall include:
 - Equipment number if assigned.
 - Equipment location.
 - Energy Source(s) (i.e. electrical, hydraulic, gas pressure, etc.)
 - Location of isolating controls (i.e. breaker switches, valves, etc.)
 - Quantity of isolating controls
 - Quantity of locks required to isolate the equipment
 - Other hardware required to isolate the equipment (i.e. chains, valve covers, blocks, etc.)
 - List any residual energy required to be dissipated before work begins.

Energy Control Plan Steps

1. Notification

Authorized employees must notify all other affected employees of the application and removal of lockout/tagout devices. Notification shall be given before the controls are applied and before they are removed from the machine or equipment.

2. Preparation for Shutdown

Before an authorized or affected employee shuts down a machine or equipment, the authorized employee shall have the knowledge of the type and magnitude of the energy, the hazards of the energy to be controlled, and the method or means (locks) to control the energy sources.

3. Machine or Equipment Shutdown

The machine or equipment shall be shut down using the procedures established for that machine or piece of equipment. The shutdown shall be orderly to avoid any additional hazards to employees as a result of the stoppage.

4. Machine or Equipment Isolation

All energy isolating devices that are needed to control the energy to the machine or equipment shall be physically located and operated in such a manner as to isolate the machine or equipment from the energy source(s).

5. Lockout/Tagout Devices and Application

- Each authorized employee shall have the proper number of locks and devices to be able to perform proper lockout/tagout procedures for machines or equipment that they may be working on. Devices shall be durable, standardized, substantial, and identifiable.
- Lockout or tagout devices shall be affixed to each energy isolating device by authorized employees.
- Each lockout and tagout devices shall include the name of the individual placing the device.
- Lockout devices shall be affixed in a manner to hold the energy isolating devices in a safe or off position.
- Tagout devices shall be affixed in a manner that will clearly indicate that the operation or movement of isolating devices from the safe or off position.
- Tagout devices used with energy isolating devices with the capability of being locked out shall be fastened at the same point at which the lock would have been attached. If a tag cannot be directly attached to the energy isolation device it shall be located as close as safely as possible to the device in a position that will be immediately obvious to anyone attempting to operate the device.
- Each energy source shall be locked out completely isolating the equipment.
- Isolating machines or equipment shall include, but are not limited to:
 - Pumps, compressors, generators, electric distribution, storage tanks, etc.
 - Each type of equipment to be isolated shall have specific procedures for isolation, i.e. for compressors: suction, discharge, power, starting, fuel, dumps shall be closed, locked and tagged out properly. The blow-down valve shall be opened, locked and tagged out properly. (NOTE): If compressor has a side stream hooked up, the side stream shall be closed, locked and tagged out properly.

6. Stored Energy and the Possibility of Reaccumulation

Following the application of lockout or tagout devices to energy isolating devices, all potentially hazardous stored or residual energy shall be relieved, disconnected, restrained and otherwise rendered safe.

If there is a possibility of re-accumulation of stored energy, verification of isolation shall be continued until the servicing or maintenance operation is completed, or until the possibility of such accumulation no longer exists.

7. Verification of Isolation

The authorized employees performing the lockout procedure verifies/ensures that the equipment is isolated or disconnected from the energy source(s) by first checking that no personnel are exposed, then verify the isolation of the machine or equipment by operating the control(s) or by testing to make certain the equipment will not operate.

Group Lockout

When servicing and/or maintenance are performed by a group of Authorized Employees, the following optional procedures will be followed for Group Lockout:

Option 1: A crew of authorized employees may use a group lockout or tagout device. All authorized employees will then place their individual locks on the device's group lockout or tagout device. When the servicing and/or maintenance is completed, all of the Authorized Employees will remove their lockout devices following the appropriate Release from Lockout or Tagout procedure.

Option 2: The Supervisor or Management Representative of Novel Geo-Environmental, Inc. will place a lockout or tagout device on each of the energy isolating devices according to the Energy Control Plan. The key from each of the lockout devices will be placed in a group lockout box. The Supervisor or Management Representative of Novel Geo-Environmental, Inc. will place an Operations lockout device on the group lockout box. Each Authorized Employee working on the wellhead, compressor, process, equipment, or ancillary equipment will then place their own lockout device on the group lock box. At the end of each shift or the workday, the lockout devices will be removed leaving the Operations lockout device on the group lock box.

When the servicing and/or maintenance is completed, all of the Authorized Employees will remove their lockout devices, the Supervisor or Management Representative of Novel Geo-Environmental, Inc. will then remove their lockout device. With all of the lockout devices removed from the group lockout box, the keys inside can be used by the Supervisor or Management Representative of Novel Geo-Environmental, Inc. to follow the appropriate section to Release from Lockout or Tagout.

Release from Lockout/Tagout

When servicing or maintenance is completed and before lockout or tagout devices are removed and energy is restored, the Authorized Employee(s) will:

- Notify all previously notified Affected employees that the equipment is going to be released from Lockout or Tagout.
- Check the machine or equipment and the immediate area surrounding the machine or equipment to ensure that all nonessential items such as tools have been removed and that the machine or equipment components are operationally intact.
- Check the work area to ensure that all personnel have been safely positioned or removed from the area.
- Verify that all operating control(s) are in the neutral, "off", or otherwise in the safe, non-operating position.

Removal of Another's Lockout or Tagout Device

The authorized employee who applied the lock shall be the one to remove their lock. However, when the Authorized Employee who applied the lockout or tagout device is not available to remove it, that device may be removed under the direction of the Supervisor or Management Representative of Novel Geo-Environmental, Inc.

The process to remove lockout and/or tagout devices is as follows:

1. The Supervisor or Management Representative of Novel Geo-Environmental, Inc. will verify that the Authorized Employee who applied the lockout and/or tagout device is not at the site;
2. The Supervisor or Management Representative of Novel Geo-Environmental, Inc. will ensure the machine or equipment is in safe operational condition or a different Authorized Employee will immediately place the appropriate lockout and/or tagout device on the energy isolating device.
3. The Supervisor or Management Representative of Novel Geo-Environmental, Inc. will remove the lockout and/or tagout devices.
4. The Supervisor or Management Representative of Novel Geo-Environmental, Inc. will ensure that Authorized Employee whose lockout and/or tagout device was removed is informed of the removal of their lockout and/or tagout device prior to the Authorized employee resuming work at that site.

Shift or Personnel Changes

In the event shift or personnel changes occur during maintenance and/or repair activities, the designated Novel Geo-Environmental, Inc. Supervisor or Management Representative shall take the necessary steps to maintain the continuity of the lockout/tagout protection.

To ensure the continuity of lockout or tagout protection during shift change or personnel changes, the Authorized Employees coming on will place their lockout or tagout devices on the energy isolating devices identified in the Energy Control Plan. The Authorized Employees going off will then remove their locking devices from the energy isolating devices.

The equipment will remain in a safe, fully locked out or tagged out condition during shift change or personnel changes. All Affected Employees will be notified of the lockout or tagout conditions.

Contractors

Contractors performing lockout procedures on Novel Geo-Environmental, Inc. property shall comply with this procedure. Contractors shall supply their own locks.

Novel Geo-Environmental, Inc. shall initially lockout Novel Geo-Environmental, Inc. machines and equipment before the contractor will be allowed to apply their own lock in addition to the Novel Geo-Environmental, Inc.'s.

Periodic Inspections

Each year the Supervisor(s) or Management Representative(s) of Novel Geo-Environmental, Inc., will perform an inspection of the Lockout Program in their respective areas to verify the effectiveness of the program. An authorized employee other than the one(s) utilizing the energy control procedure being inspected shall perform the inspection and shall verify that:

- Each authorized and/or affected employee has been trained as required.
- Any new equipment added has specific lockout procedures developed and documented.
- Current procedures are adequate for performing complete isolation of equipment and resulting in a zero-energy state.
- The annual inspection will be certified in writing and a copy of the inspection maintained on file.

TRAINING

Novel Geo-Environmental, Inc. shall provide training to ensure that the purpose and function of the energy control program are understood by authorized employees and that the knowledge and

skills required for the safe application, usage, and removal of the energy controls are acquired by authorized employees. The training shall include the following:

- The recognition of applicable hazardous energy (lockout/tagout) sources, the type and magnitude of the energy available in the workplace, and the methods and means necessary for energy isolation and control.
- The purpose and use of energy control procedures.
- When tagout systems are used, employees shall also be trained in the following limitations of tags:
 - Tags are essentially warning devices affixed to energy isolating devices, and do not provide the physical restraint on those devices that is provided by a lock.
 - When a tag is attached to an energy isolating means, it is not to be removed without authorization of the authorized person responsible for it, and it is never to be bypassed, ignored, or otherwise defeated.
 - Tags must be legible and understandable by all authorized employees, affected employees, and all other employees whose work operations are or may be in the area, in order to be effective.
 - Tags and their means of attachment must be made of materials which will withstand the environmental conditions encountered in the workplace.
 - Tags must be securely attached to energy isolating devices so that they cannot be inadvertently or accidentally detached during use.
 - Tags may evoke a false sense of security, and their meaning needs to be understood as part of the overall energy control program.

Affected Employees will be trained basic purpose of this procedure and the use of energy control. All other employees whose work operations are or may be in an area where energy control procedures may be utilized, shall be instructed about the procedure, and about the prohibition relating to attempts to restart or reenergize machines or equipment which are locked out or tagged out.

Retraining

Retraining shall be conducted whenever a periodic inspection reveals, or whenever Novel Geo-Environmental, Inc. has reason to believe that there are deviations from or inadequacies in the employee's knowledge or use of the energy control procedures.

The retraining shall reestablish employee proficiency and introduce new or revised control methods and procedures, as necessary.

Training Documentation

Novel Geo-Environmental, Inc. shall certify that employee training has been accomplished and is being kept up to date. The certification shall contain each employee's name and dates of training.

SPECIFIC EQUIPMENT LOCKOUT PROCEDURES

Department _____
Equipment _____

Energy Source(s) _____

Procedure for Shutdown and Isolation:

(List number of steps required to isolate machine or equipment - add additional steps if necessary)

STEP NO.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Additional
Information: _____

Prepared By: _____

Date: _____

(This procedure to be communicated to all authorized and affected employees and kept on file at location of machine or equipment)

AUTHORIZATION FOR RELEASE FROM LOCKOUT AND/OR TAGOUT

When the Authorized Employee who applied the lockout or tagout device is not in the facility to remove it, that device may be removed under the direction of a Novel Geo-Environmental, Inc. Manager or specified designate following the procedure and documented on this form.

The Manager or specified designate has verified that the Authorized Employee who applied the lockout and/or tagout device is not at the facility.

Yes/No Manager or specified designate Initials: _____

Phone contact with the Authorized employee:

Home: Yes/No Cell Phone: Yes/No

Manager or specified designate Initials: _____

Upon completion of the above, the Manager or specified designate will remove the lockout and/or tagout devices after ensuring the machine or equipment is in safe operational condition.

Device(s) removed by: Name: (print) _____ Date: _____
Signature: _____

Witnessed by: Name: (print) _____ Date: _____
Signature: _____

Under the direction of the Manager or specified designate, did a different Authorized Employee place the appropriate lockout and/or tagout device on the energy isolating device.

Yes/No Name of Authorized employee: (print) _____

The Manager or specified designate will ensure that Authorized Employee whose lockout and/or tagout device was removed is informed of the removal of their lockout and/or tagout device prior to the Authorized Employee resuming work at that facility. The following will be completed:

I, _____, acknowledge that the lockout and/or tagout device assigned to me, which I placed on _____, has been removed. A situational review will be conducted into why the device was not removed by me prior to my leaving the job site.

Signature: _____ Date: _____

Witnessed by: _____ Name: (print) _____ Date: _____

Signature: _____

ISOLATION LOG

Date of Isolation:

Description of Work:

List of Equipment out of Service:

Necessary Requirements of Clear Isolation:

Authorized Employee Signature: _____

Person Continuing Work Signature: _____

Locks/Tags for GROUP LOCKOUT or Multiple Locks/Tags

Lock # or Tag	Date Installed	Date Removed	Print Name (for Group Lockout)	Signature

(If additional space is needed, please attach an additional page)

Periodic Inspection Form

Date & Inspector: _____

Machine on which the energy control procedures were performed: _____

Lockout Procedure Steps:

- ☐ Locate all energy sources
- ☐ Notify Affected Employees
- ☐ Power shut down
- ☐ Isolate from energy source
- ☐ Dissipate all energy
- ☐ Lockout device installed
- ☐ Verify lockout

Steps to Restoring Power:

- ☐ Ensure area is clear of personnel
- ☐ Ensure tools/equipment removed
- ☐ Reinstall guards
- ☐ Remove lockout devices
- ☐ Restore energy source
- ☐ Remove tags

Was the energy control plan being used correctly? YES NO

If no, please explain.

If deficiency was noted, did employee receive retraining? YES NO

Comments on retraining:

Employee(s) inspected

Name

Signature

I certify that a periodic lockout procedure inspection was conducted on the employee(s) indicated above and that lockout responsibilities were reviewed.

Signature

Date

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Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Ionizing Radiation & NORM - Naturally Occurring Radioactive Material			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-027	Pages	4	Rev. 2.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for establishing the safe working conditions in operations where radiation is used, produced or radioactive material may be contacted.

Scope

The operator's program shall take precedence; however, this document is applicable to all employees of Novel Geo-Environmental, Inc. on all of the respective sites that may work in locations and operations with the potential for exposure to ionizing radiation and/or to Naturally Occurring Radioactive Material (NORM), or when an operator's program doesn't exist or is less stringent.

Definitions

NORM – Naturally Occurring Radioactive Material – radioactive isotopes that occur naturally in the environment.

TENORM – Technologically Enhanced Naturally Occurring Radioactive Material - naturally occurring radioactive materials that have been concentrated or exposed to the environment through human activity.

Radiation - Includes alpha rays, beta rays, gamma rays, X-rays, neutrons, high-speed electrons, high-speed protons, and other atomic particles; but such term does not include sound or radio waves, or visible light, or infrared or ultraviolet light.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Radiation Safety Officer (RSO)

- Administer the Radiation/NORM program.

Procedure

IONIZING RADIATION

OSHA Regulations 29CFR1910.1096 Ionizing Radiation

Characteristics

Ionizing radiation includes alpha rays, beta rays, gamma rays, X-rays, neutrons, high-speed electrons, high-speed protons, and other atomic particles; but such term does not include sound or radio waves, or visible light, or infrared or ultraviolet light.

Exposure and Locations – Potential

Employees working in operations where the use of radiation to do such tasks as, yet are not limited to, logging, measuring, inspection, testing, or other services.

Health Hazards

Short-term health effects of exposure to Ionizing Radiation include radiation sickness, evidenced by gastrointestinal disorders, bacterial infections, hemorrhaging, anemia, loss of body fluids, and electrolyte imbalance.

Long-term health effects of exposure to Ionizing Radiation include cancer and other health outcomes such as benign tumors, cataracts, and potentially harmful genetic effects.

Safe Work Procedures

- Employees of Novel Geo-Environmental, Inc. who participate in tasks such as, yet not limited to, logging, measuring, inspection, testing, or other services will do so under the direction of the NGE RSO.
- Employees of Novel Geo-Environmental, Inc. who handle or use any tools or equipment used in tasks such as, yet not limited to, logging, measuring, inspection, testing, or other services will do so under the direction of the NGE RSO.
- Eating, drinking smoking, use of cosmetics or storage of food and beverages is prohibited except in designated areas
- Radioactive materials must be locked or otherwise secure when unattended.
- Label all containers of radioactive materials with a similar wording such as CAUTION-RADIOACTIVE MATERIALS, and the radiation symbol.
- All stored material will be placed in a designated and posted secure location.
- Personal Protective Equipment (PPE)
- All PPE will be determined and meet the Personal Protective Equipment section of this manual including respiratory protection.

NATURALLY-OCCURRING RADIOACTIVE MATERIAL (N.O.R.M.)

Definition

A millirem, or one one-thousandth of a rem, is a measure of radiation exposure.

Characteristics

NORM is a low-level, naturally occurring radioactive material found in rocks and soil. NORM, generally, is Alpha emitting particles. This awareness program includes NORM that becomes concentrated in the production process and is referred to as Technologically Enhanced NORM or TENORM. For the purpose of this program NORM and TENORM are considered one on the same and will be referred to as NORM.

Specific Sources/Types

The types of radioactive materials found in NORM are radium 226, radium228, and Radon gas.

Locations where NORM can be found or created specific to operation

NORM may be found in the following areas:

- Drilling mud
- Produced water
- Mixed with barium sulfate scale in well tubulars and surface equipment
- Sludge/films/scale that accumulates in storage pits and storage tanks
- Oil-water separators
- Radon gas in the natural gas stream

Activities/Operations

NORM may be found in the following activities and operations:

- Cutting and reaming of oilfield pipe
- Removing sludge and solids from tanks and pits
- Repair/refurbishing gas processing equipment

Routes of Exposure

Workers may be exposed to NORM, generally in two routes of exposure:

- Inhalation of dust or airborne particles
- Ingestion of scale and airborne particles

Procedures and methods for testing

It will be communicated to the On-site Novel Geo-Environmental, Inc. Representative of Novel Geo-Environmental, Inc. as to the location(s) of NORM or the potential for NORM from the appropriate representative of the Novel Geo-Environmental, Inc. or companies bringing in or using such materials or equipment.

Upon being notified, the On-site Novel Geo-Environmental, Inc. Representative may require that trained operators will use portable radiation measurement instruments to measure radiation emitted by NORM.

General surveying begins with the trained operator measuring background radiation levels in a nearby area. Radiation measurements are then made close to the external surface of equipment to determine if there are any elevated levels of radiation.

Measurements are made at areas where NORM solids may accumulate, such as at pipe elbows and tank bottoms/separators, exchangers etc.

Field equipment will be surveyed when operations change in ways that could cause or increase the amount of NORM in the pipe or equipment and/or equipment is taken out of service.

Safe Work Procedures and Practices

Employees will be protected from NORM using time, distance, shielding, and cleaning methods by following these safe work practices and work procedures:

Time

- Employees working in areas with suspected NORM will be in such areas only as long as necessary to complete the task as determined by the Program Administrator so long as the dose does not exceed the OSHA-allowed exposure dose.

Distance

- Avoiding eating, drinking or smoking around open equipment or uncontained NORM
- Remove potentially contaminated clothes and shoes before returning to the vehicle, office or home
- Do not take home discarded equipment or material used at sites such as pipes, devices, bricks rocks, and water or re-use these materials as containers or as building materials

Shielding (Use of PPE)

- All PPE will be determined and meet the Personal Protective Equipment section of this manual including respiratory protection.
-

Cleaning

- Flushing production equipment and separators before cleaning them
- Equipment is stored and cleaned only at facilities subject to licensing standards
- Using wet processes for large scale cleaning of equipment to minimize dust

Signage

When radiation exposure is measured and doses could exceed 5 millirem in one hour or 100 millirem in any five consecutive days, Caution signs according to OSHA regulations 29CFR1910.1096(e).

Training

- Employees working in areas and locations that have the potential for exposure to ionizing radiation and/or have the potential for exposure to radiation or NORM will be trained in this awareness program upon initial assignment to the area and shall receive refresher training at least annually.
- The training will be documented as to the Instructor/Trainer, date of training, and topics covered.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Personal Protective Equipment (PPE)			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-028	Pages	20	Rev. 2.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for the assessment, use, care, inspection, and maintenance of Personal Protective Equipment (PPE).

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. that are required or recommended to wear Personal Protective Equipment (PPE) according to the documented hazard assessment, and/or client-required PPE.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

General

Employee-owned equipment is NOT permitted, except for safety toe footwear and prescription safety glasses. Novel Geo-Environmental, Inc. is still responsible for the assurance of its adequacy, maintenance and sanitation of those two items.

All PPE issued shall be at no cost to the employee and PPE shall be used and maintained in a sanitary and reliable condition.

All employees will know and follow the procedures outlined in this Program.

Hazard Assessments

Documented hazard assessments will be conducted by the Safety Manager or Designate prior to the issuing and use of PPE. The hazard assessment will be conducted to determine the hazards and potential hazards of the tasks and work environment, and to determine the necessary control measures according to the Hierarchy of Hazard Controls, with the use of Personal Protective Equipment being instituted only after all other means of elimination and control have been proved as not practical or feasible.

Inspection and Maintenance

- All Personal Protective Equipment (PPE) will be maintained in a clean, sanitary, and correct operating condition. PPE that is not in good operating or usable condition, or that is defective will not to be used or worn and will be replaced immediately. Defective PPE will be removed from service and discarded.
- Personal Protective Equipment assigned/provided by the employer will be of the correct type, style, size and fit for the individual employee.
- Personal protective equipment will used in specified areas at all times.

Required Personal Protective Equipment

The PPE listed in this section is the minimum PPE required by employees of Novel Geo-Environmental, Inc. according to the job or task listed below:

Field Operations - Oil and Gas	
• Hard Hat • Safety Glasses • Safety Boots • High-visibility Vest • FR Clothing	Required to be worn at all times on all sites.
• Ear Plugs/Muffs	Required to be worn in high noise areas as indicated by signs
• Gloves, Leather, General Purpose	Task specific – required to be worn when there is potential for contact with sharp edges, wire rope, rough metal surfaces, and other similar hazards.
• Gloves - Metacarpal Protection	Task specific – required to be worn when there is potential for getting hands/fingers caught in between objects and other similar hazards.
• Welding/Hot Work Equipment ○ Helmet/hood/face shield (Shaded) ○ Protective clothing ○ Gloves ○ Ear Plugs/muffs	Task specific – required to be worn when performing or assisting with welding/hot work.
• Personal Fall Arrest System (PFAS)	Task specific – required to be worn when working at heights at or above 4 feet or in an aerial lift.
Field Operations - Environmental	
• Hard Hat • Safety Glasses • Safety Boots • High-visibility Vest	Required to be worn at all times on all sites.
• Ear Plugs/Muffs	Required to be worn in high noise areas as indicated by signs
• Gloves, Leather, General Purpose	Task specific – required to be worn when there is potential for contact with sharp

	edges, wire rope, rough metal surfaces, and other similar hazards.
- Welding/Hot Work Equipment - Helmet/hood/face shield (Shaded) - Protective clothing - Gloves - Ear Plugs/muffs	Task specific – required to be worn when performing or assisting with welding/hot work.
Respiratory Protective Equipment	Task specific – required to be worn when there is potential for exposure to hazardous substances above the PEL.
Personal Fall Arrest System (PFAS)	Task specific – required to be worn when working at heights at or above 4 feet or in an aerial lift.

Drill Crews	
- Hard Hat - Safety Glasses - Ear Plugs/Muffs - Safety Boots - High-visibility Vest - FR Clothing	Required to be worn at all times on all sites.
Gloves, Leather, General Purpose	Task specific – required to be worn when there is potential for contact with sharp edges, wire rope, rough metal surfaces, and other similar hazards.
Gloves, Leather, Metacarpal Protection	Task specific – required to be worn when there is potential for getting hands/fingers caught in between objects and other similar hazards.
- Welding/Hot Work Equipment - Helmet/hood/face shield (Shaded) - Protective clothing - Gloves - Ear Plugs/muffs	Task specific – required to be worn when performing or assisting with welding/hot work.
Personal Fall Arrest System (PFAS)	Task specific – required to be worn when working at heights at or above 4 feet or in an aerial lift.

Batch Plant	
- Hard Hat - Safety Glasses - Safety Boots - High-visibility Vest	Required to be worn at all times on all sites.
Ear Plugs/Muffs	Required to be worn in high noise areas as indicated by signs
Gloves, Leather, General Purpose	Task specific – required to be worn when there is potential for contact with sharp edges, wire rope, rough metal surfaces, and other similar hazards.

• Welding/Hot Work Equipment ○ Helmet/hood/face shield (Shaded) ○ Protective clothing ○ Gloves ○ Ear Plugs/muffs	Task specific – required to be worn when performing or assisting with welding/hot work.
• Respiratory Protective Equipment	Task specific – required to be worn when there is potential for exposure to hazardous substances above the PEL.
• U.S. Coast Guard-Approved life jacket or buoyant work vest	Task specific – required to be worn when working over or near water, where the danger of drowning exists.
• Personal Fall Arrest System (PFAS)	Task specific – required to be worn when working at heights at or above 4 feet or in an aerial lift.

Personal Protective Equipment Specifications

Hard Hat (Head Protection) – will meet the current ANSI standards for (select Class G, Class E, Type 1, Type 2,) as a minimum. The brim may be all around or just in the front. Hardhats with a brim in the front of the hard hat must be worn brim forward.

Safety Glasses (Eye Protection) – will meet the current ANSI Z87 standard, High Impact. Safety glasses will have side shields.

Safety Boots (Foot Protection) – will meet the latest ASTM standards. The protective footwear will be a minimum of a 6" high boot for ankle protection, a tread pattern conducive of good traction in the work environment, water-resistant, closed back, and have a toe cap that meets the latest ASTM requirements for class I75/C75.

High-visibility Vest – will meet the requirements of ANSI/ISEA 107, latest revision, Performance Class 2. The vest must also meet FR (flame-resistant) specifications.

FR Clothing – will meet the requirements of NFPA 2112 & NFPA 2113 or equivalent according to the FR Clothing section of this Program.

Gloves (Hand Protection) - Leather, General Purpose

Gloves (Hand Protection) - Metacarpal Protection, leather or cloth

Gloves (Hand Protection) – Heat-resistant – leather or flame-resistant cloth, long cuff

Ear Plugs/muffs (Hearing Protection) – NRR of at least 25 dBA

Face Shield - Clear (Face Protection) - will meet the current ANSI Z87 standard, High Impact.

Welding helmet/hood/shield - filter lenses rating based on radiation intensity

Protective clothing (jacket & pants; apron; leather apron; leather cape) flame-resistant fabric or leather

Personal Fall Arrest System (PFAS) – will be compliant with applicable OSHA regulations. All PFAS equipment will meet the FR specifications of the FR Clothing Program.

Flame-Resistant Clothing (FRC) Program

Regulations

29CFR1910.132

NFPA 2113

Selection of FRC

Hazard Assessment

The Safety Manager or Designate will conduct a documented Hazard Assessment according to the Personal Protective Equipment (PPE) procedure in which to identify hazards in the workplace associated specifically with the potential for flash fires. The Safety Manager or Designate will make the determination of appropriate control measures. The control measures will be to, first, eliminate the hazard or potential hazard of flash fire. If the hazard or potential hazard cannot be eliminated then the Supervisor must determine if the task can be completed without exposing the worker to the potential or actual hazard of flash fire. Third, the Safety Manager or Designate will do all that is feasible to control and reduce the employee exposure of the workers to the potential or actual hazard of flash fire during the task or operation. The use of FRC is the very last measure to consider when workers are exposed to the actual or potential hazard of flash fire.

Garment Specifications

All FR Clothing will meet the minimum standards of NFPA 2113.

Rain gear for protection from hydrocarbon flash fires will meet the specifications of ASTM F2733 or similar testing standard.

FR Clothing Required (example)

The types of clothing available to the workers include:

- Coveralls
- Pants
- Long-sleeved Shirt
- Jacket
- Rain gear

Other FRC adding protection for the neck, head, hand, and foot coverings may be specified and supplied according to identified hazards.

Proper Wear of FRC

Flame-resistant Clothing (FRC) will be worn per manufacturer's instructions. For maximum protection, collars will be worn closed, and sleeves and cuffs will be worn down and secured. FRC will be the outermost garment at all times. Non-flame-resistant clothing will not be worn over or outside of the flame-resistant clothing (FRC). It is recommended that flame-resistant or non-melting undergarments (closest to the skin) to be worn when wearing FRC. Small amount of elastic used on non-melting fabric underwear or socks is permitted.

Training

Workers required to wear FRC will be trained on the following:

- The results of the Hazard Assessment
- The limitations of FR clothing
- The proper use and wearing of FR clothing
- Types of FRC including undergarments & over-garments
- Specific care instructions for FR clothing
- Specific maintenance of FR Clothing
- The specific and define areas and tasks requiring the FR clothing

The wearer will be provided with the manufacturer's instructions including warnings when the FRC is issued to the worker. Copies of the materials may be substituted as needed. The training will be conducted by the Safety Manager or designate at initial hire, prior to issuing new or different FRC, and when the Safety Manager determines that the worker does not understand the wearing, use and maintenance of FRC.

Cleaning of FR Clothing

FR Clothing will be laundered as needed to remove dirt, residue, and contaminants such as, yet not limited to, flammable residues, acids, or blood.

FR Clothing will be laundered as needed and according to the contracted services of a commercial laundering service at no cost to the worker. Contaminated FR Clothing to be cleaned and decontaminated per manufacturer's instructions.

Contaminated FR clothing will be handled so as to prevent cross-contamination with other personal or work clothing. Contaminated FR clothing will be placed in an exclusive container and marked as containing contaminated FRC.

Storage of FRC

FRC will be stored per manufacturer instructions. At a minimum, FR clothing will not to be stored in direct or indirect sunlight, will be clean and dry before long-term storage with storage areas being clean dry, and well ventilated.

Soiled FR clothing will not to be stored with personal clothing.

Maintenance of FRC

FR clothing will be inspected on a regular basis, as set forth below, to ensure the FRC remains in serviceable condition providing the protection from flash fire hazards as it was initially manufactured.

The worker to which the FRC is assigned will inspect every piece of FR clothing prior to each use for damage, soiling, or contamination. The worker will inspect the FR clothing after each cleaning/washing (prior to use) for potential damage or continued contamination and fabric or material damage.

The inspection will include examining components (if present), including outer shell, lining/interlining, wind/moisture barrier, hardware including zippers, buttons, snaps, and other fasteners, for functionality, wristlets, reinforcements, and stitching/seams for damage, skipped, broken, or missing stitches.

Damaged FR clothing will be immediately removed from service and reported to the Supervisor for repair or replacement per the manufacturer's instructions.

Repairing FRC

FR clothing that needs repaired will be repaired per manufacturer instructions. FRC will be cleaned or decontaminated before being repaired. All repairs or alterations will be performed in the same manner, using the same materials as the manufacturer. All repairs and alterations will be reported in writing to the Safety Manager by the worker so records of repairs and alterations can be maintained for the life of the FR clothing.

Removal from Service & Disposal of FRC

FR clothing will be removed from service and disposed of when it is damaged or deteriorated, or after an inspection by the wearer and no longer able to be repaired and returned to original manufactured condition providing the original protection from flash fires. The FRC will be

removed from service when it exceeds the manufacturer-stated service life. This determination and action will be at the discretion of the Supervisor.

The FRC that is removed from service will be destroyed or disposed of so as to ensure it is not used by any worker for protection against flash fire. The FRC will be cut into pieces and rendered un-wearable, then placed in a trash receptacle.

Training

All employees that are required to wear PPE will be trained on the proper use, putting on, wearing, and removing (donning/doffing), and maintenance prior to initial use of the PPE. Training will be conducted at initial hire, initial transfer, when PPE changes, or when employee shows lack of understanding or indifference to the correct use, donning/doffing, and/or maintenance of the PPE. Training will be documented indicating the employee name, training date, and the training topics covered.

Hearing Conservation Program

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. that are exposed to high levels of noise that may cause ear discomfort or possibly occupational hearing loss.

Purpose

This procedure establishes the minimum requirements for hearing conservation.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.
- The Safety Manager is designated as the Program Administrator for the hearing conservation procedure and responsible for oversight of the program.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Noise Monitoring

When information indicates that an employee's exposure may equal or exceed an 8- hour TWA of 85 dBA, the Safety Manager will arrange to have noise exposure level monitoring conducted by an outside consultant, who will determine the appropriately selected and calibrated equipment,

such as sound level meters, personal noise dosimeters, octave band analyzers, etc. and conduct sound exposure monitoring. Monitoring will also be conducted whenever there is a change in equipment, process or controls that affect the noise levels. This includes the addition or removal of machinery, alteration in building structure, or substitution of new equipment in place of that previously used. The Manager must be informed when these types of changes are instituted.

Management will notify all employees exposed at or above an 8-hour time-weighted average of 85 decibels of the results of the monitoring by providing written reports and allow the employee an opportunity to ask questions regarding the results or post the monitoring results. Noise monitoring and sampling data will be available by the Manager.

Audiometric Testing

Employees whose exposures equal or exceed an 8-hour TWA of 85 dBA are required to take part in the audiometric testing program.

A qualified service provider will be selected to conduct the audiograms at no cost to the employee.

The audiometric testing program consists of initial baseline testing and annual audiometric tests. The audiograms, if necessary, will be conducted as required by 29 CFR 1910.95(g)(3). The program will ensure that a valid baseline audiogram is established for exposed employees within 6 months of their first exposure (or within one year if mobile vans are used, with employees wearing hearing protection for any period exceeding six months). Testing to establish a baseline audiogram will be preceded by at least 14 hours without exposure to workplace noise. Hearing protection may be used as a substitute to meet this 14-hour requirement.

NOTE: At this time the drilling crew employees meet the requirements of being included in a hearing conservation program and therefore no Audiometric Testing is required only for those workers. (See Appendix A.)

Annual audiograms will be performed within one year from the date of the previous audiogram. If an annual audiogram shows that an employee has suffered a standard threshold shift, the employee will be retested within thirty days of the annual audiogram. If the retest confirms the occurrence of a standard threshold shift, the employee will be notified in writing within 21 days of the confirmation. Management will then initiate the following procedures:

- Ensure that employees not using hearing protectors are now fitted with hearing protectors, trained in their use and care, and are required to use them.
- Refit and retrain employees who are already using hearing protectors according to the following method:
 - A. Determine if a referral for a clinical audiological evaluation or an otological examination, as appropriate, is necessary if there is reason to suspect that medical pathology of the ear is caused or aggravated by the wearing of hearing protectors.
 - B. Inform the employee, verbally and in writing, of the need for an otological examination if a medical pathology of the ear that is unrelated to the use of hearing protectors is suspected.
- If subsequent audiometric testing of an employee whose exposure to noise is less than an 8-hour time weighted average (TWA) of 90 decibels indicates that a standards threshold shift is not persistent. Novel Geo-Environmental, Inc. will inform the employee of the new audiometric interpretation and discontinue the required use of hearing protectors for that employee.

Control Measures

Engineering and Administrative Controls

- When employees are subjected to sound exceeding those listed in the table below, feasible administrative or engineering controls must be implemented.

Permissible Noise Exposures

Duration per day (hours)	Sound level dBA (slow response)
8	90
6	92
4	95
3	97
2	100
1	102
1.5	105
.5	110
0.25 or less	115

- Controlling noise by engineering and administrative methods is often the most effective means of reducing or eliminating the hazard. In some cases, engineering controls will remove requirements for other components of the program, such as audiometric testing and the use of hearing protectors.
- Noise controls may include:
 - Distancing noisy machinery from employees
 - Placing machinery on rubber mountings to reduce vibration
 - Using sound-absorbing acoustical tiles and blankets on floors, walls and ceilings
 - Arranging work schedules to cut down on the time each worker spends in a noisy area.

Hearing Protection Devices

- When noise control measures are infeasible, or in the interim until effective engineering and administrative controls are implemented, hearing protection devices are the only way to protect the inner ear from hazardous noise levels. Management and employees will properly wear the prescribed hearing protection while working or traveling through any area that is designated as a high noise area. Novel Geo-Environmental, Inc. makes hearing protectors available to all employees exposed to an 8-hour time-weighted average of 85 decibels or greater at no cost to the employees. Management will ensure that employees have a variety of suitable protectors that attenuate (lower) employee exposure at least to an 8-hour time-weighted average of 90 decibels, or 85 decibels or lower for employees who have experienced a standards threshold shift in their hearing, according to assistance from the audiologist. Personal stereo headsets are not approved for hearing protection and are not permitted in any operating area of company property.
- Management will select proper hearing devices for affected employees based on utilization of exposure data collected by a qualified consultant.
- Management reevaluates attenuation whenever employee noise exposures increase to the extent that current hearing protectors no longer provide adequate attenuation, and then provides more effective hearing protection, according to the information provided by our audiologist.
- Hearing protection will be provided at no cost to employees who perform tasks designated as having a high noise exposure and will be replaced, as necessary. It is the supervisor's responsibility to enforce hearing protection requirements in designated areas or when noise levels reach or exceed 85 dBA. Foam inserts should be discarded after

each use. Hands should be washed before handling pre-formed earplugs and foam inserts to prevent contaminants from being placed in the ear.

- All employees are required to wear hearing protection on the host company job site. The basic hearing protection device will be disposable earplugs. Hearing protection devices will be available. Earmuffs will be available where double protection may be required.

Recordkeeping

The Safety Manager will ensure that accurate records of all employee exposure measurements are maintained in employee medical records. All employee audiometric test records will include:

- Name and job classification of the employee
- Date of the audiogram
- Examiner's name
- Date of the last acoustic or exhaustive calibration of the audiometer
- Employee's most recent noise exposure assessment
- The measurements of the background sound pressure levels in audiometric test rooms.

Records will be maintained for at least the following periods:

- Noise exposure measurement records will be retained for two years
- Audiometric test records will be retained for the duration of the affected employee's employment.
- All records will be provided upon written request to employees, former employees, representatives designated by the individual employee, and the Assistant Secretary, and in accordance with 29 CFR 1910.1020(a)-(e) and (g).
- If Novel Geo-Environmental, Inc. ceases to do business, all records required to be maintained will transfer to the successor employer. The successor employer will retain them for the remainder of the periods outlined above.

Training

The employee will be trained in this procedure at the time of initial hire and annually thereafter.

Novel Geo-Environmental, Inc. ensures employee participating in the hearing protection training program by making it mandatory. Affected employees will be required to attend training concerning the proper usage and wearing of hearing protection. The training will be conducted by the Safety Manager or a designated representative. The instructor will assure that the training material is updated to be consistent with changes in the protective equipment and work processes. Training documentation will be maintained.

Training will consist of the following components:

- How noise affects hearing and hearing loss
- Review of the OSHA hearing protection standard
- Explanation of audiometric testing
- Rules and procedures
- Locations within company property where hearing protection is required; and
- How to use and care for hearing protectors.

Appendix A

Final Report and Documentation – Personal Sampling (Dosimetry) for Occupational Noise Exposure

Executive Summary

RJR Safety, Inc. conducted personal sampling for occupational noise exposure at the jobsite behind the Morgantown Mall in Morgantown, WV. The noise sampling was conducted on April 30, 2015.

There were two employees operating in close proximity to the CME 450 track-mounted drill rig. Of the two samples taken, both were, potentially, exposed to noise levels higher than the OSHA Permissible Exposure Limit (PEL) of 90 dBA in 8 hours (TWA) and the OSHA Action Level of 85 dBA in 8 hours (TWA).

Supporting documentation, the “Table 1 – NGE Personal Noise Monitoring Results”, can be found as an attachment on page 6 to this report. Recommendations for further action are also presented based on the results and findings of this sampling.

All field work and report preparation was conducted by Wayne Vanderhoof CSP, who has completed the requirements to obtain the certification of Certified Safety Professional by the Board of Certified Safety Professionals.

Background

The Occupational Safety and Health Administration (OSHA) promulgated Permissible Exposure Limits (PEL) for many substances, including noise, pursuant to the authority granted by Section 6(a) of the Occupational Safety and Health Act of 1970. The original and current Permissible Exposure Limit for was established in 1971. In 1983, 29CFR1910.95 was amended called the Hearing Conservation Amendment, which set an Action Level lower than the PEL.

An employee's 8-hour TWA exposure (PEL) is the employee's exposure to any noise in an 8-hour work shift of a 40 hour work week, and shall not exceed the 90 dBA or 100% dose. For extended work shifts of more than 8 hours, any 8-hour period of exposure within the extended work shift, the exposures are required to be limited to a TWA of 90 dBA.

The OSHA Action Level is an employee's 8-hour TWA exposure to any noise in an 8-hour work shift of a 40 hour work week, and shall not be equal to or more than 85 dBA or 50% dose. When the Action Level is equaled or exceeded, the employer is required to implement a Hearing Conservation Program. The OSHA Action Level is to be adjusted lower should the work day be longer than 8 hours per the formulas in Appendix A to 29CFR1910.95 – Noise Exposure Computation.

With the potential for NGE employees of working extended work shifts of 10 or 12 hour shifts, the OSHA Action Level has been adjusted lower per the formulas in Appendix A to 29CFR1910.95 – Noise Exposure Computation. The OSHA Action Level for 10 hours is 83.4 dBA and for 12 hours it is 82.1 dBA. Both of these numbers are equal to a 50% dose using the above referenced formulas.

Scope of Work

The personal sampling for occupational noise exposure was conducted during routine work and machine operations on April 30, 2015. The tasks involved were operating the drilling rig,

collecting the bore samples, logging the samples, and placing the samples into wooden boxes. Close proximity can be described as being within an area of about a six feet radius of the drill bit. The sampling consisted of a 4-hour period of personal sampling using dosimeters and microphones placed on the workers' shoulder and the dosimeter placed on the workers' belt. There were two persons sampled each working in close proximity to the drilling rig.

Sampling Methodology

Noise sampling was conducted using 3M/Quest Technologies dosimeters, model Noise Pro DL attached the workers' belt and a class 2 cable microphone attached to the workers' shirt on top of the shoulder using the microphone clip. The dosimeters were calibrated immediately before and immediately after the sampling were completed using a Quest Technologies Acoustic Calibrator, model QC-10.

Results

The Results of the noise sampling on April 30, 2015, are shown in Table 1, page 6.

The two employees monitored were operating in close proximity to the CME 450 track-mounted drill rig. Of the two samples taken, both were, potentially, exposed to noise levels higher than the OSHA Permissible Exposure Limit (PEL) of 90 dBA (100% dose) in 8 hours (TWA).

These same two employees were, potentially, exposed to noise levels higher than the OSHA Action Level of 85 dBA (50% dose) in 8 hours (TWA). With the potential for NGE employees to perform duties similar to those performed during the noise monitoring for extended work shifts of 10 or 12 hour, the workers have the potential to be exposed to noise levels greater than the OSHA Action Level for 10 hours of 83.4 dBA or for 12 hours of 82.1 dBA. Both of these numbers are equal to a 50% dose using the above referenced formulas.

Conclusions and Recommendations

Based on the results of the noise monitoring, the following recommendations are offered for your consideration:

- 1) Due to the potential exposure to noise exceeding the OSHA PEL of 90dBA, the noise exposure should be reduced to below 90 dBA using feasible engineering and administrative controls. (reference 29CFR1910.95(b)(1))
- 2) If not possible to reduce the noise to below 90 dBA using feasible engineering and administrative controls, provide hearing protection devices (PPE) to reduce the noise to below 85 dBA. (reference 29CFR1910.95(b)(1) and 29CFR1910.95(i)(2)(i) and 29CFR1910.95(i)(2)(ii))
- 3) Due to the potential exposure to noise exceeding the OSHA Action Level of 85 dBA, implement and administer a Hearing Conservation Program per 29CFR1910.95(c) through (n).
- 4) Include all other workers involved in similar tasks, working in similar conditions with similar equipment as was monitored on 04/30/2015 in the Hearing Conservation Program or conduct noise monitoring and make a determination whether to include or not in the Hearing Conservation Program.

Table 1 – NGE Personal Noise Monitoring Results (conducted April 30, 2015)

Dept.	Machine/Location	Employee Name	Dosimeter S/N and Calibrator S/N	Start Time	End Time	HR (hh:mm)	L Avg.	Max.	8-hr TWA	8-hr DOSE (%)
Drilling	CME 450 Track-mounted	Steve Hansen, Driller	Dosimeter S/N: NLG080943 Calibrator S/N: QIG120148	12:23 PM	4:35 PM	4:12	65	113	92.9	150
Drilling	CME 450 Track-mounted	Joe Davis, Hand	Dosimeter S/N: NLG080494 Calibrator S/N: QIG080166	12:25 PM	4:38 PM	4:13	65	108	88.5	81
Noise Assessment Conducted by:			Wayne Vanderhoof CSP/RJR Safety Inc.							
Date of Assessment:			4/30/2015							
Notes / Information:										
	Dosimeters were obtained from:		Premier Safety & Services, Inc. (Rental Units R-NP-DL10-D)							
	Dosimeter Model:		3M/Quest NoisePro DL							
	Dosimeter Setting:		OSHA HC							
Calibration Information: Each dosimeter was calibrated prior to personal monitoring per manufacturer's instructions immediately before and after noise monitoring										
Calibration Equipment Used:			Quest Technologies Model No.# QC-10 Acoustic Calibrator, 114 dB - 1000 Hz; Serial No. as listed with the Dosimeter S/N in table							

Respiratory Protection Program

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. that are medically approved, fit tested and trained to use Respiratory Protection by Novel Geo-Environmental, Inc.

Purpose

The Novel Geo-Environmental, Inc. Respiratory Protection Program is designed to protect employees by defining accepted practices for respirator use, providing guidelines for training and respirator selection, and explaining proper storage, use and care of respirators. This procedure also serves to help the company and its employees comply with Occupational Safety and Health Administration (OSHA) respiratory protection requirements as found in 29 CFR 1910.134.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.
- The Safety Manager is designated as the Program Administrator for the respiratory protection program and responsible for oversight of the program.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Applicability

This program applies to all employees who are required to wear respirators during normal work operations. In addition, any employee who voluntarily wears a respirator when one is not required is subject to the medical evaluation, cleaning, maintenance, and storage elements of this program, and will be provided with necessary training.

Employees who voluntarily wear filtering face pieces (dust masks) are not subject to the medical evaluation, cleaning, storage, and maintenance provisions of this program.

Hazard Assessment and Respirator Selection

The Program Administrator will select respirators to be used on site, based on the hazards to which workers are exposed and in accordance with the OSHA Respiratory Protection Standard. The Program Administrator will conduct a hazard evaluation for each operation, process, or work area where airborne contaminants may be present in routine operations.

A log of identified hazards will be maintained by the Program Administrator. The hazard evaluations will include:

- Identification and development of a list of hazardous substances used in the workplace by department or work process
- Review of work processes to determine where potential exposures to hazardous substances may occur. This review will be conducted by surveying the workplace, reviewing the process records, and talking with employees.

Updating the Hazard Assessment

The Program Administrator must revise and update the hazard assessment as needed. If an employee feels that respiratory protection is needed during a particular activity, he/she is to contact his/her Manager or the Program Administrator. The Program Administrator will evaluate the potential hazard, and arrange for outside assistance as necessary. The Program Administrator will then communicate the results of that assessment to the employees.

If it is determined that respiratory protection is necessary, all other elements of the respiratory protection program will be in effect for those tasks, and the respiratory program will be updated accordingly.

Respirator Selection

- The proper type of respirator for the specific hazard involved will be selected in accordance with the manufacturer's instructions.
- The Program Administrator will select and provide an appropriate respirator based on the respiratory hazard(s) to which the worker is exposed and workplace and user factors that affect respirator performance and reliability.
- The Program Administrator will select a NIOSH-certified respirator. The respirator will be used in compliance with the conditions of its certification.
- The Program Administrator will identify and evaluate the respiratory hazard(s) in the workplace; this evaluation will include a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form.
- The Program Administrator will select respirators from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user.

Novel Geo-Environmental, Inc. has evaluated the respiratory hazard(s) for the tasks performed by their employees and user factors and has based respirator selection on these factors. All selected respirators are NIOSH-certified.

NIOSH Certification

All respirators must be certified by the National Institute for Occupational Safety and Health (NIOSH) and will be used in accordance with the terms of that certification. Also, all filters, cartridges, and canisters must be labeled with the appropriate NIOSH approval label. The label must not be removed or defaced while the respirator is in use.

Medical Evaluations

Employees who are required to wear respirator, must pass a medical clearance provided by Novel Geo-Environmental, Inc. before being permitted to wear a respirator on the job. Employees are not permitted to wear respirators until a physician has determined that they are medically able to do so. Any employee refusing the medical evaluation will not be allowed to work in an area requiring respirator use.

Novel Geo-Environmental, Inc. utilizes the services of a qualified Medical Clinic to perform medical evaluations on all employees to qualify them to use respiratory protection equipment in the work place. The physicians and licensed staff at the clinic have been designated as the PLHCP. They have been provided with information on the type of work performed by Novel Geo-Environmental, Inc. and the type of respiratory equipment that is worn by the employees.

Novel Geo-Environmental, Inc. has provided the selected Medical Clinic and the Physician with a copy of this written respiratory protection program and a copy of the OSHA Standard 1910.134. Records of medical evaluations and medical questionnaires must be retained and made available in accordance with 29 CFR 1910.1020. Section 14 - Employee Exposure and Medical Records addresses retention of confidential medical records.

Medical Evaluation Procedures

- The medical evaluation will be conducted using the questionnaire provided in Appendix C of the OSHA Respiratory Protection Standard. The Program Administrator will provide a copy of this questionnaire to all employees requiring medical evaluations.
- To the extent feasible, Novel Geo-Environmental, Inc. will provide assistance to employees who are unable to read the questionnaire. When this is not possible, the employee will be sent directly to the physician for medical evaluation.
- All affected employees will be given a copy of the medical questionnaire to complete, along with a stamped and addressed envelope for mailing the questionnaire to the company physician. Employees will be permitted to complete the questionnaire on company time.
- Novel Geo-Environmental, Inc. will ensure that a follow-up medical examination is provided for an employee who gives a positive response to any question among questions in Part B of the questionnaire or whose initial medical examination demonstrates the need for a follow-up medical examination. The follow-up medical examination will include any medical tests, consultations, or diagnostic procedures that the Physician deems necessary to make a final determination.
- All employees will be granted the opportunity to speak with the physician about their medical evaluation, if they so request.
- The Program Administrator will provide the evaluating physician with a copy of this Program, a copy of the OSHA Respiratory Protection Standard, the list of hazardous substances by work area, and the following information about each employee requiring evaluation.
- After an employee has received clearance to wear his or her respirator, additional medical evaluations will be provided under the following circumstances:
 - The employee reports signs and/or symptoms related to their ability to use the respirator, such as shortness of breath, dizziness, chest pains or wheezing.
 - The evaluating physician or Manager informs the Program Administrator that the employee needs to be reevaluated.
 - Information found during the implementation of this program, including observations made during the fit testing and program evaluation, indicates a need for reevaluation.
 - A change occurs in workplace conditions that may result in an increased physiological burden on the employee.
- All examinations and questionnaires are to remain confidential between the employee and the physician. The Program Administrator will only retain the physician's written recommendations regarding each employee's ability to wear a respirator.

Fit Testing

- Before an employee is required to use any respirator with a negative or positive pressure tight-fitting face piece, the employee must be fit tested with the same make, model, style, and size of respirator that will be used.
- Novel Geo-Environmental, Inc. will ensure that an employee using a tightfitting face piece respirator is fit tested prior to initial use of the respirator, whenever a different respirator face piece (size, style, model or make) is used, and at least annually thereafter.
- Novel Geo-Environmental, Inc. has established a record of the qualitative and quantitative fit tests administered to employees including:
 - The name or identification of the employee tested.
 - Type of fit test performed.
 - Specific make, model, style, and size of respirator tested.
 - Date of test.
- Additional fit tests will be conducted whenever the employee reports, or Novel Geo-Environmental, Inc., Physician, Management, or Program Administrator makes visual observations of, changes in the employee's physical condition that could affect respirator fit. Such conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.

- If after passing a QLFT or QNFT, the employee notifies Novel Geo-Environmental, Inc. Program Administrator, Management, or Physician that the fit of the respirator is unacceptable; the employee will be given a reasonable opportunity to select a different respirator face piece and to be retested.

Frequency of Fit Testing

Employees who are required to wear half-face piece APRs will be fit tested:

- Prior to being allowed to wear any respirator with a tight-fitting face piece; annually; or when there are changes in the employee's physical condition that could affect respiratory fit (e.g., obvious change in body weight, facial scarring, etc.). Employees will be fit tested with the make, model, and size of respirator that they will actually wear. Employees will be provided with several models and sizes of respirators so that they may find an optimal fit. Fit testing of powered air purifying respirators will be conducted in the negative pressure mode. The Program Administrator will conduct fit tests in accordance with the OSHA Respiratory Protection Standard.

General Respirator Use Procedures

- Respirators will only be used following the respiratory protection safety procedures established in this program. The Operations and Use Manuals for each type of respirator will be maintained by the Program Administrator and be available to all qualified users. Surveillance by the direct Manager will be maintained of work area conditions and degree of employee exposure or stress.
- When there is a change in work area conditions or degree of employee exposure or stress that may affect respirator effectiveness, Novel Geo-Environmental, Inc. will reevaluate the continued effectiveness of the respirator.
- For continued protection of respirator users, the following general use rules apply:
 - Users will not remove respirators while in a hazardous environment.
 - Respirators are to be stored in sealed containers out of harmful atmospheres.
 - Store respirators away from heat and moisture.
 - Store respirators such that the sealing area does not become distorted or warped.
 - Store respirator such that the face piece is protected.
 - Only authorized and trained Employees may use Respirators. Those Employees may use only the Respirator that they have been trained on and properly fitted to use.
 - Employees will use their respirators under conditions specified in this program, and in accordance with the training they receive on the use of each particular model. In addition, the respirator will not be used in a manner for which it is not certified by NIOSH or by its manufacturer.
 - All employees will conduct user seal checks each time they wear their respirators. Employees will use either the positive or negative pressure check (depending on which test works best for them) as specified in the OSHA Respiratory Protection Standard.
 - Positive Pressure Test: This test is performed by closing off the exhalation valve with your hand. Breathe air into the mask. The face fit is satisfactory if some pressure can be built up inside the mask without any air leaking out between the mask and the face of the wearer.
 - Negative Pressure Test: This test is performed by closing of the inlet openings of the cartridge with the palm of your hand. Some masks may require that the filter holder be removed to seal off the intake valve. Inhale gently so that a vacuum occurs within the face piece. Hold your breath for ten (10) seconds. If the vacuum remains, and no inward leakage is detected, the respirator is fit properly.
 - Before and after each use of a respirator, an employee must make an inspection of tightness or connections and the condition of the face piece, headbands, valves, filter holders and filters. Questionable items must be addressed immediately by the Manager and/or Program Administrator.

- Only Physically Qualified Employees may be trained and authorized to use Respirators. A pre-authorization and annual certification by a qualified physician will be required and maintained. Any changes in an Employees health or physical characteristic will be reported to the Occupational Health Department and will be evaluated by a qualified physician.
- All respirators will be located in a clean, convenient and sanitary location.

Cartridge Change Schedules

- All filters and cartridges will be labeled and color coded with the NIOSH approval label and that the label is not removed and remains legible. A change out schedule for filters and canisters has been developed to ensure these elements of the respirators remain effective. Respirator cartridges will be replaced as determined by the Program Administrator, Manager, and manufacturers' recommendations. The following guidelines will be followed.
- Replace cartridges when the end-of-service-life indicator (ESLI) indicates that replacement is required (if respirator is equipped with an ESLI certified by NIOSH)

Cleaning and Maintenance

- Respirators are to be regularly cleaned and disinfected at the designated respirator cleaning station. Respirators issued for the exclusive use of an employee will be cleaned as often as necessary.
- Respirators are to be properly maintained at all times in order to ensure that they function properly and protect employees adequately. Maintenance involves a thorough visual inspection for cleanliness and defects. Worn or deteriorated parts will be replaced prior to use. No components will be replaced or repairs made beyond those recommended by the manufacturer. Repairs to regulators or alarms of atmosphere-supplying respirators will be conducted by the manufacturer.
- All respirators will be inspected routinely before and after each use.

Storage

- After inspection, cleaning, and necessary repairs, respirators will be stored appropriately to protect against dust, sunlight, heat, extreme cold, excessive moisture, or damaging chemicals.
- Respirators must be stored in a clean, dry area, and in accordance with the manufacturer's recommendations. Each employee will clean and inspect their own air-purifying respirator in accordance with the provisions of this program, and will store their respirator in a plastic bag in the designated area. Each employee will have his/her name on the bag and that bag will only be used to store that employee's respirator.

Respirator Malfunctions and Defects

Respirators that are defective or have defective parts will be taken out of service immediately. If, during an inspection, an employee discovers a defect in a respirator, he/she is to bring the defect to the attention of his/her Manager.

Immediately Dangerous to Life & Health (IDLH) Atmospheres

Novel Geo-Environmental, Inc. does not work in IDLH Environments.

Documentation and Recordkeeping

- Novel Geo-Environmental, Inc. will retain written information regarding medical evaluations, fit testing, and the respirator program. This information will facilitate employee involvement in the respirator program, assist Novel Geo-Environmental, Inc. in auditing the adequacy of the program, and provide a record for compliance determinations by OSHA.
- A written copy of this program and the OSHA Respiratory Protection Standard will be kept in the office and made available to all employees who wish to review it.

- Copies of training and fit test records will be maintained by the Program Administrator. These records will be updated as new employees are trained, as existing employees receive refresher training, and as new fit tests are conducted
- For employees covered under the Respiratory Protection Program, the Program Administrator will maintain copies of the physician's written recommendation regarding each employee's ability to wear a respirator. The completed medical questionnaires and evaluating physician's documented findings will remain confidential in the employee's medical records at the location of the evaluating physician's practice. Records of medical evaluations will be retained and made available in accordance with 29 CFR 1910.1020

Training

The Program Administrator will provide training to respirator users on the contents of the Novel Geo-Environmental, Inc. Respiratory Protection Program and their responsibilities under it, and on the OSHA Respiratory Protection Standard. All affected employees and their Manager will be trained prior to using a respirator in the workplace.

The training course will cover the following topics:

- The Novel Geo-Environmental, Inc. Respiratory Protection Program;
- The OSHA Respiratory Protection Standard (29 CFR 1910.134);
- The respiratory hazards encountered at Novel Geo-Environmental, Inc. and their health affects;
- The proper selection and use of respirators;
- The limitations of respirators;
- The respirator donning and user seal (fit) checks;
- The fit testing;
- Any applicable emergency use procedures;
- The maintenance and storage; and
- The medical signs and symptoms limiting the effective use of respirators.

Employees will be retrained annually or when:

- Changes in the workplace or the type of respirator render previous training obsolete.
- Inadequacies in the employee's knowledge or use of the respirator indicate that the employee has not retained the requisite understanding or skill.
- Other situation arises in which retraining appears necessary to ensure safe respirator use.

Workers will receive training on this procedure upon job assignment and annually thereafter. The training will be documented using the appropriate sign-in sheet. Respirator training will be documented by the Program Administrator and the documentation will include the type, model, and size of respirator for which each employee has been trained and fit tested.

Respiratory Protection Addendum

To be provided to the Employee:

Respirators are a type of personal protective equipment used to provide protection against worker exposure to airborne substances. Respirators are devices worn over the mouth, nose and sometimes the eyes, which help you breathe safely in a hazardous area. The best method of controlling exposures to airborne substances is to prevent the air from becoming contaminated in the first place. This should be accomplished as much as possible by engineering controls, such as local exhaust ventilation. When airborne exposures cannot be controlled, or while controls are being installed, appropriate respirators may be used.

The need for respiratory protection may exist in any line of work. It is the employer's responsibility to determine if the work you do should be performed while wearing a respirator. Your employer will provide you with the right respirator for your job. You should not use any other respiratory protective device at work without the full understanding and agreement of your employer. Before a worker may use a respirator, he/she must be pass a medical evaluation, be trained in the use, maintenance, inspection, and care of the respirator, and be fit-tested.

At a minimum the employee should do the following:

- I have received and comprehend the OSHA Appendix A, 1910.134
- Read all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.
- Do not wear your respirator into areas containing contaminants for which your respirator is not designed to protect against.
- Keep track of your respirator so that you do not mistakenly use someone else's respirator
- Only wear approved respirators.

Employee Name: _____

Employee Last 4 of SSN #: _____

I have read and understood the information provided above regarding voluntary respirator use.

Employee Signature

Date

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Risk Assessment – Hazard Identification			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-030	Pages	7	Rev. 3.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for the use of Job Safety Analysis (JSA) as the formal and documented process to identify hazards and potential hazards in the work areas, tasks, and operations and then the methods to eliminate or control the hazards.

Scope

This procedure is applicable to all employees of Novel Geo- Environmental, Inc. when performing tasks, operations, and/or duties on offsite jobsites, properties, and facilities of which Novel Geo- Environmental, Inc. is required to provide services.

Definitions

Hazard – in the simplest form is anything that will or could cause an injury, illness, or property damage. Examples of hazards are listed on the back of the JSA form in the section titled “List of Potential Hazards”.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Risk assessments will be performed before work begins to formally identify and assess hazards. . Formal workplace inspections will be performed on a regular basis. Risk assessments and JSAs will be updated whenever changes occur to processes, equipment, and/or facilities.

Conducting the Job Safety Analysis (JSA)

A Job Safety Analysis (JSA) will be completed on tasks assessed by an individual, either worker or management, as having significant potential risk or posing a significant hazard. This includes all non-routine tasks (those tasks not performed on a daily basis).

The JSA will be completed per task, and/or as the task or scope of the work changes during the work day. Changes are when a routine task changes to a non-routine task or assessed tasks change to having a significant risk.

The JSA is valid for 12 hours. For tasks lasting longer than 12 hours, a new JSA will be completed and communicated per this procedure.

The Job Safety Analysis (JSA) will be conducted, documented, and reviewed with the involved Novel Geo- Environmental, Inc. workers on the jobsite before the beginning of the task or work. Subcontractors performing work at the location will be included. Identified hazards and risks shall be reviewed with all affected employees.

The Job Safety Analysis (JSA) form in Appendix B will be used. An equivalent form provided by the client may be used if so required by the client.

Risk Ranking

A risk matrix has been developed to assist employees with risk assessment. Risk will be determined by analyzing the probability of the hazard causing harm, the frequency the hazard is encountered, and the potential consequences of impact with the hazard. See Appendix C.

The employee conducting and completing the JSA has the responsibility to eliminate hazards or potential hazards that have been identified through the JSA process. If this is not possible, the Manager or highest ranking employee will have ultimate responsibility to eliminate hazards or potential hazards that have been identified through the JSA process.

Correcting Identified Hazards

Hazards and potential hazards, once identified, will be eliminated if possible. If not completely possible, the hazards or potential hazards will be controlled using engineering controls. If the hazards or potential hazards cannot be completely eliminated or controlled, then additional procedures and training may be developed and communicated to all employees. The last resort to controlling hazards or potential hazards will be through the use of Personal Protective Equipment.

Hazards or potential hazards that cannot be eliminated or controlled through the JSA process will be reported to the Supervisor or Manager and an Action Plan will be developed to eliminate or control the hazard(s) or potential hazard(s). Tasks may need to be modified or work may need to be halted until hazards can be eliminated or otherwise controlled and determined to be safe for the workers. The Manager will assign responsibility for the desired action and track the action to completion. The Manager is responsible to ensure that the corrective measures and the Action Plan eliminates and/or controls the identified hazard(s) or potential hazard(s).

Complete the Communication Loop

The completed Job Safety Analysis (JSA) and the information it contains will be reviewed with all of the Novel Geo- Environmental, Inc. workers on the jobsite by the Supervisor or Manager prior to the work beginning. All Novel Geo- Environmental, Inc. workers involved in the tasks identified on the JSA will sign the JSA indicating that the JSA was reviewed with them, understood by them, and that they will follow the information on the JSA.

The JSA will be readily available for review by placing a hard copy in a conspicuous location such as close to the work area, on the windshield under the wiper, on the dashboard of a truck, in a job trailer, or other suitable location.

The completed JSA will be turned into the Novel Geo- Environmental, Inc. Safety Department when the work is completed or with other job-related paperwork. The JSA will be maintained on file for the duration of the project, activities, or three months, whichever is longer. The JSA will be reviewed by the Safety Manager.

Training

All employees will be trained on the JSA process including hazard identification, risk assessment and control measures. This training will be conducted at initial hire or assignment. Refresher training may be provided as needed or indicated by a lack of understanding by the worker as recognized by the Supervisor or Safety Manager.

Basic JSA Completion Instructions

1. In Section 1, describe the significant task steps necessary for performing the work as listed in the "Description of Work to be Performed" section.
 - a. Do not proceed to the next column until this column is completed.
2. In Section 2, list any hazards associated with the task steps in Section 1.
 - a. List the hazards as complete as possible. Place the hazards associated with each step beside that step.
 - b. If needed, reference the List of Potential Hazards on the back of this form. It is optional to complete Yes/No and Comments areas.
 - c. Do not proceed to the next column until this column is completed.
3. In Section 3, list the actions that will be taken to eliminate or control the identified hazards.
 - a. Be specific, avoiding general statements such as "Be Careful".
 - b. List exactly what is necessary for performing the job – tools, equipment, procedures, permits, etc.
 - c. Use the List of PPE on the back of this form as a reference only

Use additional JSA forms or blank paper if more space is needed to fully document the task steps, hazards, and corrective actions.

Appendix A, OSHA 3071 Excerpt, Table of Hazards

Chemical (Toxic)

A chemical that exposes a person by absorption through the skin, inhalation, or through the blood stream that causes illness, disease, or death. The amount of chemical exposure is critical in determining hazardous effects. Check Material Safety Data Sheets (MSDS), and/or OSHA 1910.1000 for chemical hazard information.

Chemical (Flammable)

A chemical that, when exposed to a heat ignition source, results in combustion. Typically, the lower a chemical's flash point and boiling point, the more flammable the chemical. Check MSDS for flammability information.

Chemical (Corrosive)

A chemical that, when it comes into contact with skin, metal, or other materials, damages the materials. Acids and bases are examples of corrosives.

Explosion (Chemical Reaction)

Self-explanatory.

Explosion (Over Pressurization)

Sudden and violent release of a large amount of gas/energy due to a significant pressure difference such as rupture in a boiler or compressed gas cylinder.

Electrical (Shock/Short Circuit)

Contact with exposed conductors or a device that is incorrectly or inadvertently grounded, such as when a metal ladder comes into contact with power lines. 60Hz alternating current (common house current) is very dangerous because it can stop the heart.

Electrical (Fire).

Use of electrical power that results in electrical overheating or arcing to the point of combustion or ignition of flammables, or electrical component damage.

Electrical (Static/ESD)

The moving or rubbing of wool, nylon, other synthetic fibers, and even flowing liquids can generate static electricity. This creates an excess or deficiency of electrons on the surface of material that discharges (spark) to the ground resulting in the ignition of flammables or damage to electronics or the body's nervous system.

Electrical (Loss of Power)

Safety-critical equipment failure as a result of loss of power.

Ergonomics (Strain)

Damage of tissue due to overexertion (sprains and strains) or repetitive motion.

Ergonomics (Human Error)

A system design, procedure, or equipment that is error-provocative. (A switch goes up to turn something off).

Excavation (Collapse)

Soil collapse in a trench or excavation as a result of improper or inadequate shoring. Soil type is critical in determining the hazard likelihood.

Fall (impacts)

Conditions that result in falls from (Slip, Trip) height or traditional walking surfaces (such as slippery floors, poor housekeeping, uneven walking surfaces, exposed ledges, etc.)

Fire/Heat

Temperatures that can cause burns to the skin or damage to other organs. Fires require a heat source, fuel, and oxygen.

Mechanical/ Vibration (Chaffing/ Fatigue)

Vibration that can cause damage to nerve endings, or material fatigue that results in a safety-critical failure. (Examples are abraded slings and ropes, weakened hoses and belts.)

Mechanical Failure

Self-explanatory; typically occurs when devices exceed designed capacity or are inadequately maintained.

Mechanical

Skin, muscle, or body part exposed to crushing, caught-between, cutting, tearing, shearing items or equipment.

Noise

Noise levels (>85 dBA 8 hr TWA) that result in hearing damage or inability to communicate safety-critical information.

Radiation (Ionizing)

Alpha, Beta, Gamma, neutral particles, and X-rays that cause injury (tissue damage) by ionization of cellular components.

Radiation (Non-Ionizing)

Ultraviolet, visible light, infrared, and microwaves that cause injury to tissue by thermal or photochemical means.

Struck By (Mass Acceleration)

Accelerated mass that strikes the body causing injury or death (Examples are falling objects and projectiles).

Struck Against

Injury to a body part as a result of coming into contact of a surface in which action was initiated by the person. (An example is when a screwdriver slips.)

Temperature (Heat/Cold)

Temperatures that result in heat stress, Extreme exhaustion, or metabolic slow down such as hypothermia.

Visibility

Lack of lighting or obstructed vision that results in an error or other hazard.

Weather Phenomena (Snow/Rain/Wind/Ice)

Self-explanatory.

Appendix B – Job Safety Analysis

JOB SAFETY ANALYSIS (JSA)		Date:	New JSA Revised JSA
Building:	Division:	Branch:	Location:
JOB TITLE:		JHA Number:	Page ____ Of ____
Job Performed By:	Analysis By:	Supervisor:	Approved By:
Required Standards and General Notes:			
Required Personal Protective Equipment:			
Tool and Equipment:			
Sequence of Job Steps	Potential Hazards/Injury Sources	Safe Action or Procedure	

Appendix C – Risk Matrix

HAZARD/RISK ASSESSMENT MATRIX

POTENTIAL CONSEQUENCE OF THE HAZARD					PROBABILITY OF OCCURRENCE			
Severity Index	People	Asset	Environment	Public Image	Very Likely	Likely	Unlikely	Rare
Catastrophic	Fatality or Permanent Disability	Massive Loss (> \$500,000)	Massive Impact	Massive Visibility	Severe	Severe	High	Medium
Significant	Major Injury - Lost Time	Major Loss (\$50,000-\$500,000)	Major Impact	Major Visibility	Severe	High	Medium	Low
Moderate	Minor Injury - Recordable	Moderate Loss (\$10,000 - < \$50,000)	Moderate Impact	Moderate Visibility	High	Medium	Medium	Low
Minor	First Aid Only	Slight Loss (< \$10,000)	Minimal Impact	Minimal Visibility	Medium	Low	Low	Low

LEGEND		
	Severe	Risk Intolerable - needs to be mitigated immediately to risk rank Medium.
	High	Risk Undesireable - needs to be mitigated to risk rank Medium within 180 days.
	Medium	Risk Tolerable with engineering and administrative safeguards.
	Low	Risk Acceptable with no further action required.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Spill Prevention / Response			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-031	Pages	3	Rev. 2.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for the maintaining of a work area that is free from spills of chemicals and to specify the employee response should such spills occur.

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. on all of the respective sites.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

General Work Procedures

- Chemicals with the potential for exposure include fuel, solvents, sealants, additives, and acids.
- To minimize the potential for spills of chemicals, substances will be stored in the proper containers, covered and closed when possible.
- An adequately supplied spill response kit will be maintained on the jobsite at all times according to the chemicals used with the potential for spilling or being affected by storm water.
- Spill clean-up/absorbent pads will be maintained in each company vehicle for use as needed and then with proper disposal. The vehicle operator will inspect and maintain an adequate supply of pads monthly.
- A spill clean-up kit will be maintained in the on-site trailer. The spill clean-up kit will be inspected and maintained by a designated Supervisor monthly.
- The spill kits will be maintained on a monthly basis with a documented inspection by the Supervisor using Spill Response Kit Inspection Checklist to ensure the kit is adequately

stocked with the necessary supplies.

- Storage of chemicals will be in accordance with the Housekeeping and General Waste Management procedures. Storage areas will be maintained free of visible spills with the use of a drip bucket, pads, or other spill control methods available in the spill response kit.
- In case of any significant spill of chemicals, the Supervisor will be immediately notified via radio or phone and the chemicals will be cleaned up by the Supervisor or a designate using the supplies in the spill response kit.

Training

- Employees will be trained upon initial assignment on this spill response procedure, proper spill prevention methods, proper waste disposal, and communication procedures. Employees will be re-trained whenever a Manager of Novel Geo-Environmental, Inc. has reason to believe the employee needs to be due to observed or perceived inadequacies in the employee's knowledge or use of this procedure.

Spill Response Kit Inspection Checklist

(NGE)

Kit Location: _____

SPILL PREVENTION & CLEAN-UP KIT INSPECTION FORM

_____(Year)

Place a check or "x" in the box showing that the item was present at the time of inspection.

[illegible]

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Stop Work Authority			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-032	Pages	3	Rev. 2.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

The Stop Work Authority process involves a stop, notify, correct and resume approach for the resolution of a perceived unsafe condition, act, error, omission or lack of understanding that could result in a undesirable event. All Novel Geo-Environmental, Inc. employees have the authority and obligation to stop any task or operation where concerns or questions regarding the control of health, safety or environmental risks exist.

Scope

This program applies to all Novel Geo-Environmental, Inc. projects and operations.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.
- Management must establish and support clear expectations to exercise SWA, create a culture where SWA is exercised freely and hold those accountable that chose not to comply with established SWA policies.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.
- Responsible to ensure a culture is created where SWA is exercised and honored freely to resolve issues before operations resume and recognize proactive participation.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.
- Employees are responsible to initiate a Stop Work Intervention when warranted and management is responsible to create a culture where SWA is exercised freely.

Procedure

- When an unsafe condition is identified the Stop Work Intervention will be initiated, coordinated through the supervisor, initiated in a positive manner, notify all affected personnel and supervision of the stop work issue, correct the issue and resume work when safe to do so.
- No work will resume until all stop work issues and concerns have been adequately addressed.
- Any form of retribution or intimidation directed at any individual or company for exercising their right to issue a stop work authority will not be tolerated by the host nor by Novel Geo-Environmental, LLC.

Process to Initiate a Stop Unsafe Work Action

1. The person(s) initiating the Stop Unsafe Work Action will immediately suspend work and notify the affected person(s).
2. The work area/activity must be placed in a safe condition by the person(s) initiating the Stop Unsafe Work Action. Assistance from the immediate Supervisor may be needed to accomplish this step completely and safely.
3. The person(s) initiating the Stop Unsafe Work Action will immediately notify the immediate Supervisor or Management.
4. The immediate Supervisor/Management will resolve any issues that have resulted in the Stop Unsafe Work Action. This includes involving the person(s) who initiated the Stop Unsafe Work Action. Resolution includes agreeing on the necessary controls and corrective actions to correct the unsafe work and fully implementing those controls and corrective actions. All necessary controls and corrective actions will be fully implemented prior to work being resumed.
5. The immediate Supervisor and the person(s) initiating the Stop Unsafe Work Action will document the Stop Unsafe Work Action using the Stop Unsafe Work Action Form.

Follow-Up

- All Stop Work Interventions shall be documented for lessons learned and corrective measures to be put into place.
- Stop Work reports shall be reviewed by supervision order to measure participation, determine quality of interventions and follow-up, trend common issues, identify opportunities for improvement, and facilitate sharing of learning.
- It is the desired outcome of any Stop Work Intervention that the identified safety concern(s) have been addressed to the satisfaction of all involved persons prior to the resumption of work. Most issues can be adequately resolved in a timely manner at the job site, occasionally additional investigation and corrective actions may be required to identify and address root causes.

Training

Employees shall receive Stop Work Authority training before their initial assignment and whenever a Manager of Novel Geo-Environmental, Inc. has reason to believe the employee needs to be retrained due to observed or perceived inadequacies in the employee's knowledge or use of this procedure.

The training will be documented including the employee name, the dates of training and subject matter.

STOP UNSAFE WORK ACTION FORM

Date of Action: _____ Time Action Initiated/Suspended: _____

Action initiated by: _____

Immediate Supervisor Notified of Action: _____

Location of the Action: _____

Stop Unsafe Work Action Description

Describe the work/activities, hazards, conditions, actions, behaviors, tasks, or processes suspended upon initiation of the Action: (use additional space as needed)

Describe potential injury or illness to a person or persons, harm to the environment, or damage to equipment if Action had not been initiated: (use additional space as needed)

Describe the necessary controls and corrective actions implemented: (use additional space as needed)

Date Learnings were discussed at meeting with all workers: _____

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Transportation of Hazardous Materials			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-033	Pages	2	Rev. 2.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for the Transportation of Hazardous Materials in order to prevent risk for our employees.

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. that are required to prepare, handle or transport hazardous materials.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Novel Geo-Environmental, Inc. makes it a priority to protect public safety after an accidental release of hazardous materials. Where an accidental release of hazardous materials in excess of a prescribed quantity or concentration occurs or is imminent from a means of containment being used to handle or transport dangerous goods, any person who at the time has the charge, management or control of the means of containment will report the occurrence or imminence of the release.

Every person required to make a report will, as soon as possible in the circumstances, take all reasonable emergency measures to reduce or eliminate any danger to public safety that results or may reasonably be expected to result from the release.

Novel Geo-Environmental, Inc. requires classification of the hazardous materials. Before allowing a carrier to take possession of hazardous materials for transport, the consignor will determine the classification of the hazardous materials.

Before allowing a carrier to take possession of hazardous materials for transport, the consignor must prepare and give to that carrier a shipping document or, if the carrier agrees, an electronic copy of the shipping document.

Novel Geo-Environmental, Inc. requires the use of hazardous materials placarding or similar identification. A person will not offer for transport, transport or import a means of containment that contains hazardous materials unless each hazardous materials placard is displayed on it.

Novel Geo-Environmental, Inc. will ensure that a person will not handle, offer for transport or transport hazardous materials in a means of containment unless the means of containment is designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no accidental release of hazardous materials that could endanger public safety.

Novel Geo-Environmental, Inc. will ensure that a person will load and secure hazardous materials in a means of containment and will load and secure the means of containment on a means of transport in such a way as to prevent, under normal conditions of transport, damage to the means of containment or to the means of transport that could lead to an accidental release of the hazardous materials.

Training

Novel Geo-Environmental, Inc. requires that a person who handles, offers for transport or transports hazardous materials will be adequately trained and hold a training certificate or perform those activities in the presence and under the direct supervision of a person who is adequately trained and who holds a training certificate.

Novel Geo-Environmental, Inc. will not direct or allow an employee to handle, offer for transport or transport hazardous materials unless the employee is adequately trained and holds a training certificate or performs those activities in the presence and under the direct supervision of a person who is adequately trained and who holds a training certificate.

In the event of an accidental release of hazardous materials from a means of containment, a person who has possession of the hazardous materials at the time of the accidental release will make an immediate report of the accidental release to appropriate authority, if the accidental release consists of a quantity of hazardous materials or an emission of radiation that exceed quantities set out for each Class of hazardous materials.

Retention and Recordkeeping

Novel Geo-Environmental, Inc. will retain a copy of the shipping paper required by § 172.200(a), or an electronic image thereof, that is accessible at or through its principal place of business and must make the shipping paper available, upon request, to an authorized official of a Federal, State, or local government agency at reasonable times and locations. For a hazardous waste, the shipping paper copy will be retained for three years after the material is accepted by the initial carrier. For all other hazardous materials, the shipping paper will be retained for two years after the material is accepted by the initial carrier.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Working Near Water			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-034	Pages	2	Rev. 2.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

The purpose of this program is to define the requirements for employees of Novel Geo-Environmental, Inc. Working Near Water Policy. Its primary objective is to identify and prevent hazardous exposure from working near water.

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. that are work near water.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Novel Geo-Environmental, Inc. requires that when employees are working over or near water, where the danger of drowning exists, they will be provided a U.S. Coast Guard-Approved life jacket or buoyant work vest.

Novel Geo-Environmental, Inc. will ensure that buoyant work vests or life preservers will be inspected for defects which would alter their strength or buoyancy prior to and after each use. Defective units will not be used.

Novel Geo-Environmental, Inc. requires that ring buoys with at least 90 feet of line and spaced no further than 200' apart will be provided and readily available for emergency rescue operations.

Novel Geo-Environmental, Inc. requires that at least one lifesaving skiff will be immediately available when employees are working over or adjacent to water.

Novel Geo-Environmental, Inc. requires that a pre-task plan be completed and signed by all members of the crew before employees work over or near water before work can begin.

Novel Geo-Environmental, Inc. requires that employees are not permitted to work alone when performing work over or near water. Employees who will be performing work over or near water, where the danger of drowning exists, are not permitted to work alone at any time.

Training

Employees will be trained initially prior to assignment to work related tasks and whenever a Manager of Novel Geo-Environmental, Inc. has reason to believe the employee needs to be retrained due to observed or perceived inadequacies in the employee's knowledge or use of this procedure.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Aerial Lift Safety			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-035	Pages	4	Rev. 1.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for the safe operating of aerial lifts

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. that operate aerial lifts.

This procedure is applicable all lifts owned, rented, leased, or otherwise used by employees of Novel Geo-Environmental, Inc.

Definitions

Aerial lifts include extendable boom platforms, articulating boom platforms, and scissor lifts. Other generic terms for the same equipment include cherry pickers and articulating boom lifts for other than scissor lifts.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Vehicle Specifications

All aerial lifts owned, rented, leased, or otherwise used by employees of Novel Geo-Environmental, Inc. will meet the latest standards of the ANSI 92.2 standard.

Aerial lifts will be of the correct size, type, and designed for the specific use. All aerial lifts will be utilized within the specifications of the vehicle manufacturer.

Boom and basket load limits specified by the manufacturer will not be exceeded.

Aerial lifts will have both platform (upper) and lower controls. Upper controls will be in or beside the platform within easy reach of the operator.

Any modifications or adaptations to the aerial lift must be certified in writing by the manufacturer.

Operator Certification

Employees certified by Novel Geo-Environmental, Inc. are permitted to operate Novel Geo-Environmental, Inc. owned or leased aerial lifts.

The certification will include the name of the operator, the date of the training, the date of the evaluation, and the identity of the person(s) performing the training or evaluation. This certification can be a certificate or a card.

Safe Operation

- Know the limitations of the equipment you use. Do not exceed those limits. Do not use the equipment for any operation other than its intended purpose.
- Stand firmly on the floor of the basket/platform with both feet, do not sit or climb on the edge of the basket or use planks, ladders, or other devices for a work position.
- Always inspect the area and route of travel and remove hazards prior to traveling the route. Ensure that the clearances are adequate.
- Driving over loose objects on the roadway should be avoided.
- Grades will be ascended and descended slowly.
- Speed will be slow enough to safely negotiate turns and stops.
- All aerial lifts will have functioning back-up alarms or a Spotter will be used when the aerial lift is operated in reverse.
- A minimum distance of 10 feet will be maintained at all time when working around or near electric lines of 50kv or less.
- Aerial lifts will have both platform (upper) and lower controls. Upper controls will be in or beside the platform within easy reach of the operator. Lower controls will provide for overriding the upper controls. The lower level controls will not be operated unless permission has been obtained from the employee in the lift, except in case of emergency.
- The aerial lift will be kept in a clean condition, free of oil and grease.
- Non-combustible solvents/agents will be used to clean the aerial lift.
- The aerial lift will not be driven up to anyone standing in front of a fixed object.
- Horseplay and stunt driving is not permitted while using the aerial lift.

Vehicle Inspections and Maintenance

Aerial lifts will be inspected prior to use on a daily basis by the Operator documenting the daily inspection on an Aerial Lift Inspection Form in the Appendix. Any deficiencies noted will be reported to Supervisor/manager who will then contact the rental Novel Geo-Environmental, Inc. to have the deficiencies corrected or a new machine brought to the site. The completed Inspection Form will be forwarded to the Manager for maintaining for one year.

In order to keep all aerial lifts in a safe mechanical repair, the Operator/driver will immediately notify the Manager of any potential mechanical problems with the aerial lift. If the aerial lift is not in good repair, or if the mechanic has not repaired it properly, do not drive the vehicle, and report it to the Manager.

Repair and maintenance operations must be in compliance with Control of Hazardous Energy (Lockout-Tagout) procedures.

Before placing equipment back into service, ensure that all associated guards and safety devices are operational.

Fall Restraint

For all other aerial lifts, a full body harness and self-retracting lanyard, as the preferred method, or non-shock absorbing lanyard, no longer than 6 feet, will be used as a tether or "seatbelt" while operating the aerial lift regardless of the position of the basket/platform. The anchor point inside of the basket is marked by the equipment manufacturer and is usually one each side of the upper control console.

For scissor lifts, no fall protection is necessary as it is considered a motorized scaffold so long as the guard rail system on the basket/platform is in good condition.

Do not tie-off (as in an anchor point for PFAS) to an adjacent pole, structure, or equipment while working from an aerial.

Training

Employees will be trained initially prior to assignment to tasks requiring the operation of aerial lifts.

When operating rented or leased aerial lifts, at least, one Novel Geo-Environmental, Inc. employee will receive a review of the specific operation of the aerial lift being rented or leased from a qualified person from the rental or leasing Novel Geo-Environmental, Inc. The Novel Geo-Environmental, Inc. employee will review the operation with the other Novel Geo-Environmental, Inc. employees that may operate the rented or leased aerial lift.

Employees being trained to operate aerial lifts will operate it only under the direct supervision of persons who have the knowledge, training, and experience to train operators and evaluate their competence and where such operation does not endanger the trainee or other employees.

Training will consist of a combination of formal instruction, practical training, and an evaluation of the operator's performance in the workplace.

To avoid the duplication of training received by an Operator, if an Operator has previously received training appropriate to the aerial lift and working conditions encountered, additional training is not required. The Operator will be evaluated to be certified as an Operator.

Refresher Training

Refresher training may be conducted to ensure that the operator has the knowledge and skills needed to operate the aerial lift. Refresher training in relevant topics will be provided to the operator when:

- The operator has been observed to operate the aerial lift in an unsafe manner;
- The operator has been involved in an accident or near-miss incident;
- The operator has received an evaluation that reveals that the operator is not operating the aerial lift safely;
- The operator is assigned to drive a different type of aerial lift; or
- A condition in the workplace changes in a manner that could affect safe operation of the aerial lift.

Aerial Lift Inspection Form

Job Site: _____ Shift: _____

Inspected By: _____

Model: _____ Serial #: _____ Hours: _____

Type of inspection: Daily or Shift

Legend:

(blank) = Yes, acceptable
 X = No, remove from service
 R = Repaired
 NA = Not Applicable

Place a check in the appropriate box. If any inspection receives an “N”, tag and remove the machine from service, repair & re-inspect it. After repair, place a check in the “R” box.

Checklist of Items	Date										Maintenance Notes
Manuals											
Decals & Placards											
Damage, loose, missing parts											
Engine oil level											
Engine coolant – liquid cooled models											
Fuel leaks											
Hydraulic oil level											
Hydraulic leaks											
Tire pressure											
Oscillate axle											
Platform & ground controls											
Auxiliary power											
Tilt sensor											
Limit switches											
Upper Controls											
Lower Controls											

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Compressed Gases Safety			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-036	Pages	4	Rev. 2.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This guideline establishes the requirements to be followed to protect personnel and equipment during receiving, acceptance, handling, storage, transportation and operation of compressed gas cylinders.

Scope

This guideline applies to all Novel Geo-Environmental, Inc. facilities, projects and employees except when superseded by more stringent local standards or client requirements. This procedure is applicable to all employees of Novel Geo-Environmental, Inc. working with or in areas where compressed gas cylinders are used or stored. Examples of compressed gas include, yet are not limited to, oxygen, acetylene, propane, and nitrogen.

Definitions

Compressed gas cylinder - A pressure-tested metal container constructed and maintained in accordance with U.S. Department of Transportation requirements (49 CFR Parts 171-179). These containers are available in various sizes.

Cylinder cap - A threaded metal cover for the protection of the valve and connection area of a compressed gas cylinder.

Cylinder dolly - A hand truck designed to carry standard industrial-size compressed gas cylinders. This hand truck is wheeled and has a chain or similar mechanism for securing the cylinder during transportation within the facility.

Fire watch - A person who is assigned to prepare an area for “hot work”. The Fire Watch is responsible for assuring the presence of adequate fire extinguishing equipment for the proposed work, observing the work to ensure continuing fire prevention precautions and verifying that all sources of ignition are shut down and/or cooled off before leaving the area.

Flashback arrestor - The valve or mechanism used on fuel and oxygen lines to prevent a potential flame from passing into the fuel-gas system.

Valve assembly - Consists of a valve and connections used to access the compressed gas in a cylinder.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

The handling, storage, and utilization in cylinders and portable tanks are to be in accordance with Compressed Gas Association (CGA) publication P-1, "Safe Handling of Compressed Gases in Cylinders".

Accepting Compressed Gas Cylinders from Vendors

When accepting compressed gas cylinders from vendors, the following precautions shall be observed:

- Do not accept cylinders that are not permanently and clearly marked by content. The name of the gas must be clearly marked on the shoulder of the cylinder.
- Ensure that a Safety Data Sheet (SDS) accompanies all cylinders. Confirm that a current SDS is on hand.
- Check the cylinder for integrity. The cylinder shall show no evidence of damage or defects such as gouges, grooves, dents, burrs or corrosion. It shall have a properly fitted threaded valve protection cap and the current hydro test date shall be stamped on the cylinder collar.
- Confirm that the cylinder has been ordered. Do not accept cylinders that have not been ordered by the location.
- Do not accept cylinders that lack a valve cover properly fitted on the valve. Compressed gas cylinders, portable tanks, and cargo tanks shall have pressure relief devices installed and maintained.
- Immediately transfer cylinders to storage area and secure. Never allow cylinders to be unattended and unsecured.

Storage of Compressed Gas Cylinders

- Cylinders shall be stored in the upright position with the threaded cylinder cap in place and secured with chains or placed in racks to prevent falling. Storage areas for compressed gas cylinders shall be properly labeled by the contents and the cylinders shall be grouped accordingly. Where removable caps are provided for valve protection, such caps should be kept on cylinders at all times except when cylinders are in use. Do not store cylinders near highly flammable substances or solvents, combustible waste material and similar substances, or near unprotected electrical connections, gas flames or other sources of ignition.
- Cylinders may be stored in the open but should be protected from the ground beneath to prevent rusting. Cylinders may be stored in the sun except in localities where extreme temperatures prevail, or in the case of certain gases where the supplier's recommendation for shading shall be observed. If ice or snow accumulate on a cylinder, thaw at room temperature, or with water at a temperature not exceeding 125 F.
- Cylinders
 - The valves of empty cylinders shall be closed with the cylinder cap secured and shall be marked or tagged "MT" or "EMPTY". If stored in the same area, empty cylinders shall be separated from full cylinders.

Fire Prevention Storage Requirements

- Flammable (fuel) gases include acetylene, hydrogen, natural and LP gas; along with toxic gases including chlorine and other gases not used as fuel. Check with the Safety Representative or Manufacturer regarding the flammability of a cylinder gas. Fuel gas cylinder storage inside a building, except those in actual use or attached ready for use, must be limited to a total capacity of 2,000 standard cubic feet or 300 pounds of liquefied petroleum gas. Some precautions to be observed when storing cylinders include:
 - Oxygen cylinders shall not be stored with flammable gases. Keep oxygen cylinders 20 feet away from fuel-gas cylinders, such as acetylene, or separate them with a non-combustible barrier (such as a wall) at least 5 feet high with a fire-resistance rating of at least one-half hour.
 - Nitrogen and carbon dioxide cylinders may be stored with fuel or oxygen cylinders, as these are inert gases and do not feed a fire.
 - Remove damaged or leaking cylinders from enclosed areas. Tag cylinders as “DAMAGED” or “DEFECTIVE” and notify Purchasing to arrange for return to the vendor as soon as possible.
 - “No Smoking” signs shall be posted in flammable (fuel) gas storage areas.
- Separation of flammable, toxic and oxidizer gases must be maintained. The same separation must be maintained between the cylinders and flammable or combustible materials such as paper, wood or grease. Separation can be accomplished by taking the following steps:
 - Maintain a minimum distance of 20 feet (~6.2 meters) between the types of gases and all highly combustible materials.
 - Install a firewall 5 feet (~1.5 meters) high with a one-half hour fire rating.

Moving and Transporting Compressed Gas Cylinders

The following procedures shall be observed when moving or transporting compressed gas cylinders:

- Do not move or lift cylinders by the cap. Avoid dragging or sliding cylinders
- For local transport, use cradles, lugs, platforms, hand trucks or similar devices that allow the cylinder to be secured to the wheeled device.
- When transporting by a powered vehicle, secure the cylinder in a vertical (upright) position.
- To reposition a cylinder, it may be tilted slightly with the threaded cap in place and rolled on the bottom edge.

Putting Cylinders into Service

Only employees trained in the safe use of compressed gas cylinders shall be allowed to use the cylinders. Accessory equipment including regulators, gauges, hoses and other equipment must be selected for compatibility with the gas being used. Precautions should be used when using these cylinders, as follows:

- Oxygen equipment is reverse threaded and may not be used with other gases.
- Equipment shall be examined for damage or wear prior to use. Damaged or worn equipment shall be removed from use, tagged and returned to the warehouse for repair or replacement.

- Oil or grease shall not be used on regulators, fittings, hoses or gauges.
- Use check valves when any potential for backflow of gases into the cylinder exists.
- Because of potentially high pressures, open valves slowly on cylinders of compressed gas.
- Use a suitable cylinder truck, chain or other securing device to prevent cylinders from being knocked over while in use or standby service.
- Never use compressed gas to dust off clothing, as this may cause serious injury to the eyes or body, or create a fire hazard
- Read, understand, and follow all cylinder markings and labels.
- When connecting a regulator, stand to one side, and momentarily open the valve and then close it immediately to clear the valve of dust or dirt that could enter the regulator.
- All regulators and gauges need inspected before each use.
- Open valves slowly by hand to avoid gauge damage. Use the specific tool required to open the valve, and leave the tool in position so that the flow of gas can be stopped quickly in an emergency.
- Close the gas cylinder valves when not in use such as during breaks, lunch, or end-of-shift

Training

The employee will be trained in this procedure at the time of initial hire or initial assignment to working with or in areas where compressed gas cylinders are used or stored and whenever a Manager of Novel Geo-Environmental, Inc. has reason to believe the employee needs to be retrained due to observed or perceived inadequacies in the employee's knowledge or use of this procedure.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Contractor Management			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-037	Pages	10	Rev. 2.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

The purpose of this program is to provide reasonable assurance that contractors perform their work in compliance with applicable safety, health, and environmental standards and requirements and providing the process, tools, and requirements to assist Novel Geo-Environmental, Inc. and its contractors in meeting these obligations.

Scope

The program is applicable to all contractors, including sub-contractors, performing work Novel Geo-Environmental, Inc.

This program does not apply to visitors. Visitors are addressed by other procedures.

Definitions

Contractor - An individual, partnership, firm, or corporation that is contracted or hired to do a specific job or provide a service or to provide contract employees/personnel to a Contractor. This includes an individual, partnership, firm, or corporation that is hired by the Contractor to do a specific job or provide a specific service for the Contractor as a subcontractor to the Contractor.

Contractor Employee - An individual with an employment relationship to a General Contractor, Contractor or a business; this relationship may be full time, part-time or temporary. This also covers individuals whose work is directly supervised by the employer, but whose employment relationship is with another employer and they are a temporary or contract worker.

Contractor Records - The Manager of Administrative Services, Safety Manager or designee will maintain a file (electronic and/or hardcopy) for all contractors working for Novel Geo-Environmental, Inc. at a minimum, the file will contain:

- Prequalification information
- Waiver forms (if applicable)
- Recordable injury log or equivalent
- Applicable incident reports and investigations
- Applicable SHE inspections and audits

General Contractor - An individual, partnership, firm, or corporation with the responsibility to manage a specific project and who enters into the prime contract with the property owner.

Electronic Contractor Management Database (ECMD) - ECMD is an electronic database or service used compile, evaluate, and verify the pre-qualification information submitted by potential Contractors before being added to the "Approved Contractor List". It is also used to track the Contractors after the initial pre-qualification process. Examples of ECMD include, yet are not limited to, ISNetWorld, Veriforce, & Avetta)

Management of Program Changes - Changes to the program will be managed by the Manager of Administrative Services, Safety Manager or designee. Changes will be reviewed and approved by (management/executive/committee).

Communications to Contractors - Changes to the program affecting a contractor will be communicated to affected contractors by the Manager of Administrative Services, Safety Manager or designee.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Manager of Administrative Services, Safety Manager or designee

- Safety, health, & environment resource
- Manage program content & changes.
- Maintenance and upkeep of the program to include regular reviews and audits.
- Coordinate implementation
- Interpret program requirements.
- Meet with Contractor as necessary to assess the Contractor's progress at implementing its site safety plan and the effectiveness of the plan.
- Conduct periodic meetings with Contractor management to review, discuss, and evaluate Contractor performance.
- Review Contractor incidents to insure they are properly investigated. Participate as necessary in the Contractor's investigations.
- Review status reports from the Contractor on closure of incident action items.
- Where there is a violation by the Contractor of Novel Geo-Environmental, Inc. procedures or policies, follow-up with Contractor to ensure necessary corrective action is taken to prevent recurrence.

Procurement Function

- Identify potential Contractors for site work.
- Coordinate with the Manager of Administrative Services, Safety Manager or designee that the Contractor pre-qualification information is obtained.
- Issue bid packages for Contractors and arrange for pre-bid meetings, when needed.
- Issue contracts
- Inform potential Contractors of ECMD requirements, if applicable

Contractor Roles and Responsibilities

- Identify specific individual to be the point of contact for all safety, health, and environment related issues
- Provide daily oversight to assure the contractor meets the applicable safety, health, and environment performance and compliance requirements

- Provide an on-site contractor safety specialist (if required by Novel Geo-Environmental, Inc.) to interface with Novel Geo-Environmental, Inc. representatives on safety, health, and environment expectations and issues
- Conduct periodic documented inspections to monitor contractor performance and to address deficiencies
- Maintain up-to-date ECMD records & information, if applicable

Contractor Pre-Qualification Process

Pre-qualification is designed to provide information about a contractor's ability to comply with general safety and health requirements. All contractors must be pre-qualified and placed on the "Approved Contractors List" for Novel Geo-Environmental, Inc. before being awarded any contract to provide services. See Waiver Process section of this program.

Performance Criteria for Contractors

Prior to being placed on the "Approved Contractors List" by Procurement, all contractors will be evaluated initially to determine their ability to meet requirements and work safely on-site. The evaluation will consist of a review of the following metrics:

- Number Fatalities
- OSHA Day Away, Restricted Duty, Transfers (DART)
- OSHA Recordable Incident Rate
- OSHA Investigations and/or Citations
- Experience Modification Rate (EMR)
- Safety Procedures
- Training Records

(MANUAL PROCESS)

Completing Contractor Management Questionnaire and Supporting Information

All potential contractors will complete the **Contractor Management Questionnaire** (Questionnaire) provided to them by Procurement or Manager of Administrative Services, Safety Manager or designee. The completed Questionnaire will be returned to Procurement or Manager of Administrative Services, Safety Manager or designee along with all required supporting information. Procurement will forward all of the potential contractor information to the Manager of Administrative Services, Safety Manager or designee for review.

Review of Contractor Management Questionnaire and Supporting Information

The Manager of Administrative Services, Safety Manager or designee will review all of the information submitted along with the completed Questionnaire. Potential contractors will be pre-qualified based on the following criteria:

- Number Fatalities – must be zero fatalities
- OSHA Days Away, Restricted Duty, Transfers (DART) - Must have OSHA Injury Incidence Rates equal to or less than the latest Industry Standards according to the applicable NAICS code
- OSHA Recordable Incident Rate - Must have OSHA Injury Incidence Rates equal to or less than the latest Industry Standards according to the applicable NAICS code
- OSHA Investigations and/or Citations – case-by-case basis review and determination
- Experience Modification Rate (EMR) - Must have a Workers' Compensation Insurance EMR or other rating of or equal to 1 or less or small business waiver or new business waiver
- Safety Procedures - Evaluation of Safety Procedures per the tasks performed; potential contractor must have all necessary Safety & Health procedures according to the Services Provided and Specialty Task Services section on the Questionnaire

- Training Records – must be able to provide upon request all necessary documentation, certifications, licenses, and other training documentation to demonstrate applicable requirements of training on contractor-specific safety procedures

Other Training Requirements

Potential contractors must submit satisfactory evidence that all workers have had an initial basic safety orientation of an OSHA 10-hour Outreach training or SafeLand or equivalent training as evaluated by Novel Geo-Environmental, Inc.

Approved or Not Approved

The Manager of Administrative Services, Safety Manager or designee will, upon completion of the review, make a determination as to the “Approved” or “Not Approved” status of the potential contractor. The review will be scored and recorded on the ***Contractor Safety Pre-Qualification Scorecard***.

If potential contractor is “Approved”, the Manager of Administrative Services, Safety Manager or designee will notify Procurement that the contractor can be placed onto the “Approved Contractor List”.

If potential contractor is “Not Approved”, the Manager of Administrative Services, Safety Manager or designee will notify the potential contractor of the deficiencies. The potential contractor will need to correct deficiencies and resubmit supporting information directly to the Safety Manager and safety staff for re-evaluation. This process will continue until the potential contractor is “Approved” or withdraws from the pre-qualification process at which time the Manager of Administrative Services, Safety Manager or designee will notify Procurement of “Approved” status or withdrawal from process.

Annual Auditing Process

All contractors on the “Approved Contractor List” will submit to the Manager of Administrative Services, Safety Manager or designee the following information for calendar year just completed by February 1st:

- Number Fatalities
- OSHA Day Away, Restricted Duty, Transfers (DART)
- OSHA Recordable Incident Rate
- OSHA Investigations and/or Citations
- Experience Modification Rate (EMR)
- Changes to the information indicated on the ***Contractor Management Questionnaire***

This information will be compared to and meet the following requirements:

- Number Fatalities – must be zero fatalities
- OSHA Day Away, Restricted Duty, Transfers (DART) - Must have OSHA Injury Incidence Rates equal to or less than the latest Industry Standards according to the applicable NAICS code
- OSHA Recordable Incident Rate - Must have OSHA Injury Incidence Rates equal to or less than the latest Industry Standards according to the applicable NAICS code
- OSHA Investigations and/or Citations – case-by-case basis review and determination
- Experience Modification Rate (EMR) - Must have a Workers' Compensation Insurance EMR or other rating of or equal to 1 or less or small business waiver or new business waiver

Safety Procedures Audit

The Manager of Administrative Services, Safety Manager or designee may conduct a Safety Procedures Audit on an annual basis. For a Safety Procedures Audit the contractor's safety procedures/manual will be reviewed based on the type of work the contractor is qualified to perform. This audit will affirm or not affirm whether the contractor continues to maintain the required elements in their SHE program.

Training Records Audit

The Manager of Administrative Services, Safety Manager or designee may conduct a Training Records Audit on an annual basis or as determined by Novel Geo-Environmental, Inc. to ensure contractor compliance with applicable requirements. This audit will confirm whether the contractor has implemented their safety procedures/program and have required documents on file, such as training records and certifications.

Upon review of the information received for the Annual Auditing Process, Safety Procedures Audit, and/or Training Records Audit, the Manager of Administrative Services, Safety Manager or designee will notify Procurement if potential contractor is "Approved"; the Manager of Administrative Services, Safety Manager or designee will notify Procurement to maintain the contractor on the "Approved Contractor List".

If the contractor is no longer an "Approved" contractor, the Manager of Administrative Services, Safety Manager or designee will notify Procurement. The contractor will be flagged as "Not Approved" on the "Approved Contractors List". The Manager of Administrative Services, Safety Manager or designee will also notify the contractor of the deficiencies. The contractor will need to correct deficiencies and submit supporting information directly to the Manager of Administrative Services, Safety Manager or designee for re-evaluation. This process will continue until the contractor is "Approved" at which time the Manager of Administrative Services, Safety Manager or designee will notify Procurement of "Approved" status.

(End - MANUAL PROCESS)

(Begin - ELECTRONIC PROCESS)

Electronic Contractor Management Database ECMD

ECMD is used by Novel Geo-Environmental, Inc. to evaluate and verify the pre-qualification information submitted by potential Contractors before being added to the "Approved Contractor List".

All potential Contractors are required to participate in ECMD and must acquire a passing grade/score to be considered a Contractor for Novel Geo-Environmental, Inc. The potential Contractor is responsible for all fees associated with the ECMD.

Notification of Required Participation in ECMD

Procurement will notify all potential Contractors of the requirement for registering and maintaining the ECMD. All potential Contractors will complete the registration process and information uploading to the ECMD and pay the associated costs of the ECMD.

The basic process of the ECMD that all potential Contractors will be involved with includes (it may not be exact):

- Complete the on-line ECMD registration process.
- Complete the required Questionnaires on the ECMD.
- Complete the Gap Analysis for safety procedures.
- Submit all necessary procedures for review by ECMD.
- Submit all necessary records such as business insurance, WC insurance, OSHA Injury Records, and EMR letter, and others as requested through the ECMD.

Review of Submitted Information to ECMD

The Manager of Administrative Services, Safety Manager or designee, along with the potential Contractor will be notified by the ECMD once the review by the ECMD is completed of all of the information submitted along with the completed Questionnaires. Potential Contractors will be pre-qualified based on the following criteria:

- Number Fatalities – must be zero fatalities.
- OSHA Day Away, Restricted Duty, Transfers (DART) - Must have OSHA Injury Incidence Rates equal to or less than the latest Industry Standards according to the applicable NAICS code.
- OSHA Recordable Incident Rate - Must have OSHA Injury Incidence Rates equal to or less than the latest Industry Standards according to the applicable NAICS code.

- OSHA Investigations and/or Citations - case-by-case review and determination.
- Experience Modification Rate (EMR) - Must have a Workers' Compensation Insurance EMR or other rating of or equal to 1 or less or small business waiver or new business waiver.
- Safety Procedures - Evaluation of Safety Procedures per the tasks performed; potential Contractor must have all necessary Safety & Health procedures according to the Services Provided and Specialty Task Services section on the Questionnaire.
- Training Records – must be able to provide upon request all necessary documentation, certifications, licenses, and other training documentation to demonstrate applicable requirements of training on Contractor-specific safety procedures.

Other Training Requirements

Potential Contractors must submit to Manager of Administrative Services, Safety Manager or designee or ECMD satisfactory evidence that all workers have had an initial basic safety orientation of an OSHA 10-hour Outreach training or SafeLand or equivalent training as evaluated by the Novel Geo-Environmental, Inc.

Approved or Not Approved

The ECMD will, upon completion of the review, make a determination and assign a grade/score to the potential Contractor. This grade/score will determine as to the "Approved" or "Not Approved" status of the potential Contractor.

If potential Contractor is "Approved", the ECMD will notify Procurement and the Contractor can be placed onto the "Approved Contractor List".

If potential Contractor receives a grade/score that renders the potential Contractor as "Not Approved", the ECMD will notify the potential Contractor of the deficiencies. The potential Contractor will need to correct deficiencies and resubmit supporting information directly to the ECMD for re-evaluation. This process will continue until the potential Contractor receives an acceptable grade/score and is "Approved" or withdraws from the pre-qualification process at which time the ECMD will notify the Manager of Administrative Services, Safety Manager or designee and/or Procurement of the "Approved" status or the withdrawal from process.

Pre-qualification Criteria

The potential Contractor:

- Must answer "Yes" to all questions in the following sections of the ECMD:
 - Safety & Health Policy
 - Discipline Process
 - Safety Communication
 - Hazard Identification
 - Inspection/Audits
 - Incident Investigations
 - Preventive Maintenance
- Must have all necessary Safety & Health procedures according to the Services Provided and Specialty Task Services section on the ECMD Questionnaire.
- Must have a Workers' Compensation Insurance EMR or other rating of or equal to 1 or less or small business waiver or new business waiver.
- Must have OSHA Injury Incidence Rates equal to or less than the latest Industry Standards according to the applicable NAICS code.
- Must submit a copy of safety procedures indicated in the Company-specific Procedures & Programs for ECMD review and verification.
- Must submit satisfactory evidence that all workers have had a basic safety orientation of an OSHA 10-hour Outreach training or SafeLand or equivalent training as evaluated by the Novel Geo-Environmental, Inc.

Annual Auditing Process

All Contractors on the “Approved List” will maintain the required information in the ECMD for the calendar year just completed by (deadline). Such information includes, yet is not limited to:

- Number Fatalities
- OSHA Day Away, Restricted Duty, Transfers (DART)
- OSHA Recordable Incident Rate
- OSHA Investigations and/or Citations
- Experience Modification Rate (EMR)
- Changes to the information indicated on the required Questionnaires.

This information will be compared to and meet the following requirements:

- Number Fatalities – must be zero fatalities.
- OSHA Day Away, Restricted Duty, Transfers (DART) - Must have OSHA Injury Incidence Rates equal to or less than the latest Industry Standards according to the applicable NAICS code.
- OSHA Recordable Incident Rate - Must have OSHA Injury Incidence Rates equal to or less than the latest Industry Standards according to the applicable NAICS code.
- OSHA Investigations and/or Citations - case-by-case review and determination.
- Experience Modification Rate (EMR) - Must have a Workers' Compensation Insurance EMR or other rating of or equal to 1 or less or small business waiver or new business waiver.

Safety Procedures Audit

The Manager of Administrative Services, Safety Manager or designee may conduct a manual Safety Procedures Audit on an annual basis. For a manual Safety Procedures Audit the Contractor's safety procedures/manual will be reviewed based on the type of work the Contractor is qualified to perform. This audit will affirm or not affirm whether the Contractor continues to maintain the required elements in their SHE program.

Training Records Audit

The Manager of Administrative Services, Safety Manager or designee may conduct a Training Records Audit on an annual basis or as determined by Novel Geo-Environmental, Inc. to ensure compliance with Novel Geo-Environmental, Inc. requirements. This audit will confirm whether the Contractor has implemented their safety procedures/program and have required documents on file, such as training records and certifications.

Upon review of the information received for the Annual Auditing Process, Safety Procedures Audit, and/or Training Records Audit, the Manager of Administrative Services, Safety Manager or designee will notify Procurement if potential Contractor is “Approved”; the Manager of Administrative Services, Safety Manager or designee will notify Procurement to maintain the Contractor on the “Approved Contractor List”.

If the Contractor is no longer an “Approved” Contractor, the Manager of Administrative Services, Safety Manager or designee will notify Procurement. The Contractor will be flagged as “Not Approved” on the “Approved Contractors List”. The Manager of Administrative Services, Safety Manager or designee will also notify the Contractor of the deficiencies. The Contractor will need to correct deficiencies and submit supporting information directly to the Manager of Administrative Services, Safety Manager or designee for re-evaluation. This process will continue until the Contractor is “Approved” at which time the Manager of Administrative Services, Safety Manager or designee will notify Procurement of “Approved” status.

(End - ELECTRONIC PROCESS)

Waiver Process

In some cases, it may be necessary to select the contractor based on the ability to meet project requirements. A waiver may be requested when contractor services are needed in short notice which does not permit a complete pre-qualification.

The Manager of Administrative Services, Safety Manager or designee will perform a review of all required information for a manual review. The Manager of Administrative Services, Safety Manager or designee will make a recommendation as to short-term assistance or additional resources needed by the contractor to perform work for Novel Geo-Environmental, Inc. (executive/manager/committee) will approve/disapprove or recommend revisions to the short-term plan. Ultimately, the (executive/manager/committee) will approve and document the waiver. Approved waivers are maintained on file by the Manager of Administrative Services, Safety Manager or designee.

Annual Contractor Performance Reviews

Novel Geo-Environmental, Inc. will conduct an Annual Contractor Performance Review on all approved contractors used in the previous calendar year. The annual performance reviews will be completed by the Manager of Administrative Services, Safety Manager or designee and reviewed with the contractor.

The following topics will also be discussed and addressed:

- Overall safety, health and environment performance
- ECMD grade/score, if applicable
- Incidents Summary
- Audit and Inspection results
- Opportunities for improvement

Probation

A Contractor may be placed on “probation” for failure to meet Novel Geo-Environmental, Inc. performance standards and requirements and removed from the Approved Contractors List.

The contractor will be told specifically the reasons for being placed on Probation: Such reasons include, yet are not limited to:

- Poor evaluation results on the Annual Contractor Performance Review
- Failure to follow applicable safety, health and environment regulations
- Failure to follow Novel Geo-Environmental, Inc. procedures
- Negative OSHA Inspection
- Significant injury event
- Failing to maintain required insurance
- Failing to maintain ECMD.
- Other reasons as determined by Novel Geo-Environmental, Inc.

The contractor will develop a Plan of Action to include:

- Corrective actions to address the identified causes
- Assigning of responsibilities and completion dates for corrective actions
- Tracking to completion of the Corrective Actions

The contractor will submit monthly Action Plan status reports to the Manager of Administrative Services, Safety Manager or designee. At the end of three months, the Manager of Administrative Services, Safety Manager or designee will evaluate the contractor's progress and ability to meet the Novel Geo-Environmental, Inc. performance standards and requirements.

The Manager of Administrative Services, Safety Manager or designee will make the recommendation to the (executive/manager/committee) to release the contractor from Probation. The (executive/manager/committee) will confirm and give permission for the contractor to be added back to the “Approved Contractors List” or be dismissed from the list.

Contractor Dismissal

Contractors may be dismissed and removed from the “Approved Contractors List” for the following offenses:

- Poor evaluation results on the Annual Contractor Performance Review without improvements
- Repeated failure to follow applicable safety, health and environment regulations.
- Repeated failure to follow Novel Geo-Environmental, Inc. procedures.
- Negative OSHA Inspection
- Repeated or multiple significant injury events
- Repeated failing to maintain required insurance.
- Repeated failing to maintain ECMD.
- Other reasons as determined by management of Novel Geo-Environmental, Inc.

Re-instatement Criteria

Contractors that have been dismissed for failure to meet the Novel Geo-Environmental, Inc. performance standards and requirements will be informed of the specific deficiencies by the Manager of Administrative Services, Safety Manager or designee. The Contractor may apply for re-instatement by meeting the following requirements:

- The Contractor will not perform work for Novel Geo-Environmental, Inc. for a time period as specified on a case by case basis by the (executive/manager/committee) before applying for reinstatement to allow sufficient time to correct deficiencies. The minimum time period will be established based on the severity of the violation(s).
- The contractor will provide a written document to the (executive/manager/committee) that demonstrates how identified deficiencies have been corrected.
- The Manager of Administrative Services, Safety Manager or designee may complete an audit of the contractor’s safety and health program at other sites where the contractor is performing work and provide the results to the (executive/manager/committee).
- The Contractor will have a written approval by the Manager of Administrative Services, Safety Manager or designee before applying for reinstatement.

Approved Contractor Requirements

Once the contractor is placed on Approved Contractors List, the contractor has specific duties as required by Novel Geo-Environmental, Inc. The required duties do not, in any way, supersede or interfere with federal, state, or local laws and regulations. These specific duties of the contractor are:

- Contractor will follow all Novel Geo-Environmental, Inc. procedures as described in the Contractor Safety Program
- Contractor will have and follow their specific Safety Procedures
- Contractor is responsible to follow Novel Geo-Environmental, Inc. Site Emergency Action Plan/Emergency Response Plan
- Contractor is responsible to notify Novel Geo-Environmental, Inc. of Contractor-specific Emergency Action Plan/Emergency Response Plan
- Contractor is responsible for training their own employees including all required safety training as well as job-specific training
- Contractor is responsible for maintaining training up-to-date and verifiable by Novel Geo-Environmental, Inc.
- Contractor is responsible to provide all necessary tools, equipment, PPE, and training to perform the tasks for which they were hired
- Contractor will review the Site Owner’s or Site Operator’s safety requirements, rules, and procedures providing documentation upon request to the Novel Geo-Environmental, Inc.
- Contractor will comply with the site Owner’s or Site Operator’s safety requirements, rules, and procedures.

- Contractor employees will participate in tailgate meetings, pre-job meetings, kick-off meetings, inspections, audits, and similar events as requested by Novel Geo-Environmental, Inc.
- Contractor employees will conduct JSA's at the beginning of each shift or workday or for each task. The JSA's will be reviewed with all Contractor employees and those affected by the activities of the Contractor.

Training

Individuals assigned to the roles identified above will be trained on the applicable elements of the program and on their specific roles and responsibilities.

Retraining

Retraining is required when there are significant changes to the program or the responsibilities for the position.

Associated Forms

1. Contractor Management Questionnaire
2. Contractor Safety Pre-Qualification Scorecard
3. Operator (O&G Industry) Task List Questionnaire

Novel Geo-Environmental, Inc.

Contractor Management Questionnaire

(Reference API RP-76, Appendix B)

Date:
Name of individual that completed this questionnaire:
Name of individual to contact regarding issues with this questionnaire:
Telephone number of individual to contact regarding issues with this questionnaire:
24-hour Emergency Phone Number:

Company Information

Company Name:	
Mailing Address:	
Mailing Address:	
City:	
State:	
Zip/Postal Code:	
Phone:	
Fax:	
Company Contact:	
Email 1:	
Website:	
Parent company's name:	
Subsidiary company's name(s):	
Local Division, Branch, District:	
Parent company's Federal Tax ID#:	
Subsidiary companies' Federal Tax ID#:	
Year the company was established:	
List other company names by which the company operates:	

NAICS Code(s)

NAICS code(s) - Primary:	
NAICS code(s) - Secondary:	
NAICS code(s) - Secondary:	

Injury Statistics

<i>(for current year and three previous years)</i>	Current	Year 1	Year 2	Year 3
Workers' Compensation Insurance EMR or other rating (NCCI)				
Annual average number of employees				
Total hours worked by all employees				
Total number of OSHA Recordable cases				
Total number of Deaths				
Total number of cases with Days Away from work				
Total number of cases with job Transfer or Restriction				
Total number of Other Recordable cases				
Total number of days away from work				
OSHA Injury Incident Rates				
Incident Rate (TRIR) for all OSHA Recordable cases				
Incident Rate for cases with Days Away from work, Transfer or Restriction (DART)				
Incident Rate for Other Recordable cases				
OSHA Citations or fines				
Citations or fines from other regulatory agencies (State or Federal)				
Total number of man-hours worked				

(Incident Rate = (number of injuries/total hours worked) X 200,000)

Safety & Health Policy

	YES	NO	N/A
Does the Company have a Safety & Health Policy?			
Are individual safety responsibilities clearly defined within the Company?			
Does your Company have a dedicated full-time person responsible for Safety & Health?			
Does this person have a professional designation such as CSP, CSP, OHST, Other?			
Do job descriptions for Supervisory and Management personnel include safety and health responsibilities?			

Disciplinary Process

	YES	NO	N/A
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Does the Company have a Disciplinary process to hold individuals accountable for Safety & Health responsibilities?			

Check (X) all categories that describe the services your company provides:

Bit & Tool Sales/Rental/Repair		Mud Logging	
Building/Janitorial Service		Non-destructive Testing	
Casing Crew		Painting/Blasting/Coating	
Catering		Personnel Services	
Cathodic Protection		Pipeline Construction	
Cementing		Production Chemicals	
Coiled Tubing/Snubbing		Production Services	
Communications/Scada		Rig Rental Tools/Fishing	
Completion		Rod Pumps/Rods	
Compression Rental & Maintenance		Roustabouts/Contract Labor	
Corrosion Control		Safety, Health, & Environmental Consulting & Training	
Crane Services		Scaffolding	
Directional Drilling/LWD/MWD		Security	
Diving/ROV		Seismic/Geophysical	
Drilling Fluids		Survey	
Drilling Contractor		Tank/Vessel Cleaning	
Drilling Services		Transportation – Aircraft	
Electrical Contractor		Transportation – Land	
Electrical Submersible Pumps		Transportation – Marine	
Electric Supplies		Tubular Inspection & Coatings	
Engineering Services		Transportation – Related	
Environmental Services		Waste Disposal	
Fabricator		Valve Reconditioning/Repair	
Gas Processing Chemicals		Wellheads	
General Contractor/Construction		Welding Contractor	
General Oil Field Services		Well Service Contractor	
Heavy Equipment (Earthmoving), etc.		Well Logging/Wireline	
Hot Oil Services		Workover Contractor	
Instrumentation/Controls		Well Stimulation/Acidizing	
Laboratory Services/Core Analysis		Other:	
Logistic Services		Other:	
Lubricants/Fuel		Other:	
Machine Shop Services		Other	

Check (X) all specialty task services your company provides:

Asbestos Abatement	
Confined Space Entry	
Crane Operations	
Emergency Response	
Gas Detection Systems/Repair	
Hot Tapping	
Hot Work	
Lead Abatement	
Naturally Occurring Radioactive Material (NORM)	
Work in Hydrogen Sulfide (H2S) Areas	
Other:	

Other:	
Other:	
Other:	

Company-specific Safety Procedures & Programs

Place (X) indicating the specific Safety Procedures & Programs the company has:	YES	NO	N/A
Basic Safety Orientation – OSHA 10hr Outreach or SafeLand or Equivalent?			
Abrasive & Hydro Blasting			
Access to Exposure and Medical Records			
Aerial Lifts			
Asbestos Awareness & Exposure Control			
Behavior-based Safety Program			
Benzene Awareness & Exposure Control			
Bloodborne Pathogens Program			
Confined Space Entry			
Compressed Gas Cylinders Storage & Use			
Control of Hazardous Energy (Lockout/Tagout)			
Crane Operation			
Driving Safety (Company Vehicles)			
Drug & Alcohol Policy			
Electrical Safety			
Emergency Action Plan			
Emergency Response Plan (HAZWOPER)			
Explosives			
Fall Protection			
Fatigue Management			
Fire Prevention Plan & Fire Extinguishers			
Forklift Operation			
Hand and/or Power Tools			
Harassment/Discrimination/Workplace Violence Training			
Hazard Communication			
HM 126 (DOT) — Transportation (HAZMAT)			
Hot Work (Welding, Burning, Cutting, Grinding, etc.)			
Housekeeping and General Waste Management			
Hydrogen Sulfide Basic Safety Awareness			
Hydrogen Sulfide – Operating in an H ₂ S environment			
Incident Reporting and Investigation			
Inspections by Government Agencies (OSHA, EPA DEP, other)			
Job Safety Analysis (JSA)			
Ladder Safety			
Lead Awareness & Exposure Control			
Lone Worker Policy			
Management of Change			
Manual Material Handling (Lifting Techniques)			
Mechanical Materials Handling - mobile cranes, rigging, signal person			
Methane/Natural Gas/Condensate/Natural Gas Liquids Awareness			
Mobile Equipment (Earthmoving) Operation & Inspections			
Naturally Occurring Radioactive Materials (NORM)			
Personal Protective Equipment (PPE)			
Process Safety Management			

Radiation Basic Safety Awareness			
Scaffolding			
Short-Service Employee Program			
Site Inspections by Company On-site Representative			
Place (X) indicating the specific Safety Procedures & Programs the company has (continued):	YES	NO	N/A
Site Security Plan			
Spill Prevention & Response			
Stop Unsafe Work Policy/Program			
Supervisor Safety Training			
Trenching & Excavation			
Well Control			
Other:			
Other:			
Other:			
Other:			

Safety Communication

	YES	NO	N/A
Do the Supervisors or Managers conduct tailgate/toolbox meetings? At what frequency? _____			
Are site safety meetings conducted? How often? _____			

Hazard Identification

	YES	NO	N/A
Are Job Safety Analysis (JSA) conducted by the Supervisor or Manager? When? _____			
How is it communicated to every employee?			
Is a program in place for the recognition, reporting, and correction of workplace hazards?			
Does the program include a follow-up system for the correction of unsafe conditions?			
Are workers encouraged to intervene when unsafe conditions are observed? (Stop Work Program)			

Inspections/Audits

	YES	NO	N/A
Do Supervisors or Managers conduct periodic safety & health inspections/audits of the work-site? Frequency? _____			
What elements are inspected/audited?			
• Housekeeping			
• Proper use of PPE			
• Compliance with OSHA regulations			
• Correct use of tools			
• Proper use of equipment			
• Other:			
• Other:			

Incident Investigations

	YES	NO	N/A
Is there a process for the prompt reporting and the investigation of workplace injuries?			
Is there a process for the prompt reporting and the investigation of other incidents such as near-misses or asset damage?			
Does the investigation include determining causes, developing and implementing corrective actions, and tracking the corrective actions to completion?			
Does the process include notifying the Owner company?			

Preventive Maintenance

	YES	NO	N/A
Does the Company have a preventative maintenance program for company owned tools/equipment/machinery?			
Are the preventative maintenance and equipment inspection records maintained on file?			
Are pre-use inspections conducted on operating equipment (i.e. cranes, forklifts, extensible or articulated boom platforms, etc.)?			
Are the applicable inspection and maintenance certification records for operating equipment maintained on file?			
Does the Company maintain equipment, machinery, and tools in safe working condition and up-to-date with certification inspections per the manufacturer's requirements and/or industry standards?			

Training

	YES	NO	N/A
Is safety-related training documented? How? _____			
Is annual safety training conducted?			
Are workers trained, qualified, and/or certified to operate equipment as applicable (cranes, forklifts, extensible or articulated boom platforms, etc.)?			
Is documentation readily available to review for workers trained, qualified, and/or certified to operate equipment as applicable (cranes, forklifts, extensible or articulated boom platforms, etc.)?			
Is there a documented and specific process for new hire (short-service employee) training?			

Please provide the following information for pre-qualification:

- a. This completed Contractor Management Questionnaire.
- b. Prior three calendar years of OSHA 300A Annual Summaries.
- c. Copy of any OSHA Investigations and/or Citations from the previous 5 calendar years.
- d. Current policy period and previous three policy periods EMR.
- e. Copy of current safety procedures/manual.
- f. Verification of Basic Safety Orientation requirement, if specifically requested.
- g. Training records showing workers are trained, qualified, and/or certified to operate equipment (cranes, forklifts, extensible or articulated boom platforms, etc.), as applicable.

The above requested information is to be provided electronically to the Safety Manager or Procurement at gaiken@ngeconsulting.com. Questions: call or email 412-722-1970 or gaiken@ngeconsulting.com.

I certify that to the best of my knowledge all information represented on this Questionnaire is complete, accurate, and correct.

Signature: _____ Date: _____

Title: _____

Novel Geo-Environmental, Inc.

Operator Task List Questionnaire

NAICS Code(s)

NAICS code(s) - Primary:	
NAICS code(s) - Secondary:	
NAICS code(s) - Secondary:	

Check (X) all categories that describe the services your company provides:

Administration (HR, Procurement/Purchasing, Accounting,	
Safety & Security	
Environmental	
Engineering	
Land Management/Administration (Well-sites, Production, Pipe R/W)	
Construction Management (Well pad, drilling site, pipeline, Production)	
Drilling Management	
Completions Management	
Production Management	
Contract Administration	
Well Tenders/Pumpers/Lease Operators	
Compressor Station Operators	
Pipeline Operator	

Check (X) all Tasks performed by employees:

Operate tools (hand and/or power)	
Operate equipment (forklift, aerial lift, crane, earthmoving equipment)	
Operate company vehicle	

Percentage of employees that are located in each work environment:

Office	
Warehouse	
Storage yard	
Field	

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Hot Work Safety			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-038	Pages	5	Rev. 2.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

The purpose of the Novel Geo-Environmental, Inc. welding & cutting program is to establish the minimum requirements for safely conducting hot work in areas with flammable vapors present or have the potential for flammable vapors to be present and in areas that are classified as Class I, Division 1 or Division 2.

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. conducting hot work as defined in this procedure.

Definitions

Hot work - tasks, operations, processes involving welding, cutting, burning brazing, grinding, wire wheel brushes and other spark or heat producing activities including radiant heat.

Competent Person - one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them. For the purpose of this procedure, a Competent Person must be designated by the Manager and have sufficient knowledge and experience to be responsible for the operation, inspection, and maintenance of the compressed gas cylinders and hot work equipment.

Hot Work Area - the area at a 35-ft. radius for 360 degrees from where the hot work will be conducted.

Safe Hot Work Area – no flammable gases/vapors, combustibles within 35-ft of Hot Work Area, proper ventilation, and fire extinguisher readily available. Routine hot work operations will be allowed without the requirement of a permit only in areas that have been designated as a SAFE HOT WORK AREA.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Prohibited Work Environments

1. Hot work will not be conducted in areas meeting or exceeding the 10% Lower Explosive Limit (LEL).
2. Hot work will not be conducted on a tank, vessel, drum, or other container that has contained a flammable substance unless the atmosphere has been made inert and verified by air testing that it has been made inert.

Hazard Assessment

A Hazard Assessment will be conducted for every hot work operation each day or each shift to determine the hazards or potential hazards associated with the Hot Work operations in a specific area. The Hazard Assessment will determine the following:

1. Does the Hot Work Area have flammable vapors present or have the potential for flammable vapors to be present?
2. Are hot work operations being performed in an area classified as Class I, Division 1 or Division 2?
3. Does the Site Owner or Management specifically require the use of a Hot Work Permit for hot work operations regardless of the presence of flammable or combustible vapors or location classification?

Based upon the Hazard Assessment, if any one of the items listed above is affirmative, a Hot Work Permit will be utilized.

The Hazard Assessment will be documented using Section A: Work Request and Section B: Hot Work Hazard Assessment of *Appendix A – Hot Work Assessment/Permit*.

Hot Work Permit

- A Hot Work Permit will be obtained, when required, every day, every shift, and for every hot work operation.
- The Supervisor will complete the Hot Work Permit, Sections C, D, E, & F in *Appendix A*, ensuring all requirements of this procedure are followed.
- A hard copy of the Hot Work Permit will be conspicuously displayed on the welding or burning equipment or in the immediate hot work area after the permit has been completed including having appropriate signatures and approvals.
- When the hot work has been completed, the Hot Work Permit will be returned to the Supervisor to file and maintain for one year.

Fire Prevention

- The Hot Work Area will be inspected for flammables, combustibles, and general housekeeping.
- Barriers with appropriate signage will be used, as necessary, for protection to keep personnel from walking under or through Hot Work Area during hot work operations.
- Remove all combustible and flammable materials from the Hot Work Area
- Cover all combustible and flammable materials that cannot be removed or relocated from the Hot Work Area with flame-resistant non-asbestos covering or protect with flame-resistant screens.
- Equipment, pipes, vessels and similar items in the Hot Work Area will be purged, cleaned, blanked, blown down, and/or made inert.
- The Hot Work Area will be swept of dust or wetted down, as necessary.
- Cover floor openings, open ceilings, and wall openings within the Hot Work Area will be covered to contain sparks and hot slag.
- Fire extinguishing equipment appropriate for the type of possible fires will be readily available, have current inspection, and be in operable condition at the Hot Work Area. For most hot work this equipment will be, at least, one 20-pound multi-purpose (Class ABC) dry-chemical fire extinguisher.

- Fire Watch will be provided during hot work operations and for 30-minutes after the hot work operations are completed. The person with Fire Watch duties will be trained on the proper operation of the fire extinguisher.
- Lockout/Tagout will be performed on all equipment in the Hot Work Area per the Control of Hazardous Energy (LOTO) procedure, as necessary.
- All near-by personnel & equipment will be protected against heat, sparks, and slag using fire-resistant screens, non-asbestos fire-proof blankets or similar protective items.
- All hot work equipment will be in good operating condition, safe to use, & approved for the location.
- Mechanical ventilation will be used, as necessary, to remove flammable or combustible vapors from the Hot Work Area.
- Workers involved in the hot work operations will be trained prior to hot work operations in this Hot Work Procedure.
- The area in and around the Hot Work Area including equipment, tanks, pipe, containers, and similar items will be initially tested prior to any hot work being conducted. It will be tested for flammable or combustible vapors at or more than 10% Lower Explosive Limit (LEL). The initial testing results will be recorded by the Supervisor in Section C of on the Hot Work Assessment/Permit.
- The area in and around the Hot Work Area will be continually monitored by the Fire Watch for flammable or combustible at or more than 10% Lower Explosive Limit (LEL). Readings from the continuous monitoring will be recorded by the Fire Watch on the Hot Work Permit hourly until hot work operations are completed, and the permit has been cancelled.

Fire Watch

- Fire Watch will be provided during hot work operations and for 30-minutes after the hot work operations are completed.
- Duties of the Fire Watch include watching for sparks, fires, hot spots, smoke, smoldering, etc. then extinguish these areas before they increase or get out of control.
- The employee(s) assigned as Fire Watch cannot perform tasks that will take them from the Hot Work Area.
- The employee(s) assigned as Fire Watch will be trained on the use of a portable fire extinguisher and willing and able to use the portable fire extinguisher in case of an incipient (beginning) stage fire and on the sounding of alarm and initiating the Emergency Action Plan for Fires.

Personal Protective Equipment

- All personnel engaged involved in hot work operations will wear all necessary personal protective equipment (PPE) in accordance with the Personal Protective Equipment (PPE) Procedure.
- Respirator protection is required for hot work on lead-based metals, cadmium, mercury, beryllium, or other exotic metals, paints, or coatings.

Compressed Gas Cylinders

- Keep all oxygen, acetylene, and other compressed gas bottles chained in an upright position in assigned storage areas.
- Whenever compressed gases are used, flashback arrestors/protectors must be provided on both the torch and gauge ends of the hose to prevent reverse flow of the gas and possible ignition.
- A Competent Person is responsible for the compressed gas cylinders and associated hot work equipment.
- Oxygen cylinders will be stored at least twenty feet from any flammable gases or petroleum products. Or a barrier at least five feet high with a fire rating of at least 30 minutes will separate the oxygen from the flammable gases.
- Compressed gas cylinders will be stored, moved, and transported in accordance with Compressed Gas Cylinders Procedure.

Equipment Inspections

- A Competent Person will be specifically designated and is responsible for inspecting the associated hot work equipment to include hoses and torches, or cables and electrode holder before they are used.
- Unsafe equipment will be removed from service, tagged out of service, and reported the Manager. Repairs will be conducted by qualified personnel only.

Confined Spaces

- Confined space entry procedures will be followed when hot work is performed in a confined space.

First-aid Equipment

- First-aid equipment will be readily available for the duration of the Hot Work Permit.

Hot Work Assessment/Permit Completion Procedure

1. Supervisor to acquire the Hot Work Assessment/Permit form (Appendix A).
2. Supervisor to complete the Section A: Work Request and Section B: Hot Work Hazard Assessment.

If any answers in Section B: Hot Work Hazard Assessment are "Yes", a Hot Work Permit is required, proceed to Step 3. Otherwise, a Hot Work Permit is not required, proceed to Steps 8 & 9.

3. Supervisor, Fire Watch, and, at least, one Employee involved in Hot Work will complete "Section C: Fire Prevention". This involves performing the listed tasks as necessary and answering each question about the tasks completion and conducting the Initial Air Testing.
4. Prior to hot work operations beginning, all employees involved in the hot work operations including the Supervisor, Fire Watch, and involved Employees will print, sign, and note time the permit was issued in Section E: Required Signatures to Authorize Hot Work authorizing the hot work to begin.
5. The Fire Watch will recheck the air in the Hot Work Area after Initial Test just prior to the start of hot work recording the results in "Section D: Atmospheric Monitoring".
6. Fire Watch will conduct continuous air monitoring documenting the results every hour on the Hot Work Permit in "Section D: Atmospheric Monitoring" for the duration of the Hot Work Permit.
7. Once the hot work operations are completed, the Hot Work Permit will be closed. The Supervisor will indicate if the hot work is Complete or incomplete and if the area has been cleaned up. All employees involved in the hot work operations including the Supervisor, Fire Watch, and involved Employees will print, sign, and note the time the permit was closed in "Section F: Required Signatures to Close the Hot Work" authorizing the hot work permit to be closed.

If a Hot Work Permit is not required, continue with Step 8 & 9:

8. Employees involved in the hot work operations will ensure fire extinguishing equipment appropriate for the type of possible fires is readily available, have current inspections, and be in operable condition is in close proximity to the hot work operations. For most hot work this equipment will be, at least, one 20-pound multi-purpose (Class ABC) dry-chemical fire extinguisher.
9. Hot work operations not requiring a Hot Work Permit may continue until completed.

Training

- Employees involved in hot work will be trained on this Hot Work Procedure prior to the employees being assigned duties, before there is a change in assigned duties, whenever there is a change in the Hot Work Permit, and whenever a Supervisor of Novel Geo-Environmental, Inc. has reason to

believe either that there are deviations from the procedures or that there are inadequacies in the employee's knowledge or use of this procedure.

- Welders, Helpers, and Supervisors will be trained on the safe use and operation of hot work equipment, and associated processes.
- Employees operating gas welding and electric or arc welding equipment/processes will be properly instructed and qualified to use such equipment.
- The employee(s) assigned as Fire Watch will be trained on the use of a portable fire extinguisher and willing and able to use the portable fire extinguisher in case of an incipient (beginning) stage fire.
- The employee(s) assigned as Fire Watch will be trained on the sounding of alarm and initiating the Emergency Action Plan for Fires.
- The training will establish employee proficiency and understanding. The Instructor will certify that employee training has been accomplished. The certification will contain each employee's name and dates of training.

Novel Geo-Environmental, Inc.

Appendix A – Hot Work Assessment/Permit

Section A: Work Request	
Requestor:	Date of Request:
Site Name/Location of Hot Work:	
Description of Hot Work:	
Type of Hot Work and Heat-producing Device:	

Section B: Hot Work Hazard Assessment	Yes	No
Does the Hot Work Area have flammable vapors present or have the potential for flammable vapors to be present?		
Are hot work operations being performed in an area classified as Class I, Division 1 or Division 2?		
Does the Site Owner or Management specifically require the use of a Hot Work Permit for hot work operations regardless of the presence of flammable or combustible vapors or location classification?		

If any answer above is “Yes”, a Hot Work Permit is required!

Otherwise, hot work operations can be conducted without a Hot Work Permit.

HOT WORK PERMIT

Section C: Fire Prevention	Yes	No	N/A
Has the Hot Work Area been inspected for flammables, combustibles, and general housekeeping?			
Is the Hot Work Area barricaded or secured to restrict access, if necessary?			
Have all flammable & combustible materials been removed from the Hot Work Area?			
Have all flammable & combustible materials not removed from the Hot Work Area been protected with flame-proof covers, shields, or screens?			
Has equipment/pipes, vessels been purged, cleaned, blanked, blown-down, or made inert?			
Has the Hot Work Area been swept or wetted down, as necessary?			
Have floor openings, open ceilings, and wall openings within the Hot Work Area been covered to contain sparks and hot slag?			
Is fire extinguishing equipment readily available, have current inspection, and in operable condition?			
Is a Fire Watch provided during and for 30 minutes after hot work operations?			
Is the Fire Watch trained in the use of fire extinguishment equipment?			
Has Lockout/Tagout been performed on all necessary equipment?			
Are near-by personnel & equipment protected against heat, sparks, and slag”			
Is the hot work equipment in good operating condition, safe to use, & approved for location?			
Is mechanical ventilation needed?			
Are all involved workers trained in this Hot Work Procedure?			
Has equipment, tanks, pipe, containers, and similar items been air tested for combustible, flammable, or otherwise hazardous atmosphere? (record Initial Air Testing Results below)			
Type of fire extinguishing equipment used by Fire Watch:			
Type of air monitor:		Calibration Date:	
Initial Air Testing Results	LEL (0%) Initial Reading:	Oxygen (19.5% - 23.5%) Initial Reading:	

Section D: Atmospheric Monitoring						
Recheck after Initial Test, just prior to the start of hot work.	Time AM/PM	Oxygen (19.5- 23.5%)	LEL (0%)	H2S (<10 ppm)	CO (<35 ppm)	Initials
Use the table on the back of this form to record hourly monitoring results						

Novel Geo-Environmental, Inc.

	Work will <u>stop immediately</u> if levels are detected above the listed limits!
--	---

Section D: Atmospheric Monitoring (cont.)

	Time AM/PM	Oxygen (19.5- 23.5%)	LEL (0%)	H2S (<10 ppm)	CO (<35 ppm)	Initials
Document air monitoring results hourly						
Work will <u>stop immediately</u> if levels are detected above the listed limits!						

Section E: Required Signatures to Authorize Hot Work Permit

Time Authorized:	(Expires maximum of 12 hours later or end of shift)	
	Print	Sign
Supervisor		
Fire Watch		
Employee involved in Hot Work		
Employee involved in Hot Work		
Employee involved in Hot Work		
Employee involved in Hot Work		
Employee involved in Hot Work		

Section F: Required Signatures to Close the Hot Work Permit

Hot Work Status: ☐ Complete ☐ Incomplete		Clean-up Completed ☐ Yes ☐ No
Time Closed:		
	Print	Sign
Supervisor		
Fire Watch		
Employee involved in Hot Work		
Employee involved in Hot Work		
Employee involved in Hot Work		
Employee involved in Hot Work		
Employee involved in Hot Work		

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Lawn Maintenance Safety			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-039	Pages	4	Rev. 1.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for the safe conducting lawn maintenance work for Novel Geo-Environmental, Inc.

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. that participate in lawn maintenance work.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

General Safety Rules/Regulations for Performing Lawn Maintenance Work

- Train all employees on recognizing hazards associated with the tools/equipment they are operating and the work they are performing. Provide instruction and safety equipment, where applicable, to employees on methods to avoid injury to themselves or others resulting from the identified hazardous conditions.
- Identify and destroy harmful or noxious plants such as poison ivy.
- Protect against insects with insect repellants or protective clothing when needed.
- Rest periodically during strenuous jobs such as digging or sawing. Work-rest schedules vary according to temperature conditions, how strenuous the work is, and how acclimated the employee is to the work conditions.
- Make sure emergency telephone numbers are clearly posted at each worksite near landline phones or if not available, within each toolbox, each work vehicle, and each self-propelled piece of equipment.
- Know the location of the first aid kit and how to use the contents.
- Do not touch stray or dead animals. Contact an animal control agency for removal.
- Footwear should be construction boot type or safety boot. Boots should have a non-slip sole.
- Wear approved hardhats or bump caps when overhead hazard exists or when working under low branches.
- Wear a brimmed hat and comfortable clothing which provides sun protection.

- k. Wear sturdy, well-fitting gloves with grip.
- l. Use vibration-absorbing gloves while operating vibrating equipment.
- m. Wear suitable chemical-resistant rubber or plastic gloves when handling fertilizers and pesticides.
- n. Wear proper sunglasses when in direct sunlight for extended periods.
- o. Use appropriate eye protection with sideshields when operating mowers, weed trimmers or edgers, power tilling, breaking up rocks or concrete, using strong cleaning agents, spraying or dusting.
- p. Wear hearing protection (e.g., ear muffs, ear plugs) that provides appropriate protection from noise produced by equipment being used.
- q. Do not wear loose-fitting or torn clothing.
- r. Use tools only in the manner for which the tool was designed and intended. Don't use a screwdriver as a pry bar or a pipe wrench as a hammer.
- s. Make sure that tools are in good repair.
- t. Ensure that handles are tight and fastened securely.
- u. Repair or replace worn or damaged handles. Confirm that the handle surfaces are smooth and splinter-free.
- v. Keep cutting tools and equipment sharp.
- w. Protect the cutting edges of the tools and equipment. Store tools and equipment, especially if they are transported regularly from job to job, in a way that prevents the cutting edges from being dulled or damaged.
- x. Prior to placing tools in toolboxes, on hanging racks designed for tool/equipment storage, etc., remove all dirt and ensuring they are dry prior to placing them in storage as this will help prevent tools from rusting.
- y. Store tools and equipment in a safe, organized manner so that workers can access them easily and without injury. If stored in a truck, van, etc., they should be stored securely so they do not fall or shift position during transport.
- z. While tools are not in use, keep them within toolboxes, on storage racks, or within shelving units designed for such purposes. Do not leave tools on the floor within walk ways where they may create a potential trip/fall hazard.

Wood Chipper and Shredder Safety

- a. Before operating the equipment, read, understand, and follow the manufacturer's operating manual and safety decals on the equipment.
- b. Set up the machine on level, stable, dry ground.
- c. Chock/block wheels to ensure the machine will not move during operation.
- d. Before start-up, inspect machine to confirm there is no debris in the feed chute and that the machine is good operating condition. Check sharpness of cutting edges, tightness of bolts, condition and tension of belts.
- e. Barricade area around equipment to help reduce the probability that others working in the area near the machine will be hit with flying chips or debris.
- f. Wear appropriate PPE (Personal Protective Equipment) when operating machines. This should include, but not be limited to: eye, face, hearing, and head protection.
- g. Inspect all materials to be inserted into the chipper or shredder to confirm they do not include any debris such as wire, stones, glass bottles, etc. Do not feed raked-up material into the chipper or shredder machine. Raked materials may contain stones or debris that could damage the equipment or result in injuries to the worker.
- h. Feed material trunk or larger end first.
- i. Do not feed short pieces by hand; place shorter pieces on top of longer pieces when feeding the machine.
- j. Recheck the sharpness of the knives and anvil if it becomes more difficult to feed the machine.
- k. Do not force material into the feeder – injuries could occur if a worker slipped and fell toward the feeder.
- l. Shut down equipment and wait for all moving parts to come to a complete stop before removing clogged materials or making adjustments. To prevent accidental start-up or operation develop Lockout/Tagout program for machine. This program should include but not be limited to:

- Remove key (if key ignition on machine)
- Lock out controls
- Disengage clutch

Hedge Trimmer Safety

- a. Select a hedge trimmer appropriate for the work to be performed. Prior to purchasing a trimmer consider:
 1. The size and height of shrubs and hedges being trimmed
 2. Cutter bar length
 3. Single – or double-sided blades
 4. Weight and balance of the equipment
 5. Availability of electrical power in area where equipment will be use
- b. Before operating the equipment read, understand, and follow the manufacturer's operating manual and safety decals on the equipment.
- c. Do not use electrical tools in the rain, or on wet grass or shrubs.
- d. When using gasoline powered trimmers, inspect air filter and muffler screens to confirm they are clean and in good condition prior to use. For 2-cycle equipment follow equipment manufacturer recommended grade of fuel and gasoline/oil mixture.
- e. Maintain the blades sharp and ensure the cutter bar bolts are torqued correctly.
- f. Wear appropriate PPE (i.e. eye protection, hearing protection).
- g. Keep fingers and hands away from the blades.
- h. Check hedges for any foreign objects (e.g., metal posts, wires) before trimming.
- i. Keep the power cord of the electric hedge trimmer behind you to avoid snipping it or tripping. Leave enough slack in electrical cord to permit normal work motions.
- j. Use both hands to hold and guide the tool.

Grass Trimmer and Brush Cutter Safety Procedures

- a. Make sure you are trained in the proper use of this equipment. Rotating cutting tools can throw objects or cut the operator.
- b. Read, understand, and follow instructions in the manufacturer's operating manual.
- c. Hold the equipment firmly with both hands.
- d. Ensure that the cutting blades are adjusted properly and that all bolts and securing hardware are tight.
- e. Replace bent, warped, damaged or dull cutting apparatus.
- f. Check that the throttle springs back to idle position when the trigger on the machine is released.
- g. Select equipment with anti-vibration components.
- h. Keep people clear of the area from starting and operating areas.
- i. Check area for stones, glass, metal and debris.
- a. Refuel the engine before starting work while the engine is cool. If refueling is required before the job is completed, wait for the engine to cool if there is a likelihood that fuel can spill or splash on the hot engine.
 - j. Make sure that shields, guards, and other safety devices are in place and working properly.
 - k. Replace or tighten all loose or damaged parts or guards.
 - l. Make sure muffler is in good condition. In dry weather, use a fire-safe muffler.
 - m. Start the unit on firm ground or other solid surfaces in an open area.
 - n. Maintain good balance and secure footing when operating.
 - o. Adjust harness and hand grip so as to improve comfort and safety of machine operator.
 - p. Use unit at ground level only.
 - q. Shut off engine before cleaning out clogged or stuck cutter.
 - r. Stop the engine before putting cutter down.
 - s. Disconnect the spark plug when the equipment is left unattended.

- t. Secure cutter to prevent fuel spillage and damage during transport.
- u. DO NOT leave running tool unattended.
- v. DO NOT wear short pants or short sleeves.
- w. DO NOT use rigid blades in stony areas.
- x. DO NOT overreach. Keep proper footing and balance at all times.
- y. DO NOT repair damaged attachments – discard them.

Training

Employees will be trained initially prior to assignment to work related tasks and whenever a Manager of Novel Geo-Environmental, Inc. has reason to believe the employee needs to be retrained due to observed or perceived inadequacies in the employee's knowledge or use of this procedure.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	NFPA 70E - Electric Arc Safety			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-040	Pages	5	Rev. 2.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for the safe performance of tasks performed on or near exposed energized electrical equipment by employees of Novel Geo-Environmental, Inc. This program is to supplement the Electrical Safety Awareness program (NGE HSE 010 – Electrical Safety Awareness) with consensus standard specifics in an effort to minimize hazards created by working around and using electrical energy.

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. during operations that require tasks to be performed on or near exposed energized electrical equipment.

Definitions

Unqualified Employees - as it pertains to this Electrical Safety Procedure, an Unqualified Employee is one who does not meet the definition of Qualified Employee. These designated employees are not permitted to do any tasks the Qualified Employee is to perform unless the electric power has been disconnected and the equipment is in a safe work condition.

Qualified Employee - A worker is considered to be a qualified person when he or she has the training or experience to be familiar with the construction and operation of the equipment, along with any hazards that may be involved. A qualified person must have the knowledge to work safely on energized circuits, and to be completely familiar with precautionary techniques and safety equipment.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees of Novel Geo-Environmental, Inc. are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Designation

All employees of Novel Geo-Environmental, Inc. are, as it pertains to this Electrical Arc Safety procedure, designated as Unqualified Employees.

No Novel Geo-Environmental, Inc. employee will perform work, service or maintenance on electrical equipment unless the equipment is rendered in the electrically safe condition which is properly shut-down, de-energized, and secured per the Control of Hazardous Energy (Lockout/Tagout) Procedure.

Where the workers may be (in the future) required to work on live electrical or energized equipment, the elements in this procedure will be followed and expanded as necessary with workers receiving additional training as needed.

Host Employer

Novel Geo-Environmental, Inc. will advise the host employer of:

- Any unique hazards presented by the contract employer's work,
- Any unanticipated hazards found during work by Novel Geo-Environmental, Inc. that the host employer did not mention, and
- The measures Novel Geo-Environmental, Inc. took to correct any hazards reported by the host employer to eliminate or control identified hazards.

Procedure

General Safe Work Practices

1. Pre-job briefings will be conducted between all participating Novel Geo-Environmental, Inc. employees reviewing the specific hazards of the job, work procedures, energy control sources, and required PPE.
2. All electrical parts and circuits are considered live (energized) until proven otherwise by testing instruments.
3. Installation of electrical and electronic equipment on live electrical or energized equipment will be performed by a Qualified Employee or approved, certified, electrical contractor. The Manager/Supervisor will the contractor's certification.
4. Approved fire extinguishers must be provided near electrical breaker panels and distribution centers. Water type extinguishers will not be located closer than 50 feet from electrical equipment.

Safe Work Practices for Working within the Limited Approach Boundary

Prior to any work being done within the Limited Approach Boundary, an Arc Flash Hazard Analysis will be performed. The analysis will contain event severity, frequency, probability, and avoidance to determine the level of safe practices employed.

The limited approach boundary is the distance from an exposed live part within which a shock hazard exists.

Unqualified workers are not permitted to work in the areas designated with a limited approach boundary.

Only Qualified employees may work on electric circuit parts or equipment that has not been de-energized. Such employees will be made familiar with the use of special precautionary techniques, PPE, insulating and shielding materials and insulated tools.

Only qualified persons complete tasks such as testing, troubleshooting and voltage measuring within the limited approach boundary. Only qualified persons will perform tasks such as testing, troubleshooting and voltage measuring within the limited approach boundary of energized electrical conductors or circuit parts operating at 50 volts or more or where an electrical hazard exists.

Limited Approach Boundary

The restricted approach boundary is the closest distance to exposed live parts a qualified person can approach with without proper PPE and tools. Inside this boundary, accidental movement can put a part of the body or conductive tools in contact with live parts or inside the prohibited approach boundary. To cross the restricted approach boundary, the qualified person must:

- Have an Energized Work Permit that is approved by the supervisor or manager responsible or the safety plan.
- Use PPE suitable for working near exposed live parts and rated for the voltage and energy level involved.
- Be certain that no part of the body enters the prohibited space.
- Minimize the risk from unintended movement, by keeping as much of the body as possible out of the restricted space; body parts in the restricted space should be protected.

The prohibited approach boundary is the minimum approach distance to exposed live parts to prevent flashover or arcing. Approaching any closer is comparable to making direct contact with a live part. To cross the prohibited approach boundary, the qualified person must:

- Have specified training to work on exposed live parts.
- Have an Energized Work Permit with proper written work procedures and justifying the need to work that close approved by the appropriate supervisor.
- Use PPE appropriate for working near exposed live parts and rated for the voltage and energy level involved.

The Flash Protection Boundary is the approach limit at a distance from exposed live parts within which a person could receive a second degree burn if an electrical arc flash were to occur.

- Use PPE appropriate for working near exposed live parts and rated for the voltage and energy level involved.
- For systems of 600 volts and less, the flash protection boundary is 4 feet, based on an available bolted fault current of 50 kA and a clearing time of 6 cycles for the circuit breaker to act, or any combination of fault currents and clearing times not exceeding 300 kA cycles.
- When working on de-energized parts and inside the flash protection boundary for nearby live exposed parts - If the parts cannot be de-energized, use barriers such as insulated blankets to protect against accidental contact or wear proper PPE.

Arc Flash Hazard Analysis

An arc flash hazard analysis includes the following:

- Collect data on the facility's power distribution system.
 - Arrangement of components on a one-line drawing with nameplate specifications of every device.
 - Lengths and cross-section area of all cables.
- Contact the electric utility for information including the minimum and maximum fault currents that can be expected at the entrance to the facility.
- Conduct a short circuit analysis followed by a coordination study is performed.
- Feed the resultant data into the NFPA 70E equations.
 - These equations produce the necessary flash protection boundary distances and incident energy to determine the minimum PPE requirement.
 - The flash protection boundary is the distance at which PPE is needed to prevent incurable burns (2nd degree or worse) if an arc flash occurs. (It is still possible to suffer 1st or 2nd degree burns.)
- For systems of 600 volts and less, the flash protection boundary is 4 feet, based on an available bolted fault current of 50 kA (kiloamps) and a clearing time of 6 cycles (0.1 seconds) for the circuit breaker to act, or any combination of fault currents and clearing times not exceeding 300 kA cycles (5000 ampere seconds).

When working on de-energized the parts, though still inside the flash protection boundary for nearby live exposed parts:

- If the parts cannot be de-energized, barriers such as insulated blankets must be used to protect against accidental contact or PPE must be worn.
- Employees will not reach blindly into areas that might contain exposed live parts.
- Employees will not enter spaces containing live parts unless illumination is provided that allows the work to be performed safely.
- Conductive articles of jewelry and clothing (such as watchbands, bracelets, rings, key chains, necklaces, metalized aprons, cloth with conductive thread, metal headgear, or metal frame glasses) will not be worn where they present an electrical contact hazard with exposed live parts.
- Conductive materials, tools, and equipment that are in contact with any part of an employee's body will be handled in a manner that prevents accidental contact with live parts. Such materials and equipment include but are not limited to long conductive objects such as ducts, pipes, tubes, conductive hose and rope, metal-lined rules and scales, steel tapes, pulling lines, metal scaffold parts, structural members, and chains.
- When an employee works in a confined space or enclosed spaces (such as a manhole or vault) that contains exposed live parts, the employee will use protective shields, barriers or insulating materials as necessary to avoid contact with these parts. Doors, hinged panels, and the like will be secured to prevent them from swinging into employees. Refer to the confined space entry program.

Equipment

All test instruments, equipment and their accessories be rated for circuits and equipment to which they will be connected. Test instruments, equipment, and their accessories will meet the necessary requirements for rating and design requirements for voltage measurement and test instruments intended for use on electrical systems 1000 Volts and below.

Test instruments are verified to be in proper working order before and after an absence of voltage test is performed. When test instruments are used for the testing for the absence of voltage on conductors or circuit parts operating at 50 volts or more, the operation of the test instrument will be verified before and after an absence of voltage test is performed.

Personal Protective Equipment (PPE)

Personal protective equipment will be in accordance with the Personal Protective Equipment (PPE) procedure.

All insulating PPE must be inspected before each day's use and immediately following any incident that can reasonably be suspected of having caused damage. Insulating gloves will be given an air test, along with the inspection.

Maximum test intervals for rubber insulating personal protective equipment will include:

- Blankets-before first issue/every 12 months thereafter
- Gloves-before first issue and every 6 months
- Sleeves before first issue and every 12 months
- Covers and line hose will be testing if insulating value is suspect.

Energized Electrical Work Permit

Work on energized electrical conductors or circuit parts that are not placed in an electrically safe work condition will be considered energized electrical work and will be performed by written permit only.

Annual Audit

Management will conduct, at a minimum, one audit of field work to verify the adherence to and correctness of this procedure as it pertains to the specific task being performed in the field. Any changes will be made to this procedure and then communicated to employees.

Training

1. Employees will be trained on this entire procedure so that when completed, the employees will be able to safely perform tasks on and around exposed energized electrical equipment.
2. Training will be related to safe work practices that pertain to employee job assignments.
3. The training will ensure that this procedure is understood by the employees and that the knowledge and skills required to follow this procedure are acquired by the employees.
4. The training will be given prior to the employee being assigned duties, before there is a change in assigned duties, and/or a Manager of Novel Geo-Environmental, Inc. has reason to believe either that there are deviations from the permit or procedures or that there are inadequacies in the employee's knowledge or use of this procedure.
5. The training will establish employee proficiency and understanding. The Instructor will certify that employee training has been accomplished. The certification will contain each employee's name and dates of training.
6. Employees will be trained in safety-related work practices that pertain to their respective job assignments.
7. For Qualified employees to work within the Limited Approach Boundary, Qualified employees will be trained to understand the specific hazards associated with electrical energy. Employees will be trained in safety-related work practices and procedural requirements as necessary to provide protection from the electrical hazards associated with their respective jobs. Employees will be trained to identify and understand the relationship between electrical hazards and possible injury.
8. Employees will be trained in the skills and techniques to distinguish exposed energized electrical conductors and circuit parts from other parts of electrical equipment, to determine the nominal voltage of exposed energized electrical conductors and circuit parts, the approach distances, and the decision-making process necessary to determine the degree and extent of the hazard and the personal protective equipment and job planning necessary to perform the task safely.

Retraining

Retraining will be conducted when the employee is not complying with safety-related work practices or when workplace changes necessitate the use of safety-related work practices that are different from those that the employee would normally use. An employee will receive additional training (or retraining) under any of the following conditions:

- If the supervision or annual inspections indicate that the employee is not complying with the safety-related work practices
- If new technology, new types of equipment, or changes in procedures necessitate the use of safety-related work practices that are different from those that the employee would normally use
- If he or she must employ safety-related work practices that are not normally used during his or her regular job duties

Retraining will be performed at intervals not to exceed two years.

Training and retraining will be documented containing each employee's name and date of training with the records maintained for a minimum of two years. Documentation will be made when the employee demonstrates proficiency as determined by the Instructor.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Hot and Cold Weather Safety			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-041	Pages	5	Rev. 3.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure is to provide guidance for protecting Novel Geo-Environmental, Inc. employees from environmental hazards such as extreme hot and cold weather. This procedure provides information on engineering controls, administrative controls, PPE, and best practices.

Scope

This awareness program is for workers of Novel Geo-Environmental, Inc. that may work in locations and operations with the potential for exposure to environmental hazards such as extreme hot and cold weather.

Definitions

None

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.
- Train all employees on the severity of hot and cold weather-related hazards and emergency response procedures.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.
- Ensure that all employees have access to potable drinking water. Where it is not plumbed or otherwise continuously supplied, it shall be provided in sufficient quantity at the beginning of Provide information to workers on environmental hazards such as hot and cold weather-related illnesses.
- Provide means of preventing work related health hazards due to the environment.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Hazard Assessments

The Safety Manager or Supervisor will conduct a hazard assessment specifically for identifying the types of jobs and tasks that may expose workers to hot or cold temperature extremes.

Hazard Control

To be implemented as much as possible in the order listed:

1. Engineering Controls
 - a. Provide shelter from environmental hazards (shelter).
 - b. Provide fans or heaters.
2. Administrative Controls
 - a. Provide training to all affected employees.
 - b. Provide cooling or warming beverages.
 - c. Provide adequate hydration.
 - d. Rotate workers during high heat or extreme cold related operations.
 - e. Provide rest periods for workers.
3. Protective Equipment
 - a. Provide warming PPE when appropriate.

Drinking Water Availability

Sufficient quantities of potable drinking water will be provided and made accessible to employees. If a potable water source is not available at the worksite it is the supervisor's responsibility to ensure that at least one quart of water per employee per hour will be available for the number of company employees on the site.

Acclimation

Acclimation or (or acclimatization) is allowing an employee sufficient time for their body to become gradually used to working in a hot or cold environment, generally, taking five to seven working days in the hot or cold environment gradually increasing activities and exposure to the hot or cold work environment.

Supervisors will make the necessary provisions to allow workers to get used to hot environments by gradually increasing exposure during a 5-day work period. The table below shows the schedule to follow:

Day	Percentage of time in hot environment
1	50%
2	60%
3	75%
4	80%
5	100%

Heat Related Injuries and Illnesses

Conditions and Hazards

The list of conditions and hazards below may lead to heat illness or injury when workers are exposed by working in the outdoor environment.

- Outdoor temperature
- Air movement/wind
- Humidity level
- Radiant Heat
 - (Example: Reflection of heat from the ground, dark or metal surfaces, or work in direct sunlight)
- Conductive Heat
 - (Example: Heat from a piece of equipment or machine)
- Workload Activity and Duration
 - (Example: Manual labor tasks)
- Personal Protective Equipment Use
 - (Examples: Flame-resistant clothing (FRC), wearing a respirator, or leathers and gloves for welding)

Employees may experience heat-related injuries and illnesses at air temperatures below expected levels when employees have not acclimated to significant increases in air temperature and humidity.

Supervisors and employees will monitor for signs and symptoms of heat-related injuries and illnesses when there is a significant increase in air temperature and humidity. Supervisors with assistance from first-aid trained persons will implement treatment listed as a minimum. First-aid trained persons may provide additional treatment.

General Guidelines

- Drink water - Drink small amounts of water frequently, about one cup (8 ounces) every 15- 20 minutes; at least one quart (32 ounces) of water per employee per hour will be available.
- Limit exposure time to extreme temperature and environmental conditions.
- Take breaks in a cool and/or shaded area (building, canopy and under trees)
- Add more workers to reduce workload or reduce the workday.
- Engineering controls - increase air movement with fans or coolers.
- Wearing loose, lightweight clothing - Clothing can affect heat buildup.
- Schedule work to take advantage of morning or evening hours when temperatures are more reasonable.
- Supervisors are to take into consideration personal health factors (such as age, sex, weight, physical fitness, nutrition, alcohol or drug use, or preexisting diseases) of employees before assigning a task where there is a potential for heat illness.

Heat Injuries and Illnesses

1. Heat Cramps

Description: Heat cramps are painful spasms of the muscles in the arms, legs, or abdomen, but tired muscles (those used in performing the work) are usually the ones most susceptible to cramps.

Treatment: The affected worker should be allowed to rest in a cool place and drink water and/or sports drinks with periodic monitoring by the Supervisor or a person trained in first-aid.

2. Heat Exhaustion

Description: Heat exhaustion is when a worker is becoming tired or fatigued due to the high heat and humidity. The affected worker will sweat yet experiences extreme weakness or fatigue, giddiness, nausea, or headache. In more serious cases, the victim may vomit or lose consciousness. The skin is clammy and moist, the complexion is pale or flushed, and the body temperature is normal or only slightly elevated.

Treatment: The affected employee should be allowed to rest in a cool place and drink plenty of water and sports drinks. Victims with mild cases of heat exhaustion usually recover spontaneously with this treatment. The affected person should be continuously monitored by the Supervisor or a person trained in first-aid. If someone is showing symptoms of heat exhaustion and not responding to treatment call for medical help as soon as possible.

3. Heat Stroke

Description: Heat stroke is the most serious of health problems associated with working in hot environments. The affected person's skin is hot, usually dry, red or spotted. Body temperature is usually 105°F or higher, and the victim is mentally confused, delirious, perhaps in convulsions, or unconscious. Unless the victim receives quick and appropriate treatment, death can occur. If someone is showing symptoms of heat stroke call for medical help immediately.

Treatment: The affected employee requires immediate hospitalization. First-aid should be immediately administered to include removing the victim to a cool area, thoroughly soaking the clothing with water, and vigorously fanning the body to increase cooling.

Cold Related Injuries & Illnesses

Conditions and Hazards

The list of conditions and hazards below may lead to cold illness or injury when workers are exposed by working in the outdoor environment.

- Outdoor temperature
- Air movement/wind
- Humidity level
- Workload Activity and Duration
 - (Example: Manual labor tasks)
- Personal Protective Equipment Use
 - (Examples: Flame-resistant clothing (FRC), wearing a respirator, or leathers and gloves for welding)

Employees may experience cold-related injuries and illnesses at air temperatures below expected levels when employees have not acclimated to significant decreases in air temperature and humidity.

Supervisors and employees will monitor for signs and symptoms of cold-related injuries and illnesses when there is a significant decrease in air temperature and humidity. Supervisors with assistance from first-aid trained persons will implement treatment listed as a minimum. First-aid trained persons may provide additional treatment.

General Guidelines

- Drink water - Drink small amounts of water frequently, about a cup (8 ounces) every 15- 20 minutes.
- Limit exposure time to environmental conditions.
- Take rest breaks in warm areas.
- Add more workers to reduce workload or reduce the workday.
- Workers are to work in pairs or in groups with each worker watching out for symptoms of cold weather illnesses in the other workers.
- Engineering controls – Utilize heat producing elements to warm workers when needed.
- Wear appropriate insulated and other cold weather clothing for weather conditions (cold, wet, and windy conditions) such as heavy socks, gloves, jackets and hats.
- Do not wear tight clothing, allow for air to circulate.
- Keep a change of clothing available to change into.
- Drink warm (non-caffeinated) beverages to assist your internal body temperature.
- Regularly used walkways will be sanded, salted, cleared of snow and ice as soon as is practicable.
- Workers are to be made aware of the dangers of working around unstable snow and ice above the work areas.
- Cold weather supplies will be regularly inspected and restocked as needed.

Cold Illnesses

1. Frostbite

Description: Frostbite is caused by the body literally beginning to freeze and usually starts in the toes or fingers which lose heat the fastest. In severe frostbite cases the tissue is permanently damaged. Symptoms of frostbite include numbness of the affected area, tingling or aching feelings, and a blue-ish waxy skin.

Treatment: The affected employee should be moved to a warm area. Begin to let the affected body part(s) to naturally warm. Never rub the affected area. The affected person should be continuously monitored by the Supervisor or a person trained in first-aid. If someone is showing symptoms of frostbite and not responding to treatment call for medical help as soon as possible.

2. Hypothermia

Description: Hypothermia occurs when your body temperature drops to, generally, to or below 95 degrees F, from prolonged exposure in a cold environment. Symptoms include a slowed heartbeat, irregular breathing, the feeling of being drowsy or feel extremely exhausted,

Treatment: Move the person to a warm area, remove any wet clothing replacing with dry clothing and/or covering with a blanket. If the person is fully conscious and alert, give them a warm drink such as hot tea. The affected person should be continuously monitored by the Supervisor or a person trained in first-aid. If someone is showing symptoms of hypothermia and not responding to treatment call for medical help as soon as possible.

3. Trench Foot

Description: Trench foot, also known as immersion foot, occurs when the feet are wet for long periods of time. Symptoms include a tingling and/or itching sensation, pain, swelling, cold and blotchy skin, numbness, and a prickly or heavy feeling in the foot. The foot may be red, dry, painful, and may develop blisters.

Treatment: When possible, air-dry and elevate the affected person's feet, change to dry socks and shoes. If affected areas do not respond to treatment seek medical help.

Training

Employees, including Supervisors, working in areas and locations that have the potential for exposure to Heat and/or Cold Injuries & Illnesses related to weather conditions will be trained in this awareness program upon initial assignment, position, or area, and receive annual refresher training. The training will be documented as to the Instructor/Trainer, date of training, and topics covered.

Supervisors will receive additional training, as needed, prior to supervising employees to include preventing Heat and Cold Injury & Illnesses, this program, and associated emergency response procedures. See sections titled "Heat Related Injuries & Illnesses" and "Cold Related Injuries and Illnesses" in this program.

Specific employees are trained and certified in First-aid/CPR per the Emergency Action Plan and may provide treatment for hot and cold injuries and illnesses.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Short Service Employee			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-042	Pages	4	Rev. 4.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for the identification, supervision and training of Short-Service Employees in order to prevent injury to themselves or others, property damage, or environmental harm.

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. meeting the definition as a Short Service Employee as defined in this Program. This includes direct employees and those utilized on a contracted basis.

Definitions

Short Service Employee - an employee or contracted employee who has been with their current employer for less than six months or who has less than six months of work experience in their current job.

Mentor - An experienced employee who has been specifically assigned by management to train, help, and work with a Short Service Employee.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Identification of a Short-Service Employee (SSE)

Short-Service employees of Novel Geo-Environmental, Inc. will be identified by a sticker designating that the employee is an SSE on his/her hard hat.

At the end of the Short Service Employee period, the employee will be able to remove the SSE sticker from his/her hard hat which will then look the same as the other employees of Novel Geo-Environmental, Inc.

Mentoring Program

The purpose of the mentoring program is to provide for the guidance and development of the SSE by a peer and provide for the transferring of skills and knowledge from one person to another in the work environment.

For the first 60 days, the Short-Service Employees will work with and under the direct supervision and instruction of a designated employee who, as one of his or her duties, serves as a Mentor in the SSE Program. The 60-day period may be reduced or extended based upon the complexity of the tasks, the ability of the SSE to learn and safely perform the tasks, and the with the documented approval of the Mentor, Supervisor and Manager.

The Mentor will be a peer other than the Short-Service Employee's direct Supervisor that has specific job knowledge adequate to instruct and mentor the Short-Service Employee. The Supervisor may also be involved in the training of the SSE.

The Short-Service Employee has the following responsibilities:

- Remain open to and readily accept open and candid feedback from the Mentor
- Seek assistance and guidance from their Mentor when uncertain about any part of their job or for a task they have never done before
- Strictly follow and abide by all policies and procedures taught or shown to them by the Mentor or through knowledge gained at the initial safety orientation
- Work in a safe and environmentally sound manner

The Mentor has the following responsibilities:

- Lead by example and refrain from taking short cuts and doing anything hazardous to health and safety or that could cause environmental harm.
- Review with the SSE the known hazards of the work being performed and advise on safe work practices to be followed.
- Show the SSE how to prepare and follow a Job Safety Analysis (JSA)
- Ensure the SSE understands the scope of work being performed each day
- Provide close shadowing/supervision at all times during the training
- Observe SSE while performing duties
- Ensure that all company HSE policies and procedures are followed and implemented during SSE guidance
- Be available for and encourage questions from the SSE

Those employees chosen to be Mentors will exhibit the following qualifications and characteristics:

- Experienced employee with requisite skills and knowledge
- Provide a positive safety attitude, avoid criticism, and strive to build up confidence and self-esteem in the SSE

More than one Mentor may need to be assigned based upon the tasks or operation/division.

Prior to a job mobilization or at specific sites it may be necessary for the Mentor or Supervisor to communicate to an Operator or onsite representative that an SSE is onsite. Approval may be necessary with documentation of this procedure.

Specific Provisions

- In specific situations, an SSE may not be allowed in high hazard areas, an example of this may

be H2S or NORM.

- Any SSE incidents or injuries may result in a longer mentoring process
- The SSE will not work alone under any circumstance until released from the SSE Program.

Release from SSE Program

The SSE must have completed all required training with completion documented. The Mentor, Supervisor, and Management must each make recommendations to release the SSE from the program. These recommendations must be maintained in the SSE personnel file.

Significant Work Experience Exemption

There is one exception to participating in the Short Service Employee Program that may be granted. A new employee may be exempted from the SSE Program if they have significant work experience (a high level of previous work experience) in the same or very similar job. This specific work experience must be documented and the exception signed by the immediate Supervisor and the Manager.

The exempted employee will receive training on Safety Procedures conducted by the Supervisor, Safety Professional, competent designate, or a combination of the three. This training is to be conducted prior to performing any tasks on a jobsite.

Job/Task Training

Exempted employees will receive training on the jobs and tasks per Standard Operating Procedures (SOP) with the training being conducted by the Supervisor or specific designate prior to performing any tasks on a jobsite.

Each Procedure will be reviewed with the exempted employee by the Supervisor or specific designate, then the task will be demonstrated as to how to specifically perform the task, the exempted employee will receive practice on performing the task until comfortable with the task, then the Supervisor or specific designate will specifically observe the exempted employee performing the task and assess if the exempted employee has completed the task safely, correctly according to the SOP without coaching during the task. Upon successful completion of the task, the Supervisor or specific designate will initial and place the date by the task indicating the exempted employee is proficient in the task.

The job/task training for exempted employee will be documented.

Cross Training

Employees that may perform tasks in more than one operational division must be trained (cross-trained) also in the other operation division's applicable safety procedures and Standard Operating Procedures before performing any tasks on a jobsite. This training must be documented and will be maintained in the employee's personnel file.

Training

Safety Training

Short Service Employees will receive training on Safety Procedures conducted by the Supervisor, Safety Professional, competent designate, or a combination of the three. This training is to be conducted prior to performing any tasks on a jobsite. The Safety Training will be documented.

Job/Task Training

Short Service Employees (SSE) will receive training on the jobs and tasks per Standard Operating Procedures (SOP) with the training being conducted by the assigned Mentor prior to performing any tasks on a jobsite.

Each Procedure will be reviewed with the SSE by the Mentor, then the Mentor will demonstrate to the SSE how to specifically perform the task, the SSE will receive practice on performing the task until comfortable with the task, then the Mentor will specifically observe the SSE performing the task and assess if the SSE has completed the task safely, correctly according to the SOP without coaching during the task. Upon successful completion of the task, the Mentor will initial and place the date by the task indicating the SSE is proficient in the task. This training process will take considerable time depending on the complexity of the task.

The job/task training for the SSE will be documented. The job/task training will be based upon the assigned operations or division.

Evaluation and Assessment

Each SSE will be evaluated and assessed periodically to determine progress in the training process. The Mentor will perform an evaluation at 30-days, 60-days and 6 months to determine the skills and safe behaviors are being acquired by the SSE. The Mentor is to provide feedback to the SSE and document comments.

References

API RP-76, Annex C

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Behavior Based Safety			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-043	Pages	4	Rev. 1.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This program is to be utilized as a tool to improve safety by encouraging safe actions and behaviors as well as reducing at-risk actions and behaviors within the workplace through peer-to-peer observation and coaching.

Employees are encouraged to participate in the observation process. It is expected that employees participating in this program will not be subjected to any negative impact, discrimination, or otherwise retaliated against.

Scope

This program applies to all employees of Novel Geo-Environmental, Inc. on all the respective sites.

Definitions

None

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.
- Ensure that all employees are trained on the Behavior Based Safety Observation Program
- Develop action plans to ensure continuous improvement of the program
- Review process modification change requests developed through this program
- Maintain communication by providing feedback in a timely manner
- Attend safety meetings and offer feedback on areas of improvement
- Provide coaching to Supervisors on the BBS Observation Program
- Remove barriers so that the Supervisor can coach employees on the BBS Observation Program

Site Manager/Supervisor

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.
- Ensure that all employees are trained on the Behavior Based Safety Observation Program
- Coach Observers to improve using the Behavior Based Safety Observation Program
- Accept Observation Cards from employees and review each card
- Maintain communication by providing feedback in a timely manner
- After reviewing and giving feedback, forward the Observation Cards to the HSE Representative for data entry
- Actively promote and participate in the Behavior Based Safety Observation Program by supporting the goals and objectives of the Behavior Based Safety Observation Program
- Ensure that all employees are aware of what is expected of them regarding the BBS Observation Program
- Encourage employees to participate in observations as the Observer and/or the Person being Observed

- Provide necessary resources to keep process productive
- Attend safety meetings and offer feedback on areas of improvement
- Actively promoting and participating in the Behavior Based Safety Observation process by reviewing Observation Cards, giving feedback, developing action plans, and completing corrective actions needed.
- Refraining from using data from the Behavior Based Safety Observation Program in a punitive or negative manner
- Assisting in problem solving and completing of corrective actions in a timely manner
- Provide time for the observations to be completed, persons to be observed, and Observation Cards to be completed
- Remove barriers to safe actions and behaviors
- Encourage BBS Observations be part of the daily operations

Safety Manager or designee

- Support the goals and objectives of the Behavior Based Safety Observation Program
- Encourage, promote, provide technical support, and assist in acquiring the resources needed for the Behavior Based Safety Observation Program
- Address the concerns and suggestions about the BBS Observation Program
- Collect all Observation Cards from the Supervisor
- Enter data into BBS database, analyze for trends and patterns, report to management any trends and/or patterns

Employees

Observer(s)

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy
- Learn the Behavior Based Safety Observation process and the benefits of reducing at-risk actions and behaviors
- Promote the Behavior Based Safety Observation process
- Make observing proactive and not critical
- Be open to coaching during and after performing observations
- Be courteous and helpful during the observation process
- Assist workers by offering recommendations to safely perform a task or help them with a task, if necessary
- Give constructive feedback after observations
- Stress Safe actions and behaviors before At-Risk actions and behaviors
- Work towards solutions of problems found

Person(s) Being Observed

- Be willing to be observed as part of the BBS Observation Program
- Be open and cooperative during the observation process
- Avoid being defensive during the observation process
- Be familiar with the Behavior Based Safety Observation process

Procedure

Process to Conduct a BBS Observation

- Use the Observation Card available from the immediate Supervisor or Manager. The blank forms may be stored with the Supervisors' other project paperwork or in a file in the office.
- Observe the person for approximately five minutes doing a task. Do not give prior notice of observation to the person being observed.
- Fill-out the Observation Card, both sides. (See section titled "Completing the Observation Card")
- Provide feedback to person observed, both positive and constructive.

- Complete the Observation Card
- Give the completed Observation Card to the Supervisor
- The Supervisor will review each completed Observation Card then forward the completed Observation Cards to the HSE Representative
- The HSE Representative will enter data into BBS database and track results

Completing the Observation Card

1. Complete the information at the top of the Card on the side showing "Observation Information"
 - Enter the Observer's Name (not the name of the person being observed)
 - Location
 - Date: complete date and time of observation
2. In the section "What was observed?" describe the task being performed by the person being observed at the time of the observation
3. In the section "What actions did you take?" describe any actions that you took such as, yet not limited to:
 - You initiated a Stop Work Action
 - You offered a recommendation to the person being observed.
 - If all is safe, was positive recognition provided at the time of the observation?
4. In the section "Future Improvement: Suggestion or Recognition" describe any recommendations for improving the task or if the person deserves special positive recognition.
5. On the side of the card showing the check boxes for Safe and At Risk, place an "x" in either the Safe or At Risk checkbox.
 - Place an "x" in the appropriate box only if it was observed
 - There may be items that are not checked as either Safe or At Risk as they do not apply to the observed task
6. At the bottom in the section "Briefly Explain", add a comment for each of the At-Risk behaviors with a very brief explanation of why it was At Risk.

Behavior-Based Safety Observation Card Eligibility Guidelines

The Observation Card may not be eligible for consideration if any of the following apply:

- Items identified are hazards only and not related to an at-risk action or at risk behavior;
- Concern personal grievances, personnel issues, or whistleblower complaints;
- Concern existing policies or procedures that an employee believes are not being followed or that are not being applied properly.

Policies and procedures exist to address these situations, utilize them to ensure proper handling of the items listed as not eligible.

Data Collection

After Observation Cards are completed and submitted to the Supervisor, they will be forwarded to the Safety Manager to be entered into a database for analysis. Trends and patterns will be identified using the data. The information will be provided to management to determine action plans and corrective actions as needed.

Training

Training will be provided to new employees as part of the new hire orientation program/Short Service Employee Program. All employees will receive training on this program on an annual basis.

Appendix - Behavior Based Safety Observation Overview

General Information

- The Observer is looking for actions and behaviors that are Safe or At Risk.
- The Observer is not looking for physical hazards or hazardous conditions.
- The Observer is looking for opportunities to reinforce Safe actions and behaviors and/or change At-Risk actions or behaviors
- Record a comment for every recorded “at-risk” to include what and why. Make quality observations, concentrating on quality comments.

Observation Process (General in nature)

- Use the Observation Card
- Observe the person for approximately five minutes doing a task.
- Fill-out the Observation Card, both sides.
- Provide feedback (coaching) to person observed, both positive and constructive.
- Complete the Observation Card
- Give the completed Observation Card to the Supervisor

Examples (partial list)

Safe Actions and Behaviors	At Risk Actions and Behaviors
• Following safety procedures • Doing something safely – safe actions and/or safe behaviors • Exercising Stop Work Authority • Correcting a hazardous situation or condition • Helping another worker • Informal training of fellow workers • Moving out of the Line of Fire • Using 3-points of contact on a ladder • Manually lifting correctly • Placing barricade or signs • Using a tool correctly	• Not following safety procedures • Doing something that is either an unsafe action and/or unsafe behavior • Working under a suspended load • Placing a body part in a pinch point • Not wearing correct PPE • Operating mobile equipment without doing a pre-shift inspection • Hurrying to accomplish task • Not focused on task • Not using a tool correctly

Coaching Process

- Tell the person after they were observed that they were observed, thank them
- Tell them what you observed
- Reinforce the Safe actions and behaviors observed
- Describe, briefly, the At-Risk actions and behaviors observed
- Ask why the At-Risk actions and behaviors were taken (use open-ended questions)
- Come to agreement as to correcting the At-Risk action or behavior
- Thank them again
- Coaching process should be polite, non-confrontational, and pleasant

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Fit for Duty			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-044	Pages	3	Rev. 1.0
Procedure Owner	Manager of Administrative Services, Safety Manager or designee	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for all Novel Geo-Environmental, Inc. operations. If an individual is perceived to be mentally or physically unfit to perform one or more of the essential functions of their job, each person and/or their supervisor must follow all appropriate sections of this policy. Additionally, all personnel must follow the guidelines set forth in this policy in order to return to work from personal injury or a serious health condition, whether work-related or not.

Scope

To establish procedures for assessing fitness for duty of personnel under certain specified circumstances or upon release to return to work following a serious injury or illness.

Definitions

None

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.
- The Manager of Administrative Services, Safety Manager, or designee or designee will be responsible for managing compliance of personnel with all the terms of this policy.
- Employees must receive training specific to their assigned task. Examples might be welding, instrumentation, scaffold building, equipment operator qualifications, respirator fit test, etc.

Site Manager/Supervisor

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.
- Any Supervisor who becomes aware that an individual may be unfit for duty may rely on this policy to ensure that the person in question is removed from their work assignment or prevented from returning to their work assignment until such time that the individual's fit for duty status can be verified under the terms of this policy.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.
- Each individual is ultimately responsible to be fit for duty.

Procedure

Fit For Duty

- Self-Report: For the safety and well-being of personnel and their co-workers, an individual is not to report to work if they are seriously ill or impaired from drugs, alcohol, fatigue or any other reason especially in cases of communicable diseases. An individual with a mental or physical condition that may prevent them from performing an essential job function, in an effective and/or

safe manner should not report for work until such time as they are cleared by the Manager of Administrative Services, Safety Manager, or designee and/or personal physician. It is also the responsibility of the employee to notify their supervisor if they are fatigued to the point of not being able to perform their duties safely.

- Procedures must include drug and alcohol testing as prescribed by DOT or host facilities.
- Safe work procedures must be in place. Examples might include, hot work permitting, confined space, LO/TO, PSM, Electrical Safety, Operator Safety, etc.
- Personal Illness: Personnel are not to report for duty if they are seriously ill or impaired especially if the illness is a communicable disease.
- Medications: Personnel must report the use of any prescribed or over-the-counter medication that may potentially impair their mental or physical abilities to perform the functions of their job safely and effectively. Such notice must be provided to the Manager of Administrative Services, Safety Manager, or designee, who will work with the individual's prescribing physician to evaluate whether the medication affects the individual's ability to safely perform any essential job function.
- Personnel who report for duty or are on duty while knowingly impaired may face disciplinary actions up to and including termination. For guidelines, personnel should refer to the Substance Abuse Policy.

On-the-job and Off-the-job Illness and Injury:

- All standards and definitions for fit for duty evaluations and assessments are the same regardless of whether the illness or injury occurred on or off the job.
- For all on-the-job injury/illnesses or exposures, personnel will follow the Accident and Incident Reporting procedures, filling out all appropriate forms and making all appropriate notifications.
- For off-the-job injury or illness, personnel will make the notification to their supervisor and the Manager of Administrative Services, Safety Manager, or designee.
- Personnel with an on/off-the-job illness or injury may be subject to a fit for duty evaluation and fitness assessment as listed below.

Observation and Reporting

- Any individual observed to be mentally or physically impaired and/or who may be unable to effectively and safely perform one or more essential functions of their job may be subject to a fit for duty evaluation by the Manager of Administrative Services, Safety Manager, or designee or a qualified designee or may be subject to testing in accordance with the Substance Abuse Policy.
 - Signs of inability to perform may include apparent weakness, illness, disorientation, memory loss, erratic behavior or inability to successfully complete any individual performance standard associated with their position or a fitness assessment.
- Employees must be responsible for ensuring they are physically and mentally fit to perform their job functions safely. Employees must take responsibility for their own safety as well as not reporting to work in a condition as to endanger the safety of their fellow workers.
- Reporting Process:
 - Personnel who observe or who have reason to believe that another individual may be unfit to perform the functions of the job effectively and/or safely, will report such observations to their immediate supervisor. In cases where the individual in question is one of the immediate supervisors, the Manager of Administrative Services, Safety Manager, or designee should be contacted directly.
 - The immediate supervisor of the individual in question should contact the Manager of Administrative Services, Safety Manager, or designee, who will make the necessary arrangements to assess the individual's condition. If the supervisor believes that the condition could affect the safety of the individual or others, the supervisor will immediately take the individual off duty.
 - The Manager of Administrative Services, Safety Manager, or designee is given the discretion to assess appropriate action to be taken with regard to the individual, which may result in removal of the individual from duty until such time that a fit for duty medical evaluation is completed.

- In cases where the individual is removed from duty or needs to be referred for a medical evaluation or treatment, the Manager of Administrative Services, Safety Manager, or designee must notify the HR Department.
- Referral for Medical Evaluation
 - The following reasons may require a medical evaluation to be performed.
 - When actual problems exist or are reported with the individual's performance or any essential function of their job.
 - When there exist legitimate concerns about whether the individual or their performance poses a direct threat to the safety and health of themselves or others.
 - To determine the necessity for, or existence of, a reasonable accommodation.
 - When Medical evaluation, screening and monitoring is required by federal, state or local law.
 - If the individual requires additional treatment for health issues not relating to work, the individual will be responsible for those costs.
- Return to Work
 - Medical Evaluation to Return to Work
 - Any individual returning to work from a serious injury or illness, extended absence, or from any other health-related circumstance that may call to question their ability to perform their duties in a safe and effective manner will need to provide documentation that they are able to return to work.
 - Employees returning to work from a serious injury or illness, extended absence, or from any other health-related circumstance will have to be retrained and/or field verification on all applicable safety related items.
 - All safety procedures must be followed. Item above was developed to ensure there is no gap in safety compliance after a long time away from work.
 - The statement may need to directly reference the employee's job function if their normal job requires job functions that are considered safety sensitive.
 - Novel Geo-Environmental, Inc. reserves the right to require the individual to see another doctor for a second opinion as needed.
 - Whenever possible, Novel Geo-Environmental, Inc. will meet the restrictions for work-related injuries. Novel Geo-Environmental, Inc. may not accept work restrictions for individuals who were injured outside of their employment.

Training

Employees will be trained initially prior to assignment to work related tasks and whenever a Manager of Novel Geo-Environmental, Inc. has reason to believe the employee needs to be retrained due to observed or perceived inadequacies in the employee's knowledge or use of this procedure.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Job Competency Procedure			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-045	Pages	2	Rev. 1.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure was developed to establish defined roles and responsibilities of all employees.

Scope

This procedure establishes the minimum requirements for all Novel Geo-Environmental, Inc. operations.

Definitions

None

Responsibilities

Novel Geo-Environmental, Inc. Management

Management accepts responsibility for the implementation of this policy. Management shall:

- Ensure that organizational charts are current,
- Verify applications are correct and validate education and experience background,
- Maintain training/qualifications in personnel file. Documented verification must be obtained before the employee can perform the task,
- Make sure the "Short Service Employee" program is followed and all additional training requirements are met by each employee prior to performing the job tasks,
- Annually review job descriptions to verify they are accurate. The job description must include the minimum qualifications required to perform this job.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.
- Site Management must communicate any job description changes to the Management.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

- Once an employee has passed through the screen process directed by the HR Department, the employee will be issued a green hard hat and released to the supervisor.
- The supervisor must verify that the employee can in fact perform the job functions he/she was hired to perform.

- The Short Service Employee program is the tool we use to verify that the employee understands and demonstrates that he/she has the knowledge to effectively and safely perform his/her job duties.
- If the employee is deficient in any areas this must be indicated on the Short Service Employee program Supervisor report and be sent to the HR Department and the Safety Department.
- The Supervisor is required to document that these verification steps have been taken. This must be documented on the Short Service Employee program "Supervisors" report.

Training

Employees will be trained initially prior to assignment to work related tasks and whenever a Manager of Novel Geo-Environmental, Inc. has reason to believe the employee needs to be retrained due to observed or perceived inadequacies in the employee's knowledge or use of this procedure.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Lone Worker Safety			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-046	Pages	3	Rev. 1.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for all Novel Geo-Environmental, Inc. operations.

Scope

This procedure is applicable to those workers that work by themselves without direct or close supervision during all hours of operations including normal work hours, outside of normal work hours, and holidays. This procedure is necessary due to the mobile workforce, the 24/7 operations, and the constant “on-call” status.

Definitions

Lone worker is defined as a worker that works by themselves without direct or close supervision during all hours of operations including normal work hours, outside of normal work hours, and holidays.

- Potential situations in which workers have the potential to be working alone include, yet are not limited to, situations such as working alone at the office, garage, or storage yard. This, also, includes visiting jobsites in preparation for upcoming projects or any other reason for which to be on a jobsite as a lone worker.
- Job positions that have the potential to be considered lone workers are Superintendents, Foremen, Laborers, Operators, delivery driver, Estimator, and Office Manager.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Hazard Assessment

The Management and worker together will conduct a hazard assessment of the work areas and tasks to determine the risks and hazards to which the lone worker will be or may be exposed.

Management will make the determination as to whether or not the tasks can be safely performed by a lone worker on a specific job site with input from the worker onsite. If the tasks or work areas are not determined to be safe for a lone worker, Management will make the necessary changes to the job site or

tasks so the lone worker can work safely or will provide other measures to ensure the safety of the lone workers such as having two workers perform the task or work together on the jobsite. Management may require that two-persons are on every jobsite.

Prohibited Activities

The following are activities are prohibited for a Lone Worker to perform:

- Tasks that have regulations in place that require at least two workers to perform the tasks.
- Permit-required confined space entry
- Working on live electrical conductors or equipment that is not shut down, de-energized, and locked out or tagged out per the NGE-HSE-026 Control of Hazardous Energy – LOTO Procedure.
- Hot Work
- Heavy equipment operation
- Working at heights or using PFAS
- Workers in the NGE-HSE-042 Short-Service Employee program are not permitted to be on-site as a Lone Worker.

Medically Fit to Work Alone

Management will take the necessary steps to ensure the worker is medically fit to work alone. The worker will have no medical conditions which make them unsuitable or unable for working alone. The advice of a medical professional will be used to make the determination in cooperation with Management.

Stop Unsafe or Potentially Unsafe Work

The lone worker will have sole discretion and authority to stop work the lone worker feels is unsafe or could be potentially unsafe. The lone worker will immediately contact Management on how to proceed safely to perform the task.

Supervision of a Lone Worker

Management is responsible for the safety and health of the lone worker even without constant or direct supervision.

Management will discuss the tasks with the lone worker so as to ensure the lone worker understands the tasks, potential hazards associated with the task and work area, and the necessary control measures and precautions to safely conduct the work.

The supervisor will periodically check the progress of the tasks of each lone worker by calling the lone worker or visiting the work area to observe the lone worker. There will be a backup form of communication in the event primary correspondence is unavailable as well as documentation including employee status at the check in intervals.

The supervisor will be contacted by the Lone Worker when the worker is to perform duties as a lone worker. The Lone Worker will provide the following information to the Site Manager, Office Manager or Manager of Administrative Services, at a minimum:

- Location where Lone Worker will be performing duties
- Estimated length of time they will be at the location

Upon completion of duties, the Lone worker will contact the supervisor notifying them they are leaving the site.

The process described above will be repeated each time the worker becomes a Lone Worker.

When the supervisor visits a work site of a lone worker, the supervisor will discuss the safety of the tasks at hand as a reminder to the employee. This discussion will be documented on the JSA by Management and initialed by the lone worker to document that the discussion occurred and list the topics that were

discussed. This documentation will become part of the project record or be maintained in a specific file in the Management's office for one year.

Management will work to gain the cooperation of the customer to provide a second person on the jobsite during shut-downs, emergency repairs, and other situations as determined as necessary by Management.

Communication and Tracking

Regular communication between the lone worker and supervisor using two-way radio or cell phone or satellite phones will be established on a regular basis at the discretion of Management according to the hazards and potential hazards of the tasks being performed by the lone worker.

Communication (related to work tasks) using two-way radios or cell phones or satellite phones between co-workers is encouraged as an informal means of maintaining contact between lone workers.

When lone workers are called out other than during regular work hours such as during equipment breakdown, holidays, off-hours, or holidays, Management will maintain regular and frequent communication with the lone worker through visiting the work site or using two-way radios or cell phones or satellite phones.

If, for any reason, the supervisor cannot make contact with the lone worker for more than one-half of an hour, the supervisor or designate will conduct a physical check for the lone worker at the last known work site or location.

Training

Management is responsible to provide the necessary training to the workers so they can work safely as a lone worker. Management will ensure the lone worker is sufficiently experienced in the job tasks and understands the risks of the tasks performed as a lone worker.

Training will include, yet is not limited to:

- Conducting non-routine tasks
- Handling of unusual situations that may be encountered as a lone worker
- Emergency procedures as a lone worker
- Identifying the risks associated with the specific tasks and work areas
- Necessary precautions and measures to take to work safely as a lone worker

Training will be conducted with workers that have the potential to work as a lone worker upon hire or as responsibilities or duties change making the worker a lone worker. Training will be documented.

Refresher training will be conducted as needed to ensure workers understand the requirements of this program.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Return to Work Program			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-047	Pages	4	Rev. 2.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

It is the intention of Novel Geo-Environmental, Inc. to maintain employment of an injured or ill employee by providing temporary modified work assignments following an injury or illness until a licensed health care provider (LHCP) releases them to full duty.

This Program provides opportunities for any employee who sustains a work-related injury to safely return to work while still under the care of a LHCP and not released to full duty. This Program provides opportunities for the employee to perform temporary modified work that includes restricted or alternative duties, as defined below.

Scope

This Program is applicable and available to all employees of Novel Geo-Environmental, Inc. that sustains a work-related injury or illness.

Definitions

Full Duty - Performance of all duties, tasks, and both essential and non-essential functions of the employee's regular job.

Temporary Modified Work Assignment - A temporary job assignment intended to return an injured or ill employee to work in accordance with and complying with the restrictions outlined by a LHCP until the restrictions are removed and the worker is returned to full duty status. Temporary modified work assignments will be reviewed every three months by management to determine the next best course of action.

Hosting Department – This is the department that has a temporary assignment position available but not necessarily the employee's department.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Return-to-Work Coordinator

- The Manager of Administrative Services or their designee will coordinate the Program and assist Managers and Supervisors with implementing this Program.
- This person will be responsible for communication and follow-up with both the employee's immediate supervisor and the insurance carrier.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.
- Each manager and/or supervisor will be responsible for the following:

- Ensuring that employees are working within their restrictions as defined by their treating physician.
- Identifying possible modified or alternate job duties within their respective departments.
- Ensure that the injured employee returns to work with the necessary documents from the health care provider outlining job capabilities and possible restrictions. During an incident, all documentation related to the event will be maintained by the employer.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.
- The injured employee will be responsible for providing his/her supervisor and the company return to work coordinator with the appropriate LHCP updates immediately following his/her doctor appointments. In addition, the employee will be responsible for working within his/her job restrictions as defined by their treating physician. It will be the employee's responsibility to obtain the necessary work capabilities documentation from the health care provider and to return it to their supervisor. The proper paperwork will be required after each visit to the health care provider.

Procedure

Temporary modified work assignments will be offered to injured or ill employees, whenever possible and safe to do so when the employee is unable to return to their regular duties following a workplace injury or illness. Temporary modified work assignments will comply with and be consistent with work restrictions outlined by the LHCP.

If the LHCP states that the employee cannot perform any temporary modified work assignments, Management reserves the right to challenge the decision and request independent medical information.

Physical Demands of Jobs

Major job positions will have a Physical Demands Analysis completed to determine the physical demands of the specific job position. This information will be used to determine the temporary modified work assignments that an injured or ill worker can be offered or provided. This information will be provided to a LHCP to ensure that it complies with their outlined restrictions.

Interaction with LHCP

The LHCP will be advised that the company provides temporary modified work assignments to injured and ill employees, whenever possible. The LHCP will be provided with the Physical Demands Analysis to review ensuring the physical demands can be met by the employee with restrictions outlined by the LHCP. The LHCP will sign that the temporary modified work assignment complies with the outlined work restrictions.

Host Department Responsibility

The host department Manager must sign in agreement that the temporary modified work assignments are currently and will remain in compliance with the LHCP restrictions. If not, the Manager must notify the Manager of Administrative Services so other temporary modified work assignments can be provided.

Employee Reporting Responsibilities

An employee participating in this Program must provide their supervisor with medical documentation accounting for all absences due to the injury/illness within one business day of any absence from work, or potentially face disciplinary action.

An employee who is participating in this Program is responsible for reporting to the workers' compensation carrier any employment or income earned while performing temporary modified work assignments if required by the workers' compensation carrier.

Medical Records

Medical records will be maintained by the company per applicable HIPPA laws maintaining confidentiality per applicable regulations. The records will be maintained by the Manager of Administrative Services in a separate individual medical file for each employee.

Incident-Related Documentation

All incident-related documentation will be maintained by the employer in accordance with the Incident Reporting and Investigation Procedure.

Training

Employees will be trained initially on this Program as part of the new hire orientation and periodically as needed thereafter.

Supervisors and Managers will receive additional training to support their responsibilities related to this Program.

Appendix A
PHYSICAL DEMANDS ANALYSIS

Company Name:	Department:
Origination Date:	Revision Date:
Position:	

Physical Requirements & Job Demands

Category	Frequency (% of Work Shift)			
	None (0%)	Occasional (1-25)%	Frequent (26 -74%)	Constant (75-100%)
Sitting				
Standing				
Walking				
Bending Over				
Climbing				
Reaching Overhead				
Kneeling				
Pushing or Pulling				
Lifting or Carrying				
10 lbs or Less				
11 to 25 lbs				
26 to 50 lbs				
51 to 75 lbs				
76 to 100 lbs				
Repetitive Use of Hands				
Simple / Light Grasping				
Firm / Strong Grasping				
Required to Drive a Car / Truck/ Van,etc.				
Required to Operate Heavy Equipment and/or Material Handling Equipment (i.e Forklifts, etc)				
Environmental Extremes (Hot, Cold, Loud, etc Environments)				
Personal Protective Equipment				
Hearing Protection				
Safety Glasses				
Respiratory Protection				
Protective Footwear (Steel toe)				
Other: _____				
Special Job Demands: _____				

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Rigging Safety			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-048	Pages	2	Rev. 1.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for all Novel Geo-Environmental, Inc. operations. The purpose of this Materials Handling and Rigging Program is to provide general information on rigging procedures and proper handling of materials.

Scope

The guidelines set forth in this program are applicable to material handling procedures and related operations at Novel Geo-Environmental, Inc.

Definitions

None

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

- General Procedure:
 - Purchase only equipment that is approved by the American National Standards Institute (ANSI B-30.2).
 - Follow all requirements in 29CFR1910.180 and 29CFR1926.550.
 - All rigging work is only to be done by a qualified rigger.
 - Test/Inspect equipment prior to shift or as needed or required, or contract with the installation firm or manufacturer to perform required tests/inspections.
 - Ensure operators inspect equipment daily or before each use.
 - If any defects are found remove damaged equipment immediately.
- Rigging Safety:
 - Rigging will include hooking, unhooking any attachment to the lifting device.
 - All rigging work is only to be done by a qualified rigger.
 - Check certification tag on each chain, sling, or wire rope for maximum lifting capability prior to using. Do not overload them. If there is no certification tag, do not use the chain, sling, or wire rope.

- Inspect all rigging equipment before each use. Immediately remove from service and discard defective lifting equipment.
- All crane hooks and sling hooks will have the appropriate operating safely gate/latch.
- Avoid sharp bends in slings and protect slings from sharp edges and abrasions.
- Set loads down on proper blocking—never directly on a sling.
- Attach cable clips properly. The saddle should be on the load cable, the U-bolt on the dead end.
- Never stand, walk, or work under suspended loads.
- Do not leave suspended loads unattended at any time.
- Use tag lines of sufficient length and quantity to control the lift. No knots are permitted in tag lines. Do not wrap tag lines around any part of the body.
- Do not, under any circumstances, tie knots in sling chains, rope slings, or wire cables to shorten them.
- Do not, under any circumstances, place bolts or other material between links of chain to shorten or splice it.
- Do not, under any circumstances, exceed the hoist load rating. Always check the general condition before using the hoist.
- Do not, under any circumstances, lift or hoist any object of unknown weight.
- Rigging equipment not being used in the immediate work area will be removed from the work area.

Training

Employees will be trained initially prior to assignment to work related tasks and whenever a Manager of Novel Geo-Environmental, Inc. has reason to believe the employee needs to be retrained due to observed or perceived inadequacies in the employee's knowledge or use of this procedure.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Mobile Equipment Safety			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-049	Pages	7	Rev. 1.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for work in or around all types of mobile equipment for all Novel Geo-Environmental, Inc. operations.

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. that operate mobile equipment (owned, leased, rented, or borrowed) by Novel Geo-Environmental, Inc.. This document applies to all gasoline and diesel-powered mobile equipment operated by Novel Geo-Environmental, Inc. employees.

Definitions

Competent Person is a person who by possession of a recognized degree in an applicable field or a certificate of professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated the ability to solve or resolve problems relating to the subject matter and work.

Free Moving Mobile Equipment is operator controlled mobile equipment can include Backhoes, Skid loaders, Crawler Loaders, Dozers, Excavators, and any additional Earth Moving Equipment. Mobile Equipment is propelled/powered by gasoline, propane, natural gas, or diesel used to haul, transport, excavate, and move, any earth materials.

Pre-use Inspection is a required inspection of a piece of mobile equipment completed when the company has not operated the mobile equipment for each shift.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Compliance

Any mobile equipment will comply with applicable governmental regulations or will be removed from service; or will be included in a plan per to modify or replace with mobile equipment that complies with applicable governmental regulations.

Mobile equipment permanently tagged out and not in service, will meet the applicable governmental regulations before returning to service or the mobile equipment will be replaced with mobile equipment that complies with applicable governmental regulations.

Management, or Supervisors are responsible to determine whether non-compliant mobile equipment will be modified to comply with applicable governmental regulations or replaced with mobile equipment in compliance with applicable governmental regulations.

All mobile equipment will be utilized within the specifications of the vehicle manufacturer.

Operator Qualifications

Employees authorized by Novel Geo-Environmental, Inc. are permitted to operate Novel Geo-Environmental, Inc. (owned, leased, rented, or borrowed) mobile equipment.

Safe Operation

- Mobile equipment will not be operated by an authorized employee while the employee is under the influence of drugs or alcohol.
- All mobile equipment will be operated safely and within the speed limit at all times.
- Elevated loads will not be moved or held over personnel, or close to personnel.
- Where signal persons are being used, the equipment operator will operate the equipment only on signal from the designated signal person, and then only when the signal is distinct and clearly understood.
- The operator will maintain a safe distance from other equipment and personnel so as not to create a hazard to employee safety.
- While operating mobile equipment in adverse environmental conditions slow down and use caution.
- No person will be allowed to stand or pass under the elevated portion of any truck, whether loaded or empty.
- All hands and feet will remain in the vehicle while in transit.
- Unauthorized personnel will not be permitted to ride on mobile equipment. An approved seat will be provided for each individual where riding of vehicle is authorized.
- Stunt driving and horseplay will not be permitted.
- Mobile equipment will not lift or operate with loads that exceed their rated capacities. All limits and ratings will be followed per manufacturer instruction.
- The operator will determine that no personnel are endangered before starting or moving equipment. The equipment operator will walk completely around the machine and assure that no obstacles or personnel are in the danger area before startup.
- Equipment that has an enclosed cab will not require PPE during operation. If a closed cab is not applicable then employees must wear proper PPE (Head and Eye protection) while operating.
- Seat belts will be used where available.

Equipment Requirements

- Brakes on all equipment will be capable of stopping and holding equipment which is fully loaded.
- Any equipment that is capable of travel over 15mph will have fenders on all wheels.
- Equipment will be furnished with audible alarms. The alarms will be distinguishable from the surrounding noise levels.
- All equipment will have a horn.
- All equipment that are to be operated at night will be equipped with headlights.
- Guards will be provided for exposed moving elements such as shafts, pulleys, belts, conveyors and gears.

Electrical Hazards and Overhead Lines

- When equipment is operated in the vicinity of electrical distribution lines, there will be at least 10 feet (3m) of clearance between the lines and any part of the equipment or load. If the electrical

transmission lines are rated 50kv or more, or if the rating is unknown, special precautions are necessary and the operator will stop work and notify the Supervisor.

- Table R-6 through Table R-10 should be referenced. OSHA Standard 1910.269.
- For work around electrical hazards the spotter will be trained to recognize hazards and approach distances. The spotter will provide a well-timed warning to the operator of the equipment when in proximity to overhead lines to ensure operations are not compromised.
- In any circumstance where mobile equipment may potentially come in contact with any energized lines the lines should be verified as energized or isolated. If the overhead lines are unable to be isolated further precautions may be taken to cover strike areas with an insulating material that can withstand contact by the machine.
- Employees will be trained and knowledgeable in the protection methods for overhead lines that are either isolated and locked out or energized.

Spotters

Employees designated as a spotter will be trained in the methods of spotting and equipment hazards associated with the duty. Spotters will be necessary when an operator has a limited view of travel, equipment is backing, an operator has limited space to maneuver, equipment is operated around electrical overhead lines, heavy pedestrian or vehicle/equipment traffic or any other circumstance requires additional assistance.

Spotter Safety Rules:

- Spotters and drivers must agree on hand signals before backing up.
- A spotter must always maintain visual contact with the driver while the equipment is backing.
- Operators of equipment will stop backing immediately if they lose sight of the spotter.
- Spotters will not have any additional duties while they are acting as spotters.
- Spotters will not to use personal mobile phones, personal headphones, or other items which could pose a distraction during spotting activities.
- Spotters will wear high-visibility clothing.
- Spotters will allow for sufficient stopping distances and clearances with equipment.

Inspections

- In order to keep all equipment in good mechanical repair, the Operator/driver will perform a daily inspection of the equipment and documenting the inspection on the Mobile Equipment Inspection Form.
- Critical components of any mechanical elevating and rotating will be inspected prior to each use on each shift.
- Operators perform pre-operation /use mobile equipment inspections. All mobile equipment use inspections resulting in conditions/defects that impact their safe operation are taken out of service.
- For major repairs (anticipated that repair will take more than 4 hours), notify the Supervisor of the potential mechanical problems with the equipment.
- If the equipment is not in good repair, or if the mechanic has not repaired it properly, do not drive the equipment, and report it to the Supervisor.
- Inspection records remain with the mobile equipment for the entire shift or are readily accessible, reviewed periodically and retained for a minimum of three months, or longer.

Maintenance

- Preventive maintenance such as maintaining fluid levels, tire pressures, and the general condition of the equipment is the responsibility of the Operator/Driver and are to be checked with deficiencies corrected immediately.
- Preventive maintenance such as fluid changes and repairs are the responsibility of Novel Geo-Environmental, Inc.
- Maintenance records will be supplied by the driver/Operator and maintained by the Supervisor for each piece of mobile equipment.

- Only approved vendors are authorized to perform service on mobile equipment. All personnel who perform periodic and preventative maintenance and inspections for free moving mobile equipment have received the appropriate training.
- After completing work on mobile equipment, a qualified maintenance employee or vendor conducts a pre-release inspection prior to returning the mobile equipment to operations.
- Equipment engines will be shut down and the park brake set during servicing and repairs except where operation is necessary for adjustment.
- Established select mobile equipment tagout/lockout/verification procedures.
- Operator manuals will be kept in the equipment cab.

Mobile Equipment Speeds

Maximum outside speed of 15 MPH.

Fueling

- There will be no gasoline or diesel fuel containers carried inside or attached outside of the equipment that is not installed by the manufacturer of standard equipment.
- Fuel tanks will not be filled while the engine is running.
- Do not smoke around flammables.
- Spills of oil or fuel will be contained and absorbed with proper means of a spill kit or absorbent pad.
- Replace the tank cap before restarting the engine.
- Do not climb on vehicles while refueling.
- Vehicle Fuels - All laws relating to fuel fill-up, storage, and containment are followed.

Travel-way Safety

- Provided visibility, appropriate signage and barricades, warning signals, gates, barriers, mirrors or other hazard controls for pedestrian/mobile equipment and mobile equipment/mobile equipment interfaces.
- Pedestrians have the right of way during equipment travel.

Visibility

- Use of audible alarms or other forms of devices on mobile equipment.
- A spotter is used for short distances and when, the spotter is not in any danger of being struck.
- Operators of mobile equipment are responsible for securing unstable loads before moving.
- When any view is obstructed a spotter will be used. The audible alarm and or reverse alarm will be in working order to limit hazards of being struck. The audible alarm will be above the surrounding noise level so it can be adequately heard.

Rollover Protection (ROPS)

- Back-up alarms, back-up lights, or other device, are required on all equipment with ROPS or if the equipment design limits visibility to the side or rear.
- ROPS are provided on earth moving, load, dump and haulage.
- ROPS will be installed, tested, and maintained in accordance with the Society of Automotive Engineers.

Loading and Unloading

- Only stable or safely arranged loads will be handled.
- The long or high loads which may affect capacity will be adjusted accordingly.
- All loads must be within the capacity of the manufacturer's ratings.
- Trucks equipped with attachments will be operated as partially loaded trucks when not handling the load.

Safe Equipment Operation around Workers on Foot

Separate workers on foot from equipment as much as possible:

- Schedule work tasks to keep workers on foot out of areas where heavy equipment is in use.
- Design the workspace to eliminate or decrease backing and blind spots.
- Train workers on foot and equipment operators in appropriate communication methods (e.g., using hand signals and maintaining visual contact) to be used when workers on foot are required to be in the same area as equipment.
- Train equipment operators to never move equipment without making positive visual contact with any workers on foot near the equipment.

Accident Reporting

In case of an accident, the driver is to notify the Supervisor and gather the necessary information from the other persons involved. The accident will be documented on the Vehicle Accident Report Form.

Training

Training Requirements

Employees are trained for the mobile equipment in which they will be operating. Training takes place before the employees are allowed to operate equipment. A visual verification of the operator will be documented using the Mobile Equipment Operator Certification form.

- All operating instructions, warnings and precautions for the type of trucks the operator will be authorized to operate.
- Industrial vehicle controls and instrumentation location, what they do and how they work.
- Steering and maneuvering.
- Visibility, including restrictions due to loading.
- Inspection the operator will be required to perform.
- Other operating instruction, warning or precaution listed in the operator's manual for the type of vehicle that the employee is being trained to operate.
- Workplace-related topics and operating procedures.
- Surface conditions where the vehicle will be operated.
- Pedestrian traffic areas where vehicles will be operated.
- Hazardous locations where vehicles will be operated.
- Operating limitations.
- Refueling.

Refresher or corrective training is conducted and documented when any of the following exist or as required by with local regulations, if more stringent.

- The operator was involved in an incident or observed operating in an unsafe manner.
- An evaluation reveals that the operator is not operating safely.
- The operator is assigned to a different type of mobile industrial vehicle.
- Conditions in the workplace changes in a manner that could affect the safe operation of the mobile equipment.
- Refresher training will be conducted as soon as possible when the equipment operator has been involved in an accident or near miss incident and the operator will be prohibited from operating the equipment that was the basis for the accident until successfully completing the refresher training

Operator Credentials

Novel Geo-Environmental, Inc. Management will maintain documented certification that all operators understand how to operate mobile equipment. This certification will be completed by observation criteria and training on each individual piece of equipment. The documentation will include who observed the operator, the date observed, and the specific equipment that each operator was qualified to operate using the Mobile Equipment Operator Certification form.

MOBILE EQUIPMENT INSPECTION

Operator/ Inspector: _____ Date: _____

Time: _____ Equipment Serial Number: _____

Inspection Items	Satisfactory			Commentary
	Yes	No	NA	
Hydraulic Arm				
Bucket				
Boom				
Frame				
Undercarriage				
Gears, Belts, Hoses				
Steps, Handholds				
Lights				
Wear, Damage, Cracks				
Leaks				
Loose or Missing Nuts & Bolts				
Roll Over Protection (ROPS)				
Windshield Wipers				
Fluid Levels				
Fire Extinguisher				
Mirrors				
Seat				
Seatbelt				
Horn, Back Up Alarms				
Overall Cab Interior				
Controls, Panels, Switches				
Indicators, Monitor Panel				
INSUFFICIENT INSPECTION EQUIPMENT TAGGED OUT				

Please keep this form with the vehicle for the entire shift, once the shift is complete submit this form to the Supervisor or Manager to retain for 3 months.

MOBILE EQUIPMENT OPERATOR CERTIFICATION

Employee Name _____

Observer Name _____

Date _____

Equipment	Date Observed As Certified
Backhoe	
Skid loader	
Crawler loader	
Dozer	
Excavator	
Logging equipment	

I certify that the operator is successful in the training and operator of the equipment above.

Observer Signature _____ Date _____

This form must be retained for the duration of the employment of the individual listed above.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Environmental Sustainability			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-050	Pages	2	Rev. 1.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

At Novel Geo-Environmental, Inc. sustainable, responsible behavior is a priority. By finding innovative ways to do more with less, we aim to drive sustainability efforts and build resilience into our business in order to continue positively impacting the communities in which we operate.

Scope

We are strongly committed to protecting the health and safety of our employees and to conducting our operations in an environmentally responsible manner. This statement of our policy with respect to Environmental Sustainability is applicable to our businesses nationwide.

Definitions

Environmental Sustainability - responsible interaction with the environment to avoid depletion or degradation of natural resources and allow for long-term environmental quality. The practice of environmental sustainability helps to ensure that the needs of today's population are met without jeopardizing the ability of future generations to meet their needs.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Novel Geo-Environmental, Inc. is committed to conserving natural resources through eco-efficient management strategies and continuous improvement of the environmental performance of our activities including energy and water use, waste generation and recycling, and supply chain optimization.

Novel Geo-Environmental, Inc. recognizes that climate change is a serious issue that demands attention and action from the business community.

Energy Conservation

Each jobsite and facility will develop and implement appropriate measures for energy conservation which may include, yet are not limited to, shutting down equipment when not in use, the use of energy efficient

light bulbs, using new energy efficient technology, using equipment with the ENERGY STAR mark, reduction in the use of generators and using more local electrical supply, and similar opportunities.

Water Conservation

Each jobsite and facility will develop and implement appropriate measures to conserve water through such measures as repairing on any equipment leaking water, use of a broom instead of a hose for cleaning purposes, upgrade equipment efficiency, educating employees, recycling dirty water for other applications instead of clean water, etc.

Efficient Use of Vehicles

Whenever possible, employees are responsible for the efficient use of vehicles and equipment to minimize the impact to the environment to include maintaining vehicles in good condition with up-to-date preventative maintenance, use alternative fuels when possible, reviewing trips to reduce the number of vehicles used, using the most efficient vehicles and equipment provided by the company, and vehicles should not be left idling unnecessarily.

Habitat Impact

Whenever possible, employees will work to minimize environmental impacts on the local animal or plant population and associated habitat. Planning will be conducted with the site manager prior to work beginning that may negatively impact the habitat.

Waste Management

An efficient material use and management system will be used as much as is possible to reduce the impact on the environment by limiting the amount of materials that are used, left over as waste or transported offsite for disposal.

Purchasing

Management will emphasise purchasing products with minimal impact on the environment when available. Management will consider the impact a product has on the environment before purchasing. Preference will be given to products that minimally impact the environment, made of recycled materials, renewable materials, or is energy-efficient. Local purchasing is encouraged as this may reduce the amount of emissions and fuel used as compared to purchasing involving direct shipment from more distant locations.

Recycling

Each jobsite and facility will develop measures for recycling such as recycling paper, cardboard, fluids, plastics, tires, engine oil, treat or recycle solvents, etc.

Greenhouse Gas Emissions

Each jobsite and facility will implement procedures necessary to protect the climate to include limiting the amount of greenhouse gases by use of low-emission technologies, driving less or carpooling, and use of renewable energy. Site managers are responsible to reduce greenhouse gas emissions and fuel consumption, decrease wasted expenditures in fuel and maintenance and improve efficiency.

Novel Geo-Environmental, Inc. acknowledges that achieving our goals and objectives will require many changes to be made over time. However, we strongly believe that our sustainability efforts serve the interests of both current and future generations and constitute the foundation for long-lasting success.

Training

All employees will be made aware of this policy and the associated environmental sustainability efforts and asked for their input for additional methods to protect the environment while we conduct our work.

Novel Geo-Environmental, Inc. will train our employees to conduct their activities in a safe and environmentally responsible manner prior to engaging in their work tasks,

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Manual Materials Handling			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-051	Pages	2	Rev. 1.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for safe manual materials handling for the safety of the workers and the materials being lifted.

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. that during normal operations would require manual materials handling tasks such as lifting, pushing, pulling, lowering, or raising.

Definitions

None

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.
- NGE management will provide all necessary manual lifting equipment and other engineering controls for the employees.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.
- Employee will utilize all necessary manual lifting equipment when possible. If not possible, two-person lifts will be performed.

Procedure

Hazard Assessment

A hazard assessment will be conducted to determine the hazards and appropriate controls measures associated with the manual materials handling task. The Job Safety Analysis may be used as the hazard assessment.

The Site Manager or Supervisors will periodically evaluate current work tasks, techniques, and work areas for potential hazards and for implementing the necessary controls to prevent injuries. New operations will be evaluated to engineer out hazards before work processes are implemented.

Manual Lifting

Employees will not try to lift more than they can handle safely. Consider the size, shape and weight of the load to be manually handled. Large, oversized, awkward sized, or loads, generally, over 50 pounds should not be lifted without assistance from a co-worker or mechanical means such as cranes, dolly, pallet jack, or forklift. Ask for assistance to lift if needed.

When pre-planning the task, keep the loads or objects to be lifted manually at a height of between the knees and the shoulders of the worker doing the lifting, whenever possible. Workers should avoid lifting and bending, whenever possible, while lifting or carrying a load. Check the intended route of travel prior to lifting looking for slipping or tripping hazards and for the most efficient path of travel. If items are in the immediate path, move them prior to lifting and traveling in the path.

The use of mechanical devices, such as cranes, hoists, lift tables, and other lift-assist devices whenever possible is recommended. These mechanical devices as well as other such engineering controls will be provided to employees by the employer.

Proper Lifting Guidelines to Avoid Musculoskeletal Injuries

1. Take a balanced stance with your feet about a shoulder-width apart. One foot can be behind the object and the other next to it.
2. Squat down to lift the object, but keep your heels off the floor. Get as close to the object as you can.
3. Use your palms (not just your fingers) to get a secure grip.
4. Lift gradually (without jerking) using your legs, and keeping the load as close to you as possible. Keep your chin tucked in so as to keep your back straight.
5. Once you are standing, change directions by pointing your feet in the direction you want to go and turning your whole body. Turn using feet, not twisting at the waist.
6. When you put a load down, use these same guidelines in reverse.

Injuries caused by improper lifting will be investigated and documented following the provisions of NGE-HSE-023 Incident Investigations. Corrective Actions will be incorporated into work procedures to prevent future incidents.

Training

Employees having the potential to be involved in tasks involving manual handling of materials will be trained on this procedure so that when completed, the employees will be able to manually handle materials in a safe way. Employees will receive training on this procedure upon hiring or upon initial assignment and then annually thereafter. Training will also include general principals of ergonomics, recognition of hazards and injuries, procedures for reporting unsafe conditions and methods and procedures for early reporting of injuries.

Additional training will be provided when new tasks, tools, or equipment is introduced that presents a new hazard associated with manual material handling. Refresher training may be provided, if necessary, after an injury or near-miss incident. Training will be documented with the name and signature of the Trainer, a list of topics covered, date of the training and the name and signature of attendees.

References

NGE-HSE-023 Incident Investigations

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Preventive Maintenance			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-052	Pages	2	Rev. 1.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for performing preventive maintenance on all vehicles and motorized equipment owned or leased as part of company operations.

Scope

This procedure is applicable to all vehicles and motorized equipment owned or leased by Novel Geo-Environmental, Inc. Examples include, yet are not limited to, trucks regardless of size, cranes, trailers, excavating equipment, compressors, generators, and pumps.

Definitions

None

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Equipment Inventory

A current list of vehicles, motorized equipment, and mechanical equipment is maintained. As vehicles, motorized equipment, and mechanical equipment is acquired it is added to the inventory so to keep the inventory current. The inventory, at a minimum, maintains the following information:

- Description
- Make
- Model
- Serial Number
- Next Scheduled PM Date

Preventive Maintenance Schedule

For each vehicle, motorized equipment, and mechanical equipment a preventive maintenance schedule will be established per the manufacturer's requirements and taking into consideration any regulatory requirements.

Maintenance Records

All preventive maintenance and/or scheduled maintenance will be documented on the individual equipment maintenance record. All records will be maintained for a minimum of three years or per regulatory requirements, whichever is longer.

Repairs

Inspections will be performed on vehicles, motorized equipment, and mechanical equipment per the manufacturer's recommendations or per specific company procedures. Any vehicle, motorized equipment, and mechanical equipment that is found to be defective, not operating or operating correctly, or is otherwise unsafe to operate, it will be removed from service until such time it is repaired and made safe to operate. All records of repairs will be maintained for a minimum of three years or per regulatory requirements, whichever is longer.

Responsibility

The Maintenance Manager or a company officer is responsible to ensure:

- That the inventory is maintained and current
- That preventive maintenance is performed as required by the manufacturer
- All equipment is in good working order and safe condition

Training

Applicable employees will be trained on this policy initially, prior to job assignment.

References

None

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Powered Industrial Trucks			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-053	Pages	9	Rev. 1.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for inspection, operation, and maintenance of forklifts (powered industrial trucks) for all Novel Geo-Environmental, Inc. operations.

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. that operate forklifts as a routine task. This Procedure applies to all powered industrial trucks, forklifts, from pallet jacks to all-terrain forklifts. This procedure does not apply to other equipment such as a skid-steer loaders with fork attachments or a front loader with fork attachments.

Definitions

None

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

General Requirements

- Only Novel Geo-Environmental, Inc. certified Operators will operate forklifts for which they are specifically trained.
- Forklifts will not be modified to increase capacity without documented permission from the equipment manufacturer.
- Forklifts will have an overhead guard to help protect the operator from falling objects.
- The forklift will be kept in a clean condition, free of oil and grease.
- Non-combustible solvents/agents will be used to clean the forklift.
- The manufacturer's specified limits will be strictly followed when using the equipment. The equipment will not be used for any operation other than its intended purpose.
- Before placing equipment back into service, ensure that all associated guards and safety devices are operational.
- Horseplay and stunt driving is not permitted while using the forklift.
- The forklift will not be driven up to anyone standing in front of a fixed object.
- Employees will not stand or pass under elevated forks.

- Only the operator will be on the forklift during operations.
- Employees will not ride on the forks.
- Employees will not be lifted on the forks or on a pallet on the forks.
- The operator will not place any part of their bodies outside the vehicle or between the uprights where shear or crushing hazards exist.
- Unattended forklifts will have the brake set, the controls in neutral, the forks fully lowered and the power shut off.
- The forklift will not be fueled while the engine is running.
- Forklifts will not be operated in a hazardous atmosphere.
- Always inspect the area and route of travel and remove hazards prior to traveling the route. Ensure that the clearances are adequate.
- Trailers to be loaded or unloaded must be chocked on both sides, trailer jacks properly placed, and secured against moving prior to any forklift entering the trailer.

Traveling

- Grades will be ascended and descended slowly.
- When ascending and descending grades in excess of 10% loaded forklifts should be driven with the load upgrade.
- Running over loose objects on the roadway should be avoided.
- Speed will be slow enough to safely negotiate turns and stops.
- Always carry the forks, loaded or unloaded, as low as possible.
- Repair and maintenance operations must be in compliance with Lockout-Tagout procedures.

Inspections

- Forklifts (powered industrial trucks) will be inspected prior to use on a daily basis by the Operator documenting the daily inspection on the Forklift Inspection Form, Appendix A.
- Where forklifts are used on a round-the-clock basis, they will be inspected by the Operator before the first use of the shift.
- The forklift will be taken out of service if it is unsafe, defective or in need of repair and reported to the Supervisor/Foreman.
- If at any time a forklift (powered industrial truck) is found to be in need of repair, defective, or in any way unsafe, the truck will be taken out of service until it has been restored to safe operating condition.

Training

Operator Training

- Employees will be trained initially prior to assignment to tasks requiring the operation of a forklift.
- Employees being trained to operate forklifts (powered industrial truck) will operate it only under the direct supervision of persons who have the knowledge, training, and experience to train operators and evaluate their competence and where such operation does not endanger the trainee or other employees.
- Training will consist of a combination of formal instruction, practical training, and an evaluation of the operator's performance in the workplace.
- Training will include truck-related topics and workplace-related topics according 29CFR1910.178(l)(3)(i)(A) through 1910.178(l)(3)(iii)
- To avoid the duplication of training received by an Operator, if an Operator has previously received training appropriate to the truck and working conditions encountered, additional training is not required. The Operator will be evaluated to be certified as an Operator.

Operator Certification

- Operators will be trained and evaluated initially upon hire or assignment to be certified by Novel Geo-Environmental, Inc. as a forklift (powered industrial truck) Operator.
- The certification will include the name of the operator, the date of the training, the date of the evaluation, and the identity of the person(s) performing the training or evaluation. This certification can be a certificate or a card.
- An evaluation of each Operator's performance will be conducted at least once every three years to maintain certification.

Refresher Training

- Refresher training will be conducted to ensure that the operator has the knowledge and skills needed to operate the powered industrial truck safely. Refresher training in relevant topics will be provided to the operator when:
 - The operator has been observed to operate the vehicle in an unsafe manner;
 - The operator has been involved in an accident or near-miss incident;
 - The operator has received an evaluation that reveals that the operator is not operating the truck safely;
 - The operator is assigned to drive a different type of truck; or
 - A condition in the workplace changes in a manner that could affect safe operation of the truck.

References

OSHA Regulation

29CFR1910.178

29CFR1926.602(d)

Pre-use INSPECTION FORM

(Complete Before the Start of Each Shift)

DATE		SHIFT		OPERATOR	
TRUCK NUMBER			HOUR METER START		

CHECK ANY DEFECTIVE ITEM WITH AN X AND GIVE DETAILS BELOW. DO NOT OPERATE IF ANY ITEM CHECKED WITH AN "X"

	ACCELERATOR		HOUR METER
	ALARMS		HYDRAULIC CONTROLS
	BATTERY CONNECTOR		LIGHTS - HEAD AND TAIL
	BATTERY - DISCHARGE INDICATOR		LIGHTS - WARNING
	BELTS		MAST
	BRAKES – PARKING		OIL LEAKS
	BRAKES – SERVICE		OIL PRESSURE
	CABLES		OVERHEAD GUARD
	ENGINE OIL LEVEL		RADIATOR LEVEL
	FORKS		SAFETY EQUIPMENT
	FUEL LEVEL		STEERING
	GAUGES		TIRES
	HORN		UNUSUAL NOISES
	HOSES		OTHER

DETAILS:

NGE Operator EVALUATION FORM (Circle one: **Initial Certification** **Re-certification**)

OPERATOR:	EVALUATOR:
EVALUATION DATE	DATE OF <u>PREVIOUS</u> EVALUATION:
LOCATION:	

Select all that apply:	ASME B56.1 Classes	Description
	1	Electric motor, sit-down rider, counter-balanced trucks (solid and pneumatic tires)
	2	Electric motor narrow aisle truck (solid tires)
	3	Electric motor hand truck or hand/rider truck (solid tires)
	4	Internal combustion engine truck (solid tires) Select fuel source: propane diesel gasoline
	5	Internal combustion engine truck (pneumatic tires) Select fuel source: propane diesel gasoline
	Other	

PRE-USE INSPECTION

ITEM		PASS / FAIL	COMMENTS
1.	Follows the Daily Inspection Checklist	☐ Pass ☐ Fail	
2.	Look for Damage/Defects	☐ Pass ☐ Fail	
3.	Document all Findings on the Checklist	☐ Pass ☐ Fail	
4.	Understands Protocol for Reporting Defects When Found	☐ Pass ☐ Fail ☐ N/A	

PICKING UP A LOAD

ITEM		PASS / FAIL	COMMENTS
5.	Check the capacity plate to verify capacity of the forklift prior to use	☐ Pass ☐ Fail	
6.	Squares up on the center of the load	☐ Pass ☐ Fail	
7.	Stop with the Fork Tips About 1 Foot from the Load	☐ Pass ☐ Fail	
8.	Adjusts the Forks to the Width of the Load if Necessary	☐ Pass ☐ Fail ☐ N/A	
9.	Ensures the weight of the load is within the PIT's safe lifting capacity	☐ Pass ☐ Fail	
10.	Ensures that the load is stable	☐ Pass ☐ Fail	
11.	Clears personnel from the area near the load	☐ Pass ☐ Fail ☐ N/A	
12.	Levels the forks; then slowly drives forward until the load contacts the carriage	☐ Pass ☐ Fail	
13.	Lift the load carefully and smoothly until it is clear	☐ Pass ☐ Fail	

14.	Tilt the mast back slightly to stabilize the load	☐ Pass ☐ Fail	
15.	Looks Behind and Around the Truck to Ensure That it is Safe to Back Up.	☐ Pass ☐ Fail	
16.	After the Load is Clear, the Operator Stops to Lower the Load to Travel Height	☐ Pass ☐ Fail	
TRAVELING			
ITEM		PASS / FAIL	COMMENTS
17.	Drives With the Forks as Close to the Ground as Possible	☐ Pass ☐ Fail	
18.	Drives in Reverse When the Load Obstructs View	☐ Pass ☐ Fail ☐ N/A	
19.	Does Not Raise or Lower the Load and Forks While Traveling	☐ Pass ☐ Fail	
20.	Drives at Safe Speeds	☐ Pass ☐ Fail	
21.	Turns and Maneuvers Corners Smoothly and at a Safe Speed	☐ Pass ☐ Fail	
22.	Starts, Stops and Operates Controls Smoothly	☐ Pass ☐ Fail	
23.	Observes All Traffic Rules, Warning Signs, Floor Load Limits and Overhead Clearances	☐ Pass ☐ Fail	
24.	Slow Down/Stops and Sounds the Horn at Cross Aisles and Other Locations Where Vision is Obstructed	☐ Pass ☐ Fail	
25.	Does Not Pass Other Trucks Traveling in the Same Direction at Intersections, Blind Spots or Other Dangerous Locations;	☐ Pass ☐ Fail ☐ N/A	
26.	Follows Other Vehicles at a Safe Distance	☐ Pass ☐ Fail ☐ N/A	
27.	Travels With All Body Parts Inside the Cab of the Truck	☐ Pass ☐ Fail	
28.	Travels With the Load Facing Uphill While on a Ramp or Incline (Also Applies When Not Carrying a Load)	☐ Pass ☐ Fail ☐ N/A	
29.	Drives Straight Up/Down While on a Ramp or Incline and Does Not Turn	☐ Pass ☐ Fail ☐ N/A	
30.	Maintains a Safe Distance From the Edge of Ramps or Platforms	☐ Pass ☐ Fail ☐ N/A	
SETTING DOWN A LOAD			
ITEM		PASS / FAIL	COMMENTS

31.	Makes Sure There is Sufficient Clearance for the Load	☐ Pass ☐ Fail	
32.	Clears Personnel From the Area Near the Load	☐ Pass ☐ Fail ☐ N/A	
33.	Squares Up to the Location; Then Stops About 1 Foot Away	☐ Pass ☐ Fail	
34.	Raises the Load to Placement Level. Forks Should Not be Raised or Lowered While Truck is Moving	☐ Pass ☐ Fail	
35.	Moves the Load Slowly Forward Into Position	☐ Pass ☐ Fail	
36.	If Load is on a Pallet, the Operator Lowers it into Position and Lowers the Forks Further to Pull Out	☐ Pass ☐ Fail ☐ N/A	
37.	If Stacking Materials, the Stack is Steady and Secure	☐ Pass ☐ Fail ☐ N/A	
38.	Looks Behind and Around the Truck to Ensure That it is Safe to Back Up.	☐ Pass ☐ Fail	
39.	Backs Straight Out Until the Forks Have Cleared and Stops to Lower Forks to Traveling Position Before Proceeding.	☐ Pass ☐ Fail	

TRUCKS AND TRAILERS

ITEM		PASS / FAIL	COMMENTS
40.	Operator Verifies That the Brakes on the Highway Truck is set and Wheel Chocks Are in Place Under the Rear Wheels of the Trailer	☐ Pass ☐ Fail ☐ N/A	
41.	If the Trailer is Not Attached to the Tractor, Appropriate Trailer Supports Must be Installed Under the Front of the Trailer to Prevent Up-Ending	☐ Pass ☐ Fail ☐ N/A	
42.	Before Entering a Trailer, the Operator Inspects the Floor for Holes, Corrosion/Rotting or Other Hazards;	☐ Pass ☐ Fail ☐ N/A	
43.	Operator Ensures that the Dock Plate is Securely in Place before Entering the Trailer	☐ Pass ☐ Fail ☐ N/A	
44.	Operator Enters and Exits the Trailer Slowly and Cautiously, Watching For Pedestrians and Other Equipment.	☐ Pass ☐ Fail ☐ N/A	

PARKING			
ITEM		PASS / FAIL	COMMENTS
45.	Fully Lowers the Forks	☐ Pass ☐ Fail	
46.	Neutralizes the Controls	☐ Pass ☐ Fail	
47.	Sets the Brakes	☐ Pass ☐ Fail	
48.	Turns Off the Power	☐ Pass ☐ Fail	
49.	If Parked on an Incline, Blocks the Wheels	☐ Pass ☐ Fail ☐ N/A	
50.	Parks Only in Safe/Authorized Areas	☐ Pass ☐ Fail	
REFUELING			
ITEM		PASS / FAIL	COMMENTS
51.	Refueling Performed in a Properly Ventilated Area	☐ Pass ☐ Fail ☐ N/A	
52.	Proper PPE Worn	☐ Pass ☐ Fail ☐ N/A	
53.	Smoking, Open Flame, or Other Ignition Sources Kept Away	☐ Pass ☐ Fail ☐ N/A	
54.	Before Replacing LP Gas Tank, Operator Closes the Shut Off Valve and Lets the Engine Run Until it Stalls.	☐ Pass ☐ Fail ☐ N/A	
55.	Turns Off the Engine and any Lights That May be Burning on the Lift Truck.	☐ Pass ☐ Fail ☐ N/A	
56.	Disconnects the Empty LP Tank and Secures the Full Tank.	☐ Pass ☐ Fail ☐ N/A	
57.	Checks for damage to connections, then opens valve and checks for leaks before re-starting the engine.	☐ Pass ☐ Fail ☐ N/A	
58.	Checks battery levels	☐ Pass ☐ Fail ☐ N/A	
57.	Performs battery maintenance in well-ventilated area	☐ Pass ☐ Fail ☐ N/A	
		☐ Pass ☐ Fail ☐ N/A	
		☐ Pass ☐ Fail ☐ N/A	

OVERALL EVALUATION:

☐ Pass ☐ Fail ☐ Probation period

ADDITIONAL NOTES / COMMENTS

OPERATOR SIGNATURE: _____

EVALUATOR SIGNATURE: _____

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Silica Exposure Control Plan			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-054	Pages	6	Rev. 2.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for establishing safe working conditions in operations using sand materials that can result in worker inhalation of small respirable crystalline silica particles from the air.

Scope

This program is applicable to all employees of Novel Geo-Environmental, Inc. that may work in locations and operations with the potential for exposure to Crystalline Silica.

Definitions

Permissible Exposure Limit (PEL) - limits worker exposures to 50 µg/m³ of respirable crystalline silica averaged over an eight-hour day.

Action level - an airborne concentration of 25 µg/m³ calculated as an 8-hour TWA. Exposures at or above the action level trigger requirements for exposure assessment.

Competent person - an individual who is capable of identifying existing and foreseeable respirable crystalline silica hazards in the workplace and who has the authorization to take prompt corrective measures to eliminate or minimize them. The competent person must have the knowledge and ability necessary to implement the written exposure control plan required under the standard.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.
- Ensuring that the materials (e.g., tools, equipment, personal protective equipment) and other resources (i.e., worker training materials) required to fully implement and maintain this exposure control plan are readily available where and when they are required.
- Ensure that employee exposure is controlled to below the PEL.
- Providing a job-specific exposure control plan for each project, which outlines in detail the work methods and practices that will be followed on each site. Considerations will include:
 - Availability and delivery of all required tools/equipment.
 - Scope and nature of work to be conducted.
 - Control methods to be used and level of respiratory protection required.
 - Conducting a periodic review of the effectiveness of the exposure control plan. This would include a review of the available dust-control technologies to ensure these are selected and used when practical.
 - Ensuring supervisors and workers are educated and trained to an acceptable level of competency.
 - Maintaining records of training, fit-test results, crew talks and inspections (equipment, PPE, work methods/practices).
 - Coordinating the work with the prime contractor and other employers to ensure a safe work environment.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.
- Selecting, implementing and documenting the appropriate site-specific control measures
- Providing adequate instruction to workers on the hazards of working with silica-containing materials (e.g., concrete) and on the precautions specified in the job-specific plan covering hazards at the location
- Directing the work in a manner that ensures the risk to workers is minimized and adequately controlled
- Communicating with the prime contractor and other sub-contractors to ensure a safe work environment

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.
- Knowing the hazards of silica dust exposure
- Using the assigned protective equipment in an effective and safe manner
- Setting up the operation in accordance with the control measures in the site-specific plan
- Following established work procedures as directed by the supervisor
- Reporting any unsafe conditions or acts to the supervisor
- Knowing how and when to report exposure incidents

Procedure

Silica Properties:

Silica is the second most common mineral on earth and makes up nearly all of what we call “sand” and “rock”. Silica exists in many forms-one of these, “crystalline” silica (including quartz), is the most abundant and poses the greatest concern for human health. Some common materials that contain silica include:

- a) Rock and sand
- b) Topsoil and fill
- c) Concrete, cement and mortar
- d) Masonry, brick and tile
- e) Granite, sandstone and slate
- f) Asphalt (containing rock and stone)
- g) Fibrous-cement board containing silica

Silica is a primary component of many common construction materials, and silica-containing dust can be generated during many construction activities, including:

- a) Abrasive blasting (e.g., of concrete structures)
- b) Jackhammering, chipping or drilling rock or concrete
- c) Cutting brick or tiles
- d) Sawing or grinding concrete
- e) Tuck point grinding
- f) Road construction
- g) Loading, hauling and dumping gravel
- h) Demolition of structures containing concrete
- i) Sweeping concrete dust

Unprotected workers performing these activities, or working in the vicinity, can be exposed to harmful levels of airborne silica.

Health Hazards:

Exposure to silica has been shown to cause silicosis, lung cancer, pulmonary tuberculosis, and other airway diseases. Crystalline silica dust can cause a disabling, sometimes fatal disease called silicosis.

The fine particles are deposited in the lungs, causing thickening and scarring of the lung tissue. The scar tissue restricts the lungs' ability to extract oxygen from the air. This damage is permanent, but symptoms of the disease may not appear for many years.

A worker may develop any of three types of silicosis, depending on the concentrations of silica dust and the duration of exposure:

- Chronic silicosis – develops after 10 or more years of exposure to crystalline silica at relatively low concentrations
- Accelerated silicosis – develops 5 to 10 years after initial exposure to crystalline silica at high concentrations
- Acute silicosis – develops within a few weeks, or 4 to 5 years, after exposure to very high concentrations of crystalline silica

Initially, workers with silicosis may have no symptoms; however, as the disease progresses, a worker may experience:

- Shortness of breath
- Severe cough
- Weakness

These symptoms can worsen over time and lead to death. Exposure to silica has also been linked to other diseases, including bronchitis, tuberculosis, and lung cancer.

Exposure Control Plan:

Novel Geo-Environmental, Inc. has an Exposure Control Plan for the storage, handling, use and disposal of silica if there is potential for exposure. The Exposure Control Plan includes measures to limiting employee exposure to respirable crystalline silica. Specified exposure control methods such as ventilation or wet methods will be used to control silica-containing dusts.

Risk Identification:

A key step in developing a silica exposure control plan is to identify the work activities that would put workers at risk of exposure.

- Work activities that may generate airborne silica dust with the route of exposure through the inhalation of airborne dust. A competent person will review the planned work activities to identify those that may generate airborne silica.
- Identify workers at risk of exposure – For example, workers who drill/cut through concrete would be at greater risk of exposure.

Control Methods:

Effective control options must be used to eliminate or reduce the risk to workers from the hazards of silica dust exposure. The following hierarchy of control measures will be followed:

- Engineering controls (e.g., water, local exhaust ventilation, enclosure)
- Administrative controls (e.g., coordination of tasks with subcontractors, signage)
- The use of proper PPE such as gloves, coveralls and eye protection when exposed to silica. Personal protective equipment such as gloves, coveralls and eye protection will be used to control silica exposures.

Geo-Technical Drilling Rigs

Novel Geo-Environmental, Inc. will follow the Specified Exposure Controls listed in Table 1 of 29 CFR 1926.1153. NGE will fully and properly implement protections for the tasks or equipment listed in Table 1 section ix of the standard regarding "vehicle-mounted drilling rigs for rock and concrete". Per 29 CFR 1926.1153, employers who fully and properly implement the controls in Table 1 do not have to assess employees' silica exposure levels or keep employee exposures at or below the permissible exposure limit (PEL).

The following controls are specified in Table 1 for operations involving vehicle-mounted drilling rigs for rock and concrete when silica exposure may occur due to drilling through concrete or other silica containing materials:

- Use dust collection system with close capture hood or shroud around drill bit with a low-flow water spray to wet the dust at the discharge point from the dust collector OR
- Operate from within an enclosed cab and use water for dust suppression on drill bit.
- Respiratory Protection is not required per Table 1 regardless of task duration.
- Medical Surveillance is not required as NGE employees will not be wearing respirators for more than 30 days or more per year. If it were required it would be a no expense to the employee.
- NGE shall make and maintain an accurate record of all exposure measurements taken to assess employee exposure to respirable crystalline silica, all objective data relied upon to comply with the requirements, accurate records for each employee covered by medical surveillance.

Vehicle-mounted rock and concrete drilling rigs should be equipped with a dust collection system with a close capture hood or shroud around the drill bit, and a low-flow water spray to wet the dust discharged from the dust collector. This combination of local exhaust ventilation (LEV) and water application controls dust at all emission points that can contribute to the operator's and other employees' exposures.

Employers also have the option to have the drill operator work within an enclosed cab and, when necessary, apply water at the drill bit, as described above, to reduce exposures to other employees in the area.

Full and proper implementation of dust collection systems on vehicle-mounted drilling rigs requires the employer to ensure that:

- The shroud or hood is intact and installed in accordance with the manufacturer's instructions;
- The hose connecting the tool to the vacuum is intact and without kinks or tight bends;
- The filter(s) on the vacuum are cleaned or changed in accordance with the manufacturer's instructions; and
- The dust collection bags are emptied to avoid overfilling.

Full and proper implementation of water controls on vehicle-mounted drilling rigs requires the employer to ensure that:

- An adequate supply of water for dust suppression is used;
- The spray nozzles are working properly and produce a pattern that applies water on the discharge point from the dust collector;
- The spray nozzles are not clogged or damaged; and
- All hoses and connections are intact.

When working in cold temperatures, where there is a risk of water freezing, additional work practices such as insulating drums, wrapping drums with gutter heat tape or adding environmentally-friendly antifreeze additives to water may be needed.

The controls for enclosed cabs lower the potential for dust to be re-suspended inside the cab or enter the enclosed cab or booth. They also ensure that the filtered air provided to the employee does not contain silica particles and that the working conditions in the cab are comfortable so that employees are less likely to open windows and be exposed.

Concrete Batch Plant Quality Operations

Novel Geo-Environmental, Inc. will follow 29 CFR 1910.1053 for the assessment, control, monitoring and communication of the potential for silica exposure while performing concrete batch plant quality operations.

Housekeeping:

The Competent person will ensure the following housekeeping control measures are conducted:

- Good housekeeping work practices (for example, use vacuums with high-efficiency particulate air (HEPA) filters, or use wet sweeping).
- Wet slurry will be cleaned from work surfaces when the work is completed, using a wet vacuum or wet sweeping method.
- Do not use dry brushing, sweeping or compressed air for housekeeping methods.

Work Area Access

The Competent person will ensure the following work area access control measures are followed:

- Restricting or isolating the work activity with barriers or full enclosures. Barriers may be simple hazard-flagging ribbon or more restrictive boarding.
- Warning signs will be posted to warn workers about the hazards of silica and to specify any protection that is required.
- Work that generates silica dust will be conducted only when access to the work area by other unprotected workers can be restricted.
- NGE employee access will also be restricted, when needed, for exposures generated by another employer or self-employed person.

Enclosed Cabs

Enclosed cabs or booths are specified for rock drilling, crushers, and heavy equipment. The Competent person must ensure that the enclosed cab or booth is:

- Maintained as free as practicable from settled dust;
- Has door seals and closing mechanisms that work properly;
- Has gaskets and seals that are in good condition and work properly;
- Is under positive pressure maintained through continuous delivery of filtered air;
- Has intake air that is filtered through a pre-filter that is 95% efficient in the 0.3-10.0 μm range (e.g., MERV-16 or better); and
- Has heating and cooling capabilities.

Training

A worker who may be exposed to silica is to be informed of the health hazards associated with exposure to that substance, is informed of measurements made of airborne concentrations of harmful substances at the work site, and is trained in procedures developed by NGE to minimize the worker's exposure.

Training is required prior to using silica-containing materials or working in an environment known to contain airborne concentrations of Silica. Refresher training will be provided as often as necessary to ensure that employees know and understand respirable crystalline silica hazards and the protections available in their workplace or at least annually. We will train all silica dust in the following:

- Hazards associated with exposure to silica dust
- The risks of exposure to silica
- Signs and symptoms of silica disease
- Safe work procedures to be followed (e.g., setup of enclosures, disposal of silica waste, personal decontamination)
- Use of applicable PPE
- Use of control systems (e.g., LEV and wet methods)
- How to seek first aid (for example, the location and use of eyewash stations)
- How to report an exposure to silica dust

This silica exposure control plan is available to be viewed or copied by each employee covered by the standard, their designated representative, and representatives from OSHA or NIOSH, upon request.

References

29 CFR 1926.1153

29 CFR 1910.1053

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Asbestos Awareness			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-055	Pages	3	Rev. 1.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

The purpose of this program is to provide basic precautions and protections for employees to avoid exposure to asbestos containing material (ACM) or presumed asbestos containing material (PACM) on Novel Geo-Environmental, Inc. jobsites.

Scope

This procedure applies to all employees of Novel Geo-Environmental, Inc.

Definitions

Asbestos – an incombustible, chemical-resistant, fibrous mineral used for fireproofing, electrical insulation, building materials, brake linings, and chemical filters.

Asbestos containing material (ACM) – any material containing more than 1% asbestos.

- Friable Asbestos - used for fireproofing, insulation, or sound proofing are considered to be friable, and they readily release airborne fibers if disturbed.
- Non- friable Asbestos - vinyl-asbestos floor tile or roofing felts are considered non-friable and generally do not emit airborne fibers unless subjected to sanding or sawing operations.
- **Class I -Asbestos work** - Activities involving the removal of thermal system insulation (TSI) and surfacing asbestos containing material.
- **Class II - Asbestos work** - Activities involving the removal of ACM that is not TSI or surfacing material. This includes removal of asbestos-containing gaskets, packing, wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.
- **Class III - Asbestos work** - Includes repair and maintenance operations where ACM, including TSI and surfacing material, is likely to be disturbed to the extent that renders ACM friable or generates visible debris. Class III asbestos work is limited to cutting away small amounts of ACM, no greater than the amount which can be contained in one standard sized glove bag or waste bag in order to access a building component. In no event will the amount of disturbed ACM exceed that which can be contained in one glove bag or waste bag measuring 60 inches in length and width.
- **Class IV - Asbestos work** - Includes custodial activities during which employees are involved in clean-up activities of waste and debris containing asbestos containing material.
- **Competent Person** - A designated employee who has the authority to take prompt corrective actions and has received training and certification equivalent to the EPA's Model Accreditation Plan and equivalent training as conducted by the National Asbestos Center, at the manager or supervisor level, and thereby is knowledgeable in:
 - Identifying asbestos hazards in the workplace.
 - Selecting appropriate control strategies for asbestos exposure.
 - The contents of the OSHA asbestos regulations.
 - Work practices for safe asbestos removal/clean-up.
- **Presumed asbestos containing material (PACM)** – thermal insulation and surfacing material found in buildings constructed no later than 1980.
- **Surfacing material** – material that is sprayed, troweled-on or otherwise applied to surfaces (such as acoustical plaster on ceilings and fireproofing materials on structural members or other materials on surfaces for acoustical, fireproofing and other purposes).

- *Thermal system insulation* – ACM applied to pipes, fittings, boilers, breeching, tanks, ducts or other structural components to prevent heat loss or gain.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy. Management will ensure that the following program will be enforced and provided to all employees.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Health Effects

Exposure to asbestos has been shown to cause lung cancer, asbestosis, mesothelioma, and cancer of the stomach and colon. Fibrotic Scarring of the lung tissue

General

Novel Geo-Environmental, Inc. employees will not work or otherwise handle asbestos containing material designated as Class I, III, IV work. Class II work is limited to removal of asbestos containing gaskets and packing materials.

Where surfacing material or insulation is present, must be confirmed non-asbestos before employees disturb that material.

Where surfacing material or insulation cannot be confirmed non-asbestos, the material must be tested, and where necessary abated, before employees are permitted to work.

Signs will be posted and employees will abide warning signs and labels and will not disturb the Asbestos Containing Material.

Asbestos Exposure Control

- Asbestos exposure controls are designed to eliminate or minimize an employee's exposure to airborne asbestos fibers through the use of work practices and engineering controls.
- Prior to initiating any asbestos work the Competent Person must perform an asbestos exposure assessment.
- Subsequent to the exposure assessment, the engineering controls and work practices to be employed will be identified.
- Prior to commencement of work, the affected employees will be briefed on the engineering controls and work practices designed for the asbestos work. This briefing will be documented and maintained with the job documentation.

Personnel Air Monitoring

- Air sampling will be performed during asbestos work and the results provided to the Competent Person.
- Affected employees and/or their designated representatives are to be provided the opportunity to observe asbestos exposure monitoring.
- Air sampling analysis will be performed by an American Industrial Hygiene Association (AIHA) accredited laboratory.

- If personnel monitoring is considered necessary during the asbestos exposure assessment, in an effort to verify exposures would be maintained below the PEL/excursion limit, respiratory protection will be utilized until such time that sufficient sampling results verify that respiratory protection is not required.
- The number of samples necessary to be considered "representative" is dependent upon many factors and must be determined in consultation with the Manager, certified Industrial Hygienist consultant, or air sampling professional.
- Affected employees will be notified of monitoring results, which represent the employee's exposure, as soon as possible following receipt of the monitoring results.
- Employees will be notified in writing either individually or by posting at a centrally located place that is accessible to affected employees.
- Once representative sampling indicates that exposure levels for that particular activity are consistently below the OSHA established permissible limit and/or excursion limit, the requirement for respiratory protection may be waived.
- It is imperative that accurate personnel air sampling records are maintained in order to justify any relaxation of respiratory protection requirements.
- Results of air sampling data must be maintained in the asbestos job documentation.

Medical Surveillance Program

All employees who for a combined total of 30 or more days per year are engaged in Class II asbestos work or who are exposed at or above the permissible exposure limit for a combined 30 days or more per year will be included in the medical surveillance program.

Note: For purposes of this requirement, any day in which an employee is engaged in Class II or Class III work or a combination thereof for one hour or less and, while doing so, adheres fully to the work practices specified in this standard, will not be counted.

Respiratory Protection

The only circumstances that will necessitate employees using respiratory equipment for protection against asbestos is during the asbestos exposure assessment process, while confirming (via personnel monitoring) that the engineering controls and work practices designed and employed for a particular work activity are adequate to maintain exposure levels below the PEL/excursion limit.

Waste Disposal

Asbestos waste, scrap, debris, bags, containers, equipment, and contaminated clothing will be collected and disposed of in sealed, labeled impermeable bags of greater than 6 mils thickness or other closed, labeled, impermeable containers.

Bags or containers will be imprinted and clearly labeled with the OSHA asbestos hazard warning.

Training

Employees who do not work with asbestos but may indirectly become exposed to friable asbestos in the workplace, will receive Asbestos Awareness training upon initial assignment and annually thereafter.

References

29 CFR 1910.1001 & 29 CFR 1926.1101

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Medical Case Management Program			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-056	Pages	4	Rev. 4.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for all Novel Geo-Environmental, Inc. operations.

Scope

This program describes procedures for the minimum requirements for all Novel Geo-Environmental, Inc. employees that are impacted by injury or illness and is intended to ensure effective and timely decisions regarding securing medical attention and return-to-work practices.

Definitions

Medical Case Coordinator (Manager of Administrative Services) - Individual who coordinates and assists supervisors/management in coordinating communications regarding immediate medical care of employees and assisting employees who are returning to work after an injury or after an extended illness (either occupational or non-occupational). Case coordinators facilitate timely return to work with the goal of meeting or exceeding published return to work guidelines.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.
- Ensure requirements of this policy are communicated throughout the organization.
- Ensure that Medical Case Coordinator has been notified in the event of an employee work related injury/illness.

Site Manager/Supervisor

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.
- Accompany injured employees to selected health care provider or emergency facility, or verify that suitable designate (as determined by supervisor) is in attendance.
- Ensure employees returning to work after an incident have been deemed “fit-for-duty”.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.
- Report all incidents to supervisor or designated alternate.
- Where possible, notify supervisor or designated alternate prior to obtaining medical evaluation for work related injury/illness, including follow-up visits.
- Adhere to any prescribed work restrictions and treatment / recovery plan and keep Medical Case Coordinator informed of status.
- Advise supervisor and Manager of Administrative Services of any non-work-related injury/illness that could be reasonably expected to impact the employee’s “fitness-for-duty”.

Procedure

Occupational (on the job) Injury or Illness

For Emergencies, contact 911 immediately.

For Non-Emergency Injuries follow the step by step plan below.

- 1) Contact your Supervisor immediately. If your supervisor does not answer, contact Manager of Administrative Services—Grace Aiken 412-302-3020 until someone answers.
- 2) Supervisor notifies Manager of Administrative Services.
- 3) Utilize the Preferred Occupational Medical Facilities List as referenced to determine where to go. See Appendix A.
- 4) Inform Supervisor of the clinic you will be going to before leaving site.
- 5) Supervisor will meet you at the occupational clinic.

Employees are required to inform their supervisor immediately upon knowledge that an injury or illness they suffered (including first aid, soft tissue injury, twisted ankle, etc.) may be work related.

Supervisors will respond immediately to by notifying the Owner Client Superintendent and EHS. If the supervisor needs assistance (e.g. in determining the seriousness of the employee's condition, assisting in determining where to receive medical care, etc.) the supervisor will consult with the Medical Case Coordinator.

If it is necessary to transport the injured/ill employee for medical care, the supervisor, or suitable designate, shall accompany the injured/ill worker to the selected health care provider or emergency facility. The injured/ill employee will be asked to sign applicable medical forms and submit to post incident drug and alcohol testing as required.

The Medical Case Coordinator's duty is:

- To coordinate communications with the medical treatment facility regarding the transport and condition of the injured/ill employee being transported,
- To advise the medical treatment facility or professional of the nature of the injured/ill employee's normal job duties,
- To clarify any questions about the restrictions, if any, applicable to the injured/ill employee's return to work,
- Assist the injured/ill employee with scheduling and following up on any rehabilitation or similar follow-up visits, and
- To confirm, in two situations only, that the medical treatment facility has considered the suitability of equivalent medical treatment.
- Those two situations are
 - Where a non-prescription medication might, in the treating physician's opinion, be substituted for an equivalent prescription medication and
 - Where a butterfly bandage might, in the treating physician's opinion, be substituted for stitches. Further, if the injured/ill employee has signed an appropriate consent, the Medical Case Coordinator can assist with the transfer of medical records and other discussions with the treating physician or medical facility.

The treating physician shall be expected to provide a report of the worker's medical condition with regards to the injury. The report shall be forwarded to the appropriate Medical Case Coordinator.

The Supervisor shall complete the incident investigation report and provide it to the Manager of Administrative Services to initiate a worker's compensation claim by following appropriate procedures and submitting the form to the appropriate Workers Compensation representative.

If an injured/ill worker is not returned to work following initial assessment the Medical Case Coordinator will maintain contact (with the employee, supervisor and necessary healthcare providers), monitor care and arrange for any necessary fitness for duty evaluations prior to the employee's planned return to work. The Medical Case Coordinator will work with the Return to Work Coordinator in arranging return to work options per the Return to Work Policy NGE-HSE-047.

Non-Occupational (on the job) Injury or Illness

Employees with injury/illness not attributed to the workplace, but that could be reasonably expected to impact their "fitness for duty" or their ability to report to work, are required to advise their supervisor. The supervisor shall contact the Medical Case Coordinator to discuss the situation; the Medical Case Coordinator will determine if additional information and/or evaluation is recommended per the Fit for Duty policy NGE-HSE-044.

Training

In order to ensure the success of this program, training will be provided to the following individuals and/or groups of employees:

Medical Case Coordinator: Training for this individual will include a review of program policies and procedures and how the coordination of the Medical Case Management will be administered. Training areas:

- The role and function of the Medical Case Coordinator
- The Benefits of Medical Case Management

Supervisors / Managers: This training will be given to all employees who have the responsibility to supervise and manage other employees. Training areas:

- Supervisor Responsibilities under the Medical Case Management program
- The Benefits of Medical Case Management

Employees: This plan will be reviewed with all employees along with the Incident Reporting requirements per Incident Investigation and Reporting NGE-HSE-023". Employees will be trained at hire and annually thereafter.

Frequency of Training: (1) At the time of initial Medical Case Management program set-up and installation (2) Refresher training as deemed necessary.

References

NGE-HSE-023
NGE-HSE-044
NGE-HSE-047

Appendix A

Preferred Occupational Medical Facilities					
Operating Area	Preferred Clinics			After Hours	
PA	UPMC: HAPPI 20130 Rt. 19 Suite 2200 Cranberry Township, PA 16066 724-772-5400 Mon - Fri 8:00 AM - 4:30 PM Drug Testing Location	The Washington Hospital Occupational Medicine Center Dr. Leslie Scott 95 Leonard Ave, Building 1 Ste. 401 Washington, PA 15301 724-223-3528 M-F - 7:30AM - 4:30PM Drug Testing Location	WorkWell PC One Thorn Run Center 1187 Thorn Run Road, Suite 120 Coraopolis, PA 15108 (800)-662-2400 Drug Testing Location	Med Express 8702 University Blvd., Moon Township, PA 15108 Hours: 8:00 am - 8:00 pm 412-299-3627 Drug Testing Location	Concentra Urgent Care 4390 Campbells Run Rd, Pittsburgh, PA 15205 Hours: 8:00 am - 5:00 pm (412) 429-9675 Drug Testing Location
Ohio	Wheeling Hospital Corporate Health 1 Medical park Wheeling, WV 26003 Phone- 304-243-3784 Building 3, Lower Level M-F 7:00AM - 5:00PM 24 Hour Drug Testing	Occupational Health System 94 N 4th St. #24 Martins Ferry, OH 43935 740-633-4199 Mon - Fri 8:00 AM - 3:30 PM Drug Testing Location	The Washington Hospital Occupational Medicine Center Dr. Leslie Scott 95 Leonard Ave, Building 1 Ste. 401 Washington, PA 15301 724-223-3528 M-F - 7:30AM - 4:30PM Drug Testing Location	MedExpress 620 National Rd. Wheeling WV 26003 304-233-3627 9 AM - 9PM	Med Express 10 Elm Grove Crossing Mall Wheeling, WV 304-242-4228
West Virginia	WVU Occupational Medicine 390 Birch Street Morgantown, WV 26505 304-293-3693 Mon - Fri 8:00 AM - 4:30 PM	Bridgeport Expresscare 1370 Johnson Avenue Bridgeport WV 26330 304-842-3330 M-F 8-8. Sat-Sun 9-5	Physical Exams, Inc. 313 MacCorkle Ave SW, Suite 201, South Charleston, WV 25303 304-346-8213 Monday - Friday: 8am - 5pm Drug Testing Location	WVU Urgent Care 301 Suncrest Towne Center Dr. Morgantown, WV 26505 304-599-2273 7 Days - 8:00AM - 8:00PM MedExpress 630 Fairmont Ave Fairmont, WV 26554 304-842-7186 7 Days 9:00AM - 9:00PM Drug Testing Location	Urgent Care Center 4812 Maccorkle Ave. SW, Charleston, WV 25309 Hours: 8:00 am - 8:00 pm 304-768-3627

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Commercial Driver Qualifications and Safety			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-058	Pages	20	Rev. 1.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. that operate a commercial vehicle provided (owned, leased, rented, or borrowed) by Novel Geo-Environmental, Inc.

Scope

This procedure establishes the minimum requirements for the driver qualifications and management of Novel Geo-Environmental, Inc. commercial vehicles.

Key Responsibilities

Novel Geo-Environmental, Inc. Management

- Management is responsible for developing and maintaining the program and related procedures.

Site Manager

- Responsible for the implementation and maintenance of the program for their site and ensuring all assets are made available for compliance with the plan.

Employees

- All shall be familiar with this procedure and the local workplace commercial vehicle safety program.
- Follow all requirements, report unsafe conditions, and follow all posted requirements.

An Overview of DOT Recordkeeping Requirements

The Federal Motor Carrier Safety Administration (FMCSA) requires motor carriers to keep records to document compliance with the safety regulations. This documentation must be retained for varying lengths of time as established by the applicable regulations.

Organized Files Streamline Audits

During Safety Audits and Compliance Reviews, auditors will carefully comb through all the paperwork in the company DOT compliance records. By purging unnecessary records and properly organizing the files, it will simplify and streamline the review process.

Record-Retention Requirements

The following is a quick review of record-retention requirements in a few key compliance areas:

Drug and Alcohol Testing

All DOT drug and alcohol test records must be maintained in a secure location with controlled access. This means all drug and alcohol test records must be kept in a separate file under lock and key; they should not be stored with personnel files.

The Following Records Must Be Maintained for At Least Five Years:

- Alcohol test results indicating a BAC of 0.02 or greater
- Verified positive controlled substances test results
- Refusal-to-test documentation
- Substance Abuse Professional (SAP) evaluation reports
- Copy of annual calendar year summary if required by 49 CFR 382.403

The Following Records Must Be Maintained for at Least Two Years:

- Random selections
- Reasonable-suspicion testing documentation
- Medical evaluations for shy lung and shy bladder situations
- The Following Records Must Be Maintained for at Least One Year:
- Negative and canceled drug test results
- Alcohol test results with a BAC below 0.02

Additional Retention Requirements:

- The Company's Drug and Alcohol policy, driver's signed receipt and all records related to employer and supervisor education and training must be retained while the individual performs safety-sensitive and/or supervisory functions and for two years thereafter.

Driver Qualification

Both the Driver Qualification and Safety Performance History Files must be retained for as long as the safety-sensitive individual is employed by the company, and for three years thereafter.

The following documentation may be discarded from the Driver Qualification File three years from the date of execution:

- Annual List of Violations
- Annual Inquiry to State Agencies
- Annual Review of Driving Record
- Medical Examiner's Certificate
- Safety Performance Evaluation Certificate (if applicable)

Hours-of-Service

Driver logs and supporting documents must be retained for six months.

Vehicle Maintenance

For every vehicle in their control for 30 days or more, motor carriers must retain the following records for one year at the location where the vehicle is garaged and for six months after the vehicle leaves the carrier's control:

- Identifying information (company number, make, serial number and tire size)
- Inspection schedule, including type and date

Other Retention Requirements:

- Post-Trip Inspection Reports must be retained for at least three months from the report date
- Periodic Inspection Report or Copy must be retained for 14 months from the report date
- Evidence of an inspector's qualifications for one year after the inspector ceases to perform inspections for the carrier.

Driver Qualification File Checklist

The following documents are to be included in a Driver Qualification file for duration of employment:

- Driver-specific application for employment (§391.21)
- Original motor vehicle record (MVR) requested from state(s) within 30 days of hire (§391.23)
- Road test or road test exception:
 - Road test form and certificate conducted by your motor carrier (§391.31(g)), or
 - Road test certificate conducted by another motor carrier within the past 3 years (§391.33(a)(2)), or
 - Photocopy of a CDL accepted in lieu of road test - not applicable if hired to operate doubles, triples, or tankers. (Note: No subsequent copies of license renewals required.) (§391.33(a)(1))
- Background investigations (§391.23):
 - *Drivers hired before October 30, 2004:* General employment verifications sent to all former employers for the 3 years prior to the application date or a record of a good faith effort; or

- *Drivers hired on or after October 30, 2004:* Safety Performance History data from all former DOT-regulated employers for the 3 years prior to the application date or a record of a good faith effort. This form must be maintained in accordance with §391.53 (secured, limited access) and may be in a separate Driver Investigation History File; and if applicable, any driver rebuttals to the Safety Performance History data and responses to the rebuttals from the former DOT-regulated employers.

The following documents are to be included in the DQ file for three years from date of execution:

- Medical certificate or MVR showing that driver is medically certified (§391.43(g)): Medical exam certificate, original or a copy, for all non-CDL drivers; or
 - Medical exam certificate, original or a copy, kept for up to 15 days, until the CDL/CLP driver's MVR can be obtained, showing current medical certification status; or
 - Current MVR showing CDL/CLP driver's medical certification status.
- If applicable, documentation of any variance, exemption, or waiver from the physical qualification standards (§391.51(b)(7))
- Verification that medical examiner was listed on National Registry (for exams conducted after May 20, 2014) (§391.51(b)(9))
- Annual motor vehicle record (§391.25)
- Annual review of driving record (§391.25); and
- Annual list of violations from driver (§391.27).

The DQ file and Driver Investigation History file must be retained for 3 years after a driver leaves your employment.

The following documents are also required and kept in the DQ file, but are not applicable to all drivers:

- Longer Combination Vehicle (LCV) Driver-Training Certificate (§380.401); and
- Entry-level driver training certificate (§380.509(b)).

Training

Manager of Administrative Services, Hiring Managers, CDL driver employees will be trained initially prior to assignment to work related tasks and whenever a Manager of Novel Geo-Environmental, Inc. has reason to believe the employee needs to be retrained due to observed or perceived inadequacies in the employee's knowledge or use of this procedure.

References

NGE Drug Free Workplace Policy

Driver Hiring Checklist

CDL & CMV DRIVER HIRING CHECKLIST

- ☐ Driver-specific application for employment.
- ☐ Past Drug & Alcohol Test Results.
- ☐ Pre-employment Drug & Alcohol test results.
- ☐ Novel Geo-Environmental, Inc. Drug and Alcohol Prevention Policy with a receipt.
- ☐ Original motor vehicle record (MVR)
- ☐ Safety Performance History data from all former DOT-regulated employers for the 3 years prior to the application date.
- ☐ Medical exam certificate, original or a copy, for all non-CDL drivers.
- ☐ Verify current MVR showing CDL/CLP driver's medical certification status with Verification that medical examiner was listed on National Registry. Copy in File.
- ☐ Road test form and certificate conducted by your motor carrier or Photocopy of a CDL accepted in lieu of road test - not applicable if hired to operate doubles, triples, or tankers.
- ☐ Background and Reference Check Results.

Driver Application

CDL & CMV DRIVER APPLICATION FOR EMPLOYMENT

Complete all information. An incomplete application may disqualify you from further consideration.

Date Available for Employment: _____ Date of Application: _____

Name _____
(Last) (First) (Middle)

Current Address _____ City _____ State _____ Zip _____

Residence for the past 3 years.

Address _____ City _____ State _____ Zip _____

Address _____ City _____ State _____ Zip _____

Home Phone (____) _____ Cell (____) _____

Work (____) _____ Email _____

Are you eligible to work in the U.S.? __ Yes __ No Are you over the age of 18? __ Yes __ No

Do you have a valid State Driver's License? __ Yes __ No State: _____

Have you ever been convicted of a felony? __ Yes __ No. If yes, please explain:

I, _____, certify that I have only one DRIVERS LICENSE. This license certifies me as being qualified to drive _____ vehicles.

Driver's License # _____ State: _____ Expiration Date: _____

PROFESSIONAL REFERENCES – Do Not List Relatives

Name/Title _____ Employer _____ Phone _____

Name/Title _____ Employer _____ Phone _____

Name/Title _____ Employer _____ Phone _____

EDUCATION AND TRAINING

High School Name _____	Location (City & State) _____	Graduate/GED __ Yes __ No
College/University Name _____ Major _____	Location (City & State) _____ Degree _____	Years Completed: __ 1 __ 2 __ 3 __ 4 Graduate __ Yes __ No
College/University Name _____ Major _____	Location (City & State) _____ Degree _____	Years Completed: __ 1 __ 2 __ 3 __ 4 Graduate __ Yes __ No
Vocational Training Institute	Location (City & State)	Years Completed:

	_____	__ 1 __ 2 __ 3 __ 4
Trade/Other Training	Location (City & State) _____	Years Completed: __ 1 __ 2 __ 3 __ 4
Valid Professional Licenses	Type and Issuing State	Expiration Date
Personal Computers	Proficient with: __ Microsoft Word __ Excel __ Access __ Outlook __ Power Point	Other Software Used:

Please list any professional licenses you hold that are required or applicable to the position (e.g., driver's license, CDL, etc.)

Please list any transferable skills you possess that are required or applicable to the position (e.g., computer skills, accounting, project management, etc.)

In case of emergency, who would you like us to contact?

Name _____ Address _____ Phone _____

WORK HISTORY

Resumes may be attached but will not be accepted as a substitute for completing this section. Beginning with your present or most recent employer, list all of your work experience for at least the last ten years per FMCSA requirements. Include periods of self-employment, military service, and explain any gaps in employment that are longer than 30 days. Attach separate sheets if needed. Failure to complete this page may result in disqualification.

From (month & year)	Company Name	Position Title
To (month & year)	City	__ Full Time __ Part Time # of Hrs. _____ May We Contact? __ Yes __ No
Salary	Supervisor	Phone
Duties		
Reason for Leaving		
From (month & year)	Company Name	Position Title

To (month & year)	City	☐ Full Time ☐ Part Time # of Hrs. _____ May We Contact? ☐ Yes ☐ No
Salary	Supervisor	Phone
Duties		
Reason for Leaving		
From (month & year)	Company Name	Position Title
To (month & year)	City	☐ Full Time ☐ Part Time # of Hrs. _____ May We Contact? ☐ Yes ☐ No
Salary	Supervisor	Phone
Duties		
Reason for Leaving		

SIGNATURE IS REQUIRED

I hereby certify, under penalty of perjury in the State of Pennsylvania or West Virginia, that this application contains no willful misrepresentation and that the information given is true and complete to the best of my knowledge and belief. I understand that falsification of this application will be grounds for elimination from further consideration or, if employed, for dismissal at any time. I authorize my previous employers and all schools or educational and technical institutions that I have attended to furnish Novel Geo-Environmental, Inc. my record, reason for leaving and all information they may have concerning me. I hereby release any such current or former employers or institutions, their agents or employees and Novel Geo-Environmental, Inc. from all liability for any damage whatsoever arising there from. I authorize an investigation of all statements in this application.

Signature _____ **Date** _____

EXPERIENCE AND QUALIFICATIONS – DRIVER

Driver License	State	License Number	Type	Expiration Date
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DRIVING EXPERIENCE

Class of Equipment	Type of Equipment (Van, Tank, Flat, etc.)	Dates From To	Total Miles (Approximately)
Straight Truck			
Tractor/Semi-Trailer			
Tractor/2 Trailers			
Other:			

ACCIDENT RECORD, REGARDLESS OF FAULT, FOR PAST 3 YEARS**(ATTACH SHEET IF MORE SPACE IS NEEDED)**

Dates	Nature of Accident (Head-on, Rear-end, Upset, etc.)	Fatalities	Injuries
Dates	Nature of Accident (Head-on, Rear-end, Upset, etc.)	Fatalities	Injuries
Dates	Nature of Accident (Head-on, Rear-end, Upset, etc.)	Fatalities	Injuries

TRAFFIC CONVICTIONS AND FORFEITURES FOR THE PAST 3 YEARS**(OTHER THAN PARKING VIOLATIONS)**

Location	Date	Charge	Penalty
Location	Date	Charge	Penalty
Location	Date	Charge	Penalty

(ATTACH SHEET IF MORE SPACE IS NEEDED)

DRIVER QUALIFICATION

I have submitted a Photocopy of my CDL/NCL which will be accepted in lieu of the road test. This is not applicable if I am hired to operate doubles, triples, or tankers. Note: subsequent copies of my license renewals will be required per 49 CFR 391.33 (a) (1).

I, _____, hereby declare that I ___ HAVE ___ HAVE NOT driven a Commercial Motor Vehicle requiring a class ___ CDL or ___ Non – Commercial Driver's License for at least one (1) year. I am familiar with the mechanical workings of a Commercial Motor Vehicle and I have had ___ number of years of experience adjusting air brakes on CMV tractors and trailers.

Potential Driver's Signature: _____ Date: _____

PRE-EMPLOYMENT DRUG TESTING

I understand that I will be required to submit to a pre-employment controlled substance test at a qualified testing facility designated by Novel Geo-Environmental, Inc. as a part of the on boarding process. Furthermore, I will not be permitted to perform any safety-sensitive function until a confirmed **NEGATIVE** result is forwarded to Novel Geo-Environmental, Inc. by the Medical Review Officer of the testing facility.

I have received a copy of the Novel Geo-Environmental, Inc. Drug and Alcohol Prevention Policy with a receipt attached in Appendix B of which I must complete and submit to Novel Geo-Environmental, Inc.

Check the appropriate box:

☐ I hold a Commercial Driver's License (CDL). Therefore, I agree to submit to a D.O.T. pre-employment controlled substance test at a qualified testing facility designated by the Novel Geo-Environmental, Inc. as prescribed by F.M.C.S.A.

☐ I hold a Non Commercial Driver's License (NCL). Therefore, I agree to submit to a NON-DOT pre-employment controlled substance test at a qualified testing facility designated by Novel Geo-Environmental, Inc.

Potential Driver's Signature: _____ Date: _____

LICENSING & DRUG/ALCOHOL

1. Have you ever been denied a license, permit or privilege to operate a motor vehicle? ☐ YES ☐ NO
2. Has any license, permit, or privilege ever been suspended or revoked? ☐ YES ☐ NO
- In the past (2) years have you:
3. Been denied employment due to a positive, adulterated or refusing to submit to a D.O.T. pre-employment drug test? ☐ YES ☐ NO
4. Had a Positive or adulterated result on any D.O.T. drug test? ☐ YES ☐ NO
5. Tested above .04 alcohol concentration on any D.O.T. alcohol test? ☐ YES ☐ NO
6. Refused to test for a D.O.T. controlled substance and/or alcohol test? ☐ YES ☐ NO
7. If you answered "YES" to any of the 40.25g questions, can you provide/obtain proof that you have successfully completed the D.O.T. return-to-duty requirements? ☐ YES ☐ NO
8. If you answered "YES" to any of the above questions, please give details of your answers below. For any violation of 40.25(j) also include all the documentation of your return-to-duty process and any follow-up testing.

I, _____ hereby certify and declare that this application was completed by me and that all entries and information herein are true and complete to the best of my knowledge.

Signature: _____ Date: _____

INQUIRY FOR DRIVER'S RECORD

Drivers Name: _____ Driver's Signature: _____

Driver's Operator Lic. No: _____ Driver's Social Security No: ____ - ____ - _____

Dear Sir/Madam:

The above listed individual has made application with us for employment as a driver. Applicant has indicated that the above numbered operator's license or permit has been issued by your State to applicant and it is in good standing.

In accordance with Section 391.23(a)(1) and (b) of the Federal Motor Carrier Safety Regulations, we are required to make inquiry into the driving record during the preceding 3 years of every State in which an applicant-driver has held a motor vehicle operator's license or permit during those 3 years.

Therefore, please certify to us what the individual's driving record is for the preceding 3 years, or certify that no record exists if that be the case.

In the event that this inquiry does not satisfy your requirements for making such inquiries, please send us such forms of yours as are necessary for us to complete our inquiry into the driving record of this individual.

Respectfully yours,

Signature – Novel Geo-Environmental, Inc.

(printed) Name of person making inquiry

Title of person making inquiry

Company Name

Street Address

City

State

Zip

REQUEST FOR INFORMATION FROM PREVIOUS EMPLOYER(S)

From –Prospective Employer	To –Previous Employer
Novel Geo-Environmental, Inc.	Company
Individual/Job Title	Individual/Job Title
171 Montour Run Road	Address
Moon Township, PA 15108	City State Zip

Dear former employer,

The applicant named below has applied to this company for employment as a _____ and states that he/she was employed as a(n) _____ from _____ to _____.

Please reply to this inquiry below pertaining to this applicant. The applicant has waived any claim of liability against your company for information in response to this inquiry as required by 49 CFR 391.23.

Sincerely, _____, Novel Geo-Environmental, Inc. Date: _____

NAME OF APPLICANT: _____

SOCIAL SECURITY NUMBER OF APPLICANT: _____ - _____ - _____

1. Is employment information stated above correct?

2. What kind(s) of work did applicant do?

3. If employed as a driver, specify type of equipment driven

4. Number of accidents: _____

5. Was applicant's driver's license ever suspended or revoked? _____ If yes, when?

6. Reason for leaving your employ: Discharged _____ Laid Off _____ Resigned _____

7. Was applicant's general conduct satisfactory? Yes ___ No ___ If no, why?

8. Is applicant competent for the position applicant is seeking? Yes ___ No ___ If no, why?

9. Did he/she test 0.04 or greater for alcohol, test positive for controlled substances, or refuse at any time to be tested in the last two (2) years? Yes _____ No _____

10. Would you re-employ? Yes _____ No _____ Why

11. Any remarks with regard to question 1-10 above?

By (Print): _____ Date: _____

Signature of person supplying information:

This form was: ___ Faxed ___ Mailed ___ Emailed to previous employer. Date: _____

PRIOR EMPLOYER LIABILITY RELEASE

(Former Employer) _____ (Date) _____ ,

_____ I here-by authorize you to release all information regarding my services, character and conduct while in you employ, and you are released from any and all liability which may result from furnishing such information.

_____ Applicant's Signature
_____ Witnesses Signature

REQUEST FOR DRUG / ALCOHOL RESULTS

Please fax/email the following information regarding the applicant listed below to Novel Geo-Environmental, Inc. (412) 722-1969 fax or gaiken@ngeconsulting.com

Authorized (APPLICANT) Print Name: _____

Driver-Applicant Authorization to Release Drug & Alcohol Test Information

Pursuant to 49 CFR 40.25 I hear-by authorize the companies listed below to furnish to Novel Geo-Environmental, Inc. the following information concerning drug and alcohol tests involving me during the last two years:

1. The dates on which I had confirmed positive test for drugs, and the drugs involved.
2. The dates on which I had a confirmed alcohol test result of 0.04g/dl or greater, and the blood-alcohol content (B.A.C.) recorded.
3. The dates on which I refused to be tested for drugs and /or alcohol.

Additionally in the event that any company listed below furnishes Novel Geo-Environmental, Inc. with information concerning items 1, 2, & 3, I also authorize that company to release and furnish:

4. The dates of my negative drug and/or alcohol test during the past two years.
5. and the name and phone number of any substance abuse professional (S.A.P.) who evaluated me during the past two years, in accordance with Section 382.413(g)

I fully understand that my authorization to release such information does not guarantee or commit the company to which I have applied, Novel Geo-Environmental, Inc., to obtain all or any of the information which I have authorized to be released.

***ALL COMPANIES FOR THE PAST TWO YEARS - COMPANY CITY & STATE PHONE
NUMBER***

In signing below, I certify that I have read and fully understand this release. I further certify that all of the information which I have furnished on this form is true and complete: I also certify that I have listed every company for which I worked as a driver during the past two years, every company for which I took a pre-employment drug test during the past two years, and every company for which I took a pre-employment alcohol test during the past two years.

APPLICANT NAME: _____

SIGNED: _____

SOCIAL SECURITY NUMBER: _____

DATE: _____

Background and Reference Checks

To ensure that individuals who join Novel Geo-Environmental, Inc. are well qualified and to ensure that Novel Geo-Environmental, Inc. maintains a safe and productive work environment, it is our policy to conduct pre-employment background checks on all applicants who accept an offer of employment. Background checks may include verification of any information on the applicant's resume or application form.

If an applicant refuses to provide the information necessary for the Novel Geo-Environmental, Inc. to conduct the necessary background checks or provide false information during the application process, then Novel Geo-Environmental, Inc. will deny employment.

All offers of employment are conditioned on receipt of a background check report that is acceptable to Novel Geo-Environmental, Inc. All background checks are conducted in conformity with the Federal Fair Credit Reporting Act, the Americans with Disabilities Act, and state and federal privacy and antidiscrimination laws. Reports are kept confidential and are only viewed by individuals involved in the hiring process.

Background checks will include a criminal record check, although a criminal conviction does not automatically bar an applicant from employment. Any applicant with a criminal conviction shall be evaluated on an individual basis to determine whether they should be excluded from consideration based on the conviction.

Additional checks such as a driving record or credit report may be made on applicants for particular job categories if appropriate and job related.

Novel Geo-Environmental, Inc. also reserves the right to conduct a background check for current employees to determine eligibility for promotion or reassignment in the same manner as described above.

I hereby authorize an Agent for Novel Geo-Environmental, Inc. to ascertain information regarding my background to determine any and all information of concern to my record, whether same is of record or not, and I release employers and persons named in my application from all liability for any damages on account of his/her furnishing said information. Additionally, you are hereby authorized to make any investigation of my personal history, educational background, military record, motor vehicle records, criminal records and credit history through an investigative or credit agency or bureau of your choice. I authorize the release of this information by the appropriate agencies to the investigating service. I understand that my consent will apply throughout my employment, unless I revoke or cancel my consent by sending a signed letter or statement to Novel Geo-Environmental, Inc. at any time, stating that I revoke my consent and no longer allow the Novel Geo-Environmental, Inc. to obtain consumer or investigative consumer reports about me.

Name

(Last)	(First)	(Middle)
--------	---------	----------

Other Names Used/Maiden Name/Dates:

Current Address

List all addresses for past 7 years

Previous Address

Previous Address

Social Security # ____ - ____ - ____ Date Of Birth: _____

Driver's License # _____ State Issued: _____

May We Contact Your Current Employer? ☐ Yes ☐ No

Have You Ever Been Convicted Of A Crime? ☐ Yes ☐ No If Yes, Please Explain on
Separate Sheet.

Signature: _____ Date: _____

A Summary of Your Rights Under the Fair Credit Reporting Act

The federal Fair Credit Reporting Act (FCRA) promotes the accuracy, fairness, and privacy of information in the files of consumer reporting agencies. There are many types of consumer reporting agencies, including credit bureaus and specialty agencies (such as agencies that sell information about check writing histories, medical records, and rental history records). Here is a summary of your major rights under the FCRA.

For more information, including information about additional rights, go to www.ftc.gov/credit or write to: Consumer Response Center, Room 130-A, Federal Trade Commission, 600 Pennsylvania Ave. N.W., Washington, D.C. 20580.

- **You must be told if information in your file has been used against you.** Anyone who uses a credit report or another type of consumer report to deny your application for credit, insurance, or employment – or to take another adverse action against you – must tell you, and must give you the name, address, and phone number of the agency that provided the information.
- **You have the right to know what is in your file.** You may request and obtain all the information about you in the files of a consumer reporting agency (your “file disclosure”).
- You will be required to provide proper identification, which may include your Social Security number. In many cases, the disclosure will be free. You are entitled to a free file disclosure if:
 - a person has taken adverse action against you because of information in your credit report;
 - you are the victim of identity theft and place a fraud alert in your file;
 - your file contains inaccurate information as a result of fraud;
 - you are on public assistance;
 - you are unemployed but expect to apply for employment within 60 days.
 - In addition, by September 2005 all consumers will be entitled to one free disclosure every 12 months upon request from each nationwide credit bureau and from nationwide specialty consumer reporting agencies. See www.ftc.gov/credit for additional information.
- **You have the right to ask for a credit score.** Credit scores are numerical summaries of your credit-worthiness based on information from credit bureaus. You may request a credit score from consumer reporting agencies that create scores or distribute scores used in residential real property loans, but you will have to pay for it. In some mortgage transactions, you will receive credit score information for free from the mortgage lender.
- **You have the right to dispute incomplete or inaccurate information.** If you identify information in your file that is incomplete or inaccurate, and report it to the consumer reporting agency, the agency must investigate unless your dispute is frivolous. See www.ftc.gov/credit for an explanation of dispute procedures.
- **Consumer reporting agencies must correct or delete inaccurate, incomplete, or unverifiable information.** Inaccurate, incomplete or unverifiable information must be removed or corrected, usually within 30 days. However, a consumer reporting agency may continue to report information it has verified as accurate.
- **Consumer reporting agencies may not report outdated negative information.** In most cases, a consumer reporting agency may not report negative information that is more than seven years old, or bankruptcies that are more than 10 years old.
- **Access to your file is limited.** A consumer reporting agency may provide information about you only to people with a valid need -- usually to consider an application with a creditor, insurer, employer, landlord, or other business. The FCRA specifies those with a valid need for access.

- **You must give your consent for reports to be provided to employers.** A consumer reporting agency may not give out information about you to your employer, or a potential employer, without your written consent given to the employer. Written consent generally is not required in the trucking industry. For more information, go to www.ftc.gov/credit.
- **You may limit “prescreened” offers of credit and insurance you get based on information in your credit report.** Unsolicited “prescreened” offers for credit and insurance must include a toll-free phone number you can call if you choose to remove your name and address from the lists these offers are based on. You may opt-out with the nationwide credit bureaus at 1-888-5-OPTOUT (1-888-567-8688).
- **You may seek damages from violators.** If a consumer reporting agency, or, in some cases, a user of consumer reports or a furnisher of information to a consumer reporting agency violates the FCRA, you may be able to sue in state or federal court.
- **Identity theft victims and active duty military personnel have additional rights.** For more, visit www.ftc.gov/credit.

States may enforce the FCRA, and many states have their own consumer reporting laws. In some cases, you may have more rights under state law. For more information, contact your state or local consumer protection agency or your state Attorney General.

Medical Exam Certification

MEDICAL EXAMINER'S CERTIFICATE				
I certify that I have examined _____ in accordance with the Federal Motor Carrier Safety Regulations (49 CFR 391.41-391.49) and with knowledge of the driving duties, I find this person is qualified, and, if applicable, only when:				
☐ wearing corrective lenses ☐ wearing hearing aid ☐ accompanied by a _____ waiver/exemption		☐ driving within an exempt intracity zone (49 CFR 391.62) ☐ accompanied by a Skill Performance Evaluation Certificate (SPE) ☐ qualified by operation of 49 CFR 391.64		
The information I have provided regarding this physical examination is true and complete. A complete examination form with any attachment embodies my findings completely and correctly, and is on file in my office.				
SIGNATURE OF MEDICAL EXAMINER		TELEPHONE		DATE
MEDICAL EXAMINER'S NAME (PRINT)		☐ MD ☐ DO ☐ Physician Assistant ☐ Chiropractor ☐ Advanced Practice Nurse ☐ Other Practitioner		
MEDICAL EXAMINER'S LICENSE OR CERTIFICATE NO./ISSUING STATE		NATIONAL REGISTRY NO.		
SIGNATURE OF DRIVER		INTRASTATE ONLY ☐ YES ☐ NO	CDL ☐ YES ☐ NO	DRIVER'S LICENSE NO.
STATE				
ADDRESS OF DRIVER				
MEDICAL CERTIFICATION EXPIRATION DATE				

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Gas Hazards Awareness			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-059	Pages	2	Rev. 1.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure communicates the minimum information that an employee or workers supervised by the employees of Novel Geo-Environmental, Inc. will need to work safely in areas with the potential exposure to any of the hazardous gases listed.

Scope

This procedure is applicable to all employees, contractors, and subcontractors of Novel Geo-Environmental, Inc. that has the potential of exposure to the following hazardous gases:

- Hydrogen Sulfide
- Vapors from Condensate/ Natural Gas Liquids (NGL)/Methane – Natural Gas
- Carbon Monoxide

This program is associated with the Respiratory Protection program, Confined Space Entry, and Hot Work Procedures.

Definitions

High gas hazard - the amount of hazardous gas or vapor at or above the recognized exposure limit – OSHA PEL or ACGIH TLV.

High Gas Area – an area or areas where there is or is a potential to have a high gas hazard.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Personal Gas Monitoring

- Personal single or multi-gas monitors will be properly worn by every employee of, or worker supervised by employees of Novel Geo-Environmental, Inc. including contractors, in work areas where there is a potential for exposure to or the collection of highly hazardous gases, such as, yet not limited to, Hydrogen Sulfide, Condensate – Methane/Natural Gas, and/or Carbon Monoxide or the potential for flammable or combustible gases.
- All monitors, prior to use, will be bump-tested daily according to the manufacturer's instructions to ensure the monitor and the alarms are working correctly.

- All monitors will be calibrated per the manufacturers' instructions and have a sticker on the monitor indicating the most recent calibration or as information stored on the specific monitor about the most recent calibration. The calibration testing will be documented.
- The monitors will be worn on the outside of the clothing and within the "breathing zone".
- When the monitor alarms, the worker will stop their activities immediately, and safely, leave the unsafe area for a safe area, generally, upwind. Workers are to follow the emergency action plans developed specifically for each site.

Owner-Client Contingency Plans Awareness:

- Novel Geo-Environmental, Inc. shall insure all employees are aware of the Owner Client's contingency plan provisions including evacuation routes and alarms.
- Novel Geo-Environmental, Inc. employees shall participate in emergency evacuation drills and practice rescue procedures.
- Site specific Contingency/Emergency plans will be provided before work is initiated and made available upon request.

Training

Novel Geo-Environmental, Inc. requires that Gas Hazard Awareness training will be conducted before initial assignment and annually thereafter.

Training will consist of, at a minimum, gas hazards, characteristics of gases, oxygen deficient atmospheres, oxygen enriched atmospheres, hydrogen sulfide, signs and symptoms of overexposure, health effects, personal protective equipment, the location of alarm stations on the worksite, gas monitoring equipment both portable and fixed, gas alarms, site evacuation procedures, and assembly areas.

Novel Geo-Environmental, Inc. will ensure that Gas Hazard Awareness training provided for Novel Geo-Environmental, Inc. employees will be documented. All records will be made available for review.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Pandemic Preparedness Plan			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-061	Pages	4	Rev. 2.0
Procedure Owner	Safety Manager	Effective Date	07-20-23	

Purpose

The purpose of this Plan is to decrease the spread of infectious diseases and lower the impact in the workplace. By implementing this Plan, we are continuously working to accomplish the following:

- a. reduce transmission among employees,
- b. maintain healthy business operations, and
- c. maintain a healthy work environment.

Scope

This Plan provides direction to employees, subcontractors, and visitors regarding how to respond to infectious disease exposures at local, regional and/or national outbreaks by establishing the minimum requirements for the protections from exposure, determining of exposure, reporting of an exposure, and procedures to follow after an actual or potential exposure to an infectious disease or persons showing signs of or having tested positive for an infectious disease. This Plan applies equally to all personnel, locations, and departments of the company's operations.

Definitions

Infectious Diseases are caused by micro-organisms, such as bacteria or viruses (infectious agents) that can be spread, directly or indirectly. The primary routes of infectious disease transmission are contact, droplet, and airborne.

SARS-CoV-2 - the abbreviation for "severe acute respiratory syndrome coronavirus 2" is the virus that causes the COVID-19 disease.

COVID-19 - is the disease caused by SARS-CoV-2.

Isolation

- Wear a high-quality mask if you must be around others at home and in public.
- Do not go places where you are unable to wear a mask.
- Do not travel.
- Stay home and separate from others as much as possible.
- Use a separate bathroom, if possible.
- Take steps to improve ventilation at home, if possible.
- Don't share personal household items, like cups, towels, and utensils.

Pre-symptomatic – before a person is showing any symptoms of an infectious disease, regardless of how minor

Symptomatic - showing any symptoms of an infectious disease, regardless of how minor

Asymptomatic – showing no symptoms of an infectious disease

Close Contact – being within 6 feet of any person.

Location – any location, site, jobsite, or facility of the employer.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

The management of Novel Geo-Environmental, Inc. is providing guidance explaining the response to any global health crisis. Novel Geo-Environmental, Inc.'s management and the Safety Manager will be coordinating these efforts.

It is important that the information in this document is used take the necessary steps to reduce the spread of COVID-19, or any other viral or bloodborne health issue, while continuing our operations as normally as possible.

Reducing the Spread of Infection

Wash your hands often and thoroughly with soap and water for at least 20 seconds, especially after going to the bathroom; before eating; and after blowing your nose, coughing, or sneezing. If soap and water are not readily available, use an alcohol-based hand sanitizer with at least 70% alcohol. Washing your hands with hand sanitizer is not effective when your hands are dirty or greasy. Wash your hands with hand cleaner before using hand sanitizer, if necessary. Hand washing facilities, hand cleaner, hand sanitizers, tissues, no touch trash cans where available, hand soap, and disposable towels will be provided.

In addition, please ensure that you:

- Cover your mouth and nose with a tissue or your sleeve (not your hands) when you cough or sneeze;
- Throw all used tissues in the trash right away and wash your hands immediately after handling used tissues;
- Avoid touching your eyes, nose or mouth;
- Avoid close contact (be within 6 feet) with people; and
- Clean and disinfect frequently touched objects and surfaces, such as but not limited to your keyboard or mouse, door handles, tools, valve handles, equipment cab areas, steering wheels, gear shift levers, and control levers using a regular household cleaning spray (such as Clorox or Lysol or similar) or equivalent wipes.
- Refer to reputable and quality websites for up-to-date information such as CDC.gov

Disinfecting Surfaces

Clean all areas that are likely to have frequent hand contact (like keyboard or mouse, door handles, tools, valve handles, equipment cab areas, steering wheels, gear shift levers, and control levers) periodically and when visibly soiled. Work surfaces should also be cleaned frequently using EPA N-List cleaning products such as Lysol-brand and Clorox-brand disinfectant sprays and/or wipes.

Symptoms of Infectious Disease

Symptoms of viral or bloodborne infections may vary. The CDC, NIH and other reputable websites will be consulted as they will have the latest information in the event of any pandemic situation.

One may be infected with or just carrying the SARS-CoV-2 virus and not yet have the disease of COVID-19 or not yet showing symptoms (asymptomatic) of the COVID-19 disease. The only way to be sure that one has COVID-19 is to be tested and receive a positive test result for it.

Symptoms of COVID-19 may appear 2-14 days after exposure to the virus. Symptoms may include:

- Cough
- Shortness of breath or difficulty breathing
- Fever (at or above 100.4 degrees F)
- Headache or confusion
- Chills
- Muscle pain or aches
- Sore throat
- New/acute loss of taste or smell
- Congestion or runny nose
- Nausea or vomiting
- Difficulty staying awake or waking up

Exhibiting COVID-19 symptoms does not necessarily mean that you have the coronavirus. **However, if you have symptoms, do not come to work.** Notify your supervisor by phone, text, or email before you are due to start work, or as soon as possible if that is not practical.

If you develop symptoms or have been in close contact with a person known to have symptoms of COVID-19, or any other viral or bloodborne health issue, immediately notify your supervisor and call your doctor.

Current CDC Guidelines (09/2022)

Regardless of vaccination status, you should isolate from others when you have COVID-19.

You should also isolate if you are sick and suspect that you have COVID-19 but do not yet have test results.

If your results are positive, follow the full isolation recommendations below.

If your results are negative, you can end your isolation.

If you test positive for COVID-19, stay home for **at least** 5 days and isolate from others in your home.

- You are likely most infectious during these first 5 days.
- Contact Novel Geo-Environmental, Inc. management to discuss leave options.

End isolation based on the seriousness of your COVID-19 symptoms

If you had symptoms and your symptoms are improving, you may end isolation after day 5 if:

- You are fever-free for 24 hours (without the use of fever-reducing medication).

If your symptoms are not improving, continue to isolate until:

- You are fever-free for 24 hours (without the use of fever-reducing medication).
- Your symptoms are improving.

If you had symptoms and had Moderate illness (you experienced shortness of breath or had difficulty breathing):

- You need to isolate through day 10.

If you had symptoms and had Severe illness (you were hospitalized) or have a weakened immune system:

- You need to isolate through day 10.
- Consult your doctor before ending isolation.
- Ending isolation without a viral test may not be an option for you.

When you have COVID-19, isolation is counted in days, as follows:

If you had No symptoms

- Day 0 is the day you were tested (not the day you received your positive test result)
- Day 1 is the first full day following the day you were tested
- If you develop symptoms within 10 days of when you were tested, the clock restarts at day 0 on the day of symptom onset

If you have no symptoms, your supervisor will discuss with you what, if any, work you can do remotely from home. If it is not possible for you to work from home, discuss alternative options with your supervisor.

If you had symptoms

Day 0 of isolation is the day of symptom onset, regardless of when you tested positive

Day 1 is the first full day after the day your symptoms started

Regardless of when you end isolation until at least day 11:

- Avoid being around people who are more likely to get very sick from COVID-19.
- Remember to wear a high-quality mask when indoors around others at home and in public.
- Do not go places where you are unable to wear a mask until you are able to discontinue masking.

Removing Your Mask

After you have ended isolation, when you are feeling better (no fever without the use of fever-reducing medications and symptoms improving):

- Wear your mask through day 10 or
- If you have access to antigen tests, you should consider using them. With two sequential negative tests 48 hours apart, you may remove your mask sooner than day 10.

Immunizations

Workers are encouraged to obtain appropriate immunizations to help avoid contagious diseases such as COVID-19 or any other viral or bloodborne disease, as they become commercially available. Time off work to obtain the vaccine may be allowed by talking with your supervisor.

Plan Review

Following a pandemic event, the person responsible for implementation of the plan should identify learning opportunities and take action to implement any corrective actions. This pandemic preparedness plan will also be reviewed with the Emergency Action Plan to ensure its continued effectiveness with lessons learned applied and communicated to the appropriate persons.

Business Continuity

Key contacts within the company and including customers, suppliers, and subcontractors will be notified in the event of an outbreak any viral or bloodborne disease that may impact the company's ability to perform services. Telecommuting will be utilized to maintain business continuity. This notification will be by management representatives of Novel Geo-Environmental, Inc. Customers, suppliers, and subcontractors will be notified when normal operations resume.

Further Communications

Pandemics are rapidly changing situations. Management will continue to provide guidance and communicate updates as to how any viral or bloodborne health issue, affects Novel Geo-Environmental, Inc. operations on regular basis. In the meantime, please do not hesitate to contact Novel Geo-Environmental, Inc. management if you have any questions or concerns.

Training

Workers will receive training on this plan upon initial hire and then periodically as necessary.

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Excavating and Trenching Safety			
Applicability	Novel Geo-Environmental, Inc. – Employees & Subcontractors			
Procedure Number	NGE-HSE-062	Pages	9	Rev. 0.0
Procedure Owner	Safety Manager	Effective Date	01-10-23	

Purpose

This procedure establishes the minimum requirements for the elimination or control of hazards associated with excavation and trenching operations. All company workers and contractor employees will be protected from those hazards associated with excavation and trenching.

Scope

This procedure is applicable to all employees of Novel Geo-Environmental, Inc. during operations that require employees to work in or around excavation and or trenching operations.

Definitions

Excavation - any man-made cut, cavity, trench, or depression in an earth surface, formed by the moving or removal of earth.

Trench (trench excavation) - a narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet.

Competent Person - any person specifically designated by management as a Competent Person regarding Excavation and Trenching operations has experience and/or training specific to excavation and trenching, is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective actions to eliminate or control them. The specific designation as Competent Person by management has such authority regardless of job title. The Competent Person will be trained per the Training – Competent Person section of this procedure and listed in Appendix A.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager

- Responsible for the implementation and maintenance of this program for their site and ensuring all assets are made available for compliance with the program.

Employees

- All employees are required to comply with the restrictions and limitations imposed upon them during the use of this policy.

Procedure

Underground Installations

The approximate location of utility installations, such as sewer, telephone, fuel, electric, water lines, or any other underground installations that can be reasonably anticipated or expected to be encountered during excavation work, will be determined prior to beginning of excavation. Utility companies or owners, through the 811 "Call Before You Dig" program or similar state One Call program, will be contacted within

established state required or customary local response times, advised of the proposed work, and asked to establish the location of the utility underground installations prior to the start of actual excavation. Utility installations, such as sewer, telephone, fuel, electric, water lines, or any other underground installations that may not be identified by the above 811 or One Call systems as they are private installations need to be identified by the property owner before excavation begins, when possible.

Daylighting (aka Potholing) procedures in this procedure will be followed to identify the exact location of the underground utilities after the 811 or One Call program has identified the approximate location of the utilities or the property owner has identified the approximate location of the private installations.

Surface encumbrances

All surface encumbrances that has the potential to create a hazard to employees will be removed or supported, as necessary, to provide a safe work environment for workers. Examples of surface encumbrances include, but are not limited to, retaining walls, foundations, adjoining buildings, base or footing of any foundation or retaining wall, sidewalks, or pavements.

Other Potential hazards

Site evaluations are to include looking for other potential hazards such as, yet not limited to, vehicle and heavy machinery traffic and previously disturbed soil.

General Excavation

- The Competent Person will be specifically identified before excavation and/or trenching operations begin and specifically identified on the Job Safety Analysis (JSA).
- The Competent Person will determine the need for worker protection in all excavations and/or trenches regardless of depth.
- A safe means of entry and exit such as a stairway, ladder, or ramp will be located in trenches or excavations 4 feet or deeper and within 25 feet of lateral travel for employees. The safe means of entry will be relocated as needed to remain within 25 feet of lateral travel by employees as the work area moves.
- Maintain the pile of excavated material (spoils) and other equipment and/or tools, at least, 2 feet from the excavation edge.
- Keep heavy equipment away from the edge of the excavation.
- Workers will not enter or work in an excavation where water has accumulated or is accumulating. The water must be removed, and the soil condition reclassified and appropriate protective measures implemented.
- Employees are required to stay a safe distance from vehicles being loaded or unloaded.
- Employees will not perform tasks/work underneath equipment.
- Employees will not work in an excavation when working under or near a suspended load.
- Employees will not be in the excavation or trench when power equipment is being used to perform the excavation.
- A warning system will be established, communicated to employees, and utilized when mobile equipment is operating near the edge of the excavation/trench.
- Employees are prohibited from working on the faces of slopes or benched excavations above other employees.
- Employees are prohibited from remaining in a shield system (trench box) during vertical movement.
- Excavations left unattended for extended periods, such as overnight, should be surrounded by barricades, fences, or other physical barriers.
- Employees working in areas on or near public roads or in areas with vehicle traffic will wear high visibility garments, such as vests. High-visibility garments will meet the requirements of ANSI/ISEA 107-2004, Performance Class 2 as a minimum.
- Traffic control plans will be developed for working in areas on or near public roads or in areas with vehicle traffic.

- Walkways and bridges across excavations and trenches 6 feet or greater in depth will be protected by a Standard Handrail (see Fall Protection Program).
- Excavations 20 feet deep or more require protective systems designed by a registered professional engineer or based upon tabulated data prepared and/or approved by a registered professional engineer.

Hazardous Atmospheres

Excavations and/or trenches 4 feet deep or deeper where a hazardous atmosphere exists or could reasonably be expected to exist will be initially tested before employees enter the excavation/trench and then continuously monitored for a hazardous atmosphere which includes oxygen deficiency (atmospheres containing less than 19.5% oxygen), flammable gas at or greater than 20% of the lower flammable limit (LFL) of the gas, toxic gases, and/or other hazardous atmospheric conditions. Test results will be documented on the Excavation/Trenching Inspection Sheet.

Specific precautions will be taken to prevent employee exposure to a hazardous atmosphere listed above including, yet not limited to, providing proper respiratory protection or ventilation equipment. When controls such as ventilation are used to prevent employee exposure to a hazardous atmosphere, initial testing, continuous monitoring, and periodic documentation of the results will be conducted as often as necessary to ensure that the atmosphere remains safe.

Inspections by Competent Person

The Competent Person will conduct daily inspections of excavations, trenches, the adjacent areas, and protective systems for evidence of a situation that could result in possible cave-ins, water, cracks, bulges, toppling, or sliding soils, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions. The inspection will be conducted by the Competent Person prior to the start of work when workers have a potential to enter a trench and/or excavation and as needed throughout the day or shift. Inspections will also be made after every rain event or other hazard increasing occurrence. The inspections, findings, and corrective actions will be documented using *Appendix B*.

Where the Competent Person finds evidence of a situation that could result in a possible cave-in, water, cracks, bulges, toppling, or sliding soils, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions, exposed employees will not be permitted to begin work or will be immediately removed from the hazardous area until the necessary corrective actions or precautions have been taken to ensure their safety. The specifically identified Competent Person has the authority to remove employees from the excavation immediately.

Soil Classification

Soil testing and classification will be conducted by and determined by the Competent Person according to OSHA regulation 29CFR1926.652 and Appendix A of the regulation.

The basis of classification of soil as Stable Rock, Type A, B, or C will be made based upon the results of, at a minimum, one Visual Analysis and one Manual Analysis conducted by the Competent Person. If soil is not classified, it is assumed to be Type C and the appropriate protections will be implemented by the Competent Person.

Soil classification will be documented on the daily inspection using *Appendix B*.

Sloping, Benching, Shoring, Shields

All protective measures will be implemented under the direction and supervision of the Competent Person and according to OSHA regulation 29CFR1926.652.

Walkways and Bridges

Walkways and bridges across excavations and trenches 6 feet or greater in depth will be protected by a Standard Handrail (see Fall Protection Program)

Emergencies

- A specific Rescue Plan will be developed before excavation and/or trenching operations begin and will be communicated to workers daily during the JSA review.
- If personnel are trapped by a cave-in, the following should be done immediately:
 - Call 911 or the local emergency services as quickly as possible.
 - Never dig out a victim with heavy equipment.
 - Do not enter the excavation to perform rescue until the walls are stabilized.
 - Follow Emergency Action Plan.

Emergency rescue equipment, such as breathing apparatus, a safety harness and line, and/or a basket stretcher, will be readily available where hazardous atmospheric conditions exist or may reasonably be expected to develop during work in an excavation. This equipment will be attended when in use by workers trained in rescue and the use of the equipment.

Daylighting (aka Potholing) Procedure

This procedure is used to identify the exact location of utilities such as sewer, telephone, fuel, electric, water lines, or any other underground installations after the utilities or the property owner has identified the approximate location of the private installations. Refresher training will be conducted as needed.

Initial Inspection

1. Ensure all utility lines are identified by contacting state One Call or 811 or the Operator of the site.
2. Take photos or develop a simple diagram of markings to use as reference as markings are destroyed or fade. As best as possible, protect and preserve the markings from the time the excavation begins until markings are no longer required for the proper and safe excavation near the utility lines
3. Conduct a site inspection of the area in which the excavation will be conducted before excavating. Look for items such as, yet not limited to indications of previous excavation, unidentified utilities, or other unsafe or out of the ordinary situations.
4. Determine if the planned excavation/trench is in the correct location of the job site.
5. Determine if there any clear evidence of unmarked utility lines such as knowledge of the presence of a utility line that is not marked or not marked correctly, visual evidence of an unmarked utility line, or faded marks from previous markings.
6. If clear evidence of an unmarked utility line is identified, do not proceed with excavation. Contact the immediate supervisor, manager or Operator representative.

Initial Exposure of Utility Line (Daylighting)

1. At no time should mechanical excavation be used within 24 inches on each side of the markings (boundary limits) without, first, hand-digging test holes to determine the location and depth of cover of the utility line. Use of a probe is an acceptable method instead of hand-digging test holes to determine location and depth of the utility line.
2. Test holes may be excavated by one of the following methods:
 - a. Hydro-excavating may be used to dig test holes
 - b. Mechanical excavation may be used to dig test holes immediately outside of the boundary limits and then hand-digging used laterally until the utility line is found; or
 - c. A combination of hand-digging and mechanical excavation as follows:
 - i. Hand-digging between the boundary limits in cuts of at least 1 foot in depth
 - ii. Mechanical excavation could then be used to widen the hand dug trench to within 1 foot of the depth of the hand digging
 - iii. Repeat steps (i) and (ii) until the utility line is located.
3. Use of a probe to locate the utility line may be used in conjunction with hand digging to identify the location of the utility line.
4. Where the proposed excavation is to be parallel to and within the boundary limits of a utility line, expose the utility line by hand digging a series of test holes along the entire route at regular intervals of approximately 12 to 14 feet apart.
5. Dig additional test holes, as needed, to identify changes in alignment or in elevation.

7. Where the utility line cannot be located following the procedures described above, do not proceed with excavation. Contact the immediate supervisor, manager or Operator Representative.
6. When hand-digging test holes, use soft digging methods that may include the use of only rounded/blunt-edged tools when hand digging near utility lines. Do not use tools such as axes, posthole diggers, picks, mattocks and pry/probing bars may result in damage.
7. Carefully begin hand-digging test holes in the area to the side of the marked utility line. Keep the face of the shovel parallel with the utility line markings. Begin extending the test hole walls toward the utility line. Once the utility line is visible, keep the face of the shovel parallel with the utility line, and use all precautions to remove the soil from around the utility line. Proceed to fully expose the extremities of the utility line.

Excavating After Test Holes Are Completed

1. Where test holes in an area have been completed and the utility line located, mechanical excavation may take place provided the following procedures are used:
 - a. Wherever possible, mechanical excavating equipment should be operated parallel to the direction of the utility line when the excavation is within 3 feet of the utility line; and
 - b. Mechanical excavation must not be used closer than 1 foot in any direction to the utility line
 - c. Excavation within 1 foot in any direction of the utility line must be carried out by hand digging.
2. Exposed utility lines may need to be supported after excavation. Install temporary support prevent any deflection or damage to the utility line. Temporary support should remain in place until the backfill material underneath the structure has cured or it has been compacted adequately to restore support.

Procedure When Damage Occurs

1. If damage to the utility line occurs, the workers will leave the utility line exposed, barricade the area and contact the immediate supervisor, manager or Operator representative.
2. If gas is escaping from a gas pipeline, shut off vehicles or equipment, remove or extinguish all ignition sources, barricade the area off, and keep public and workers away. Call 911 immediately then notify the Operator Representative. No attempt should be made to control the escaping gas.
3. In no case will the contractor attempt to control or make repairs to the damaged utility line or equipment.

Training

Competent Person

The Competent Person may receive training to supplement their specific experience and knowledge of hazards specific to excavation and trenching, soil analysis, the use of protective systems, and the requirements of 29CFR1926 Subpart P to further improve their ability to detect conditions that could result in cave-ins, failures in protective systems, and hazardous atmospheres.

This training will be conducted prior to the person(s) being designated as a Competent Person by management. Refresher training will be conducted as needed.

Workers

Workers with the potential to enter an excavation or trench will be trained initially before being assigned to tasks that may include entering the excavation and/or trench on topics to include, yet not limited to, the specific hazards of entering an excavation or trench, identification methods of the specific hazards, the protective and control measures from the specific hazards, air monitoring techniques, egress requirements, the emergency rescue plan, and the responsibilities of the Competent Person.

References

29 CFR 1926.650-652

Appendix A – List of Excavation & Trenching Competent Persons
Date: 09/14/2022

The following individuals are authorized as Competent Persons for the Excavation and Trenching Policy:

- Alan Lupardus – Drilling Services Field Manager

Appendix B

Date

EXCAVATION & TRENCH INSPECTION SHEET

(To be completed by a Competent Person)

SITE LOCATION:		
DATE:	TIME:	COMPETENT PERSON:
SOIL TYPE:(See attached form):		
SOIL CLASSIFICATION:	EXCAVATION DEPTH:	EXCAVATION WIDTH:
TYPE OF PROTECTIVE SYSTEM USED:		

Indicate for each item: YES - NO - or N/A for not applicable

1. General Inspection of Jobsite:	
A. Excavations, adjacent areas, and protective systems inspected by a competent person daily before the start of work.	
B. Competent person has the authority to remove employees from the excavation immediately.	
C. Surface encumbrances removed or supported.	
D. Employees protected from loose rock or soil that could pose a hazard by falling or rolling into the excavation.	
E. Hard hats worn by all employees.	
F. Spoils, materials, and equipment set back at least two feet from the edge of the excavation.	
G. Barriers provided at all remotely located excavations, wells, pits, shafts, etc.	
H. Walkways and bridges over excavations four feet or more in depth are equipped with standard guardrails and toeboards.	
I. Warning vests or other highly visible clothing provided and worn by all employees exposed to public vehicular traffic.	
J. Employees required to stand away from vehicles being loaded or unloaded.	
K. Warning system established and utilized when mobile equipment is operating near the edge of the excavation.	
L. Employees prohibited from going under suspended loads.	
M. Employees prohibited from working on the faces of slopes or benched excavations above other employees.	
2. Utilities:	
A. Utility companies contacted and/or utilities located.	
B. Exact location of utilities marked.	
C. Underground installations protected, supported, or removed when excavation is open.	
3. Means of Access and Egress:	

A. Lateral travel to means of egress no greater than 25 feet in excavations four feet or more in depth.	
B. Ladders used in excavations secured and extended three feet above the edge of the trench.	
C. Structural ramps used by employees designed by a competent person.	
D. Structural ramps used for equipment designed by a registered professional engineer (RPE).	
E. Ramps constructed of materials of uniform thickness, cleated together on the bottom, equipped with no-slip surface.	
F. Employees protected from cave-ins when entering or exiting the excavation.	
4. Wet Conditions:	
A. Precautions take to protect employees from the accumulation of water.	
B. Water removal equipment monitored by a competent person.	
C. Surface water or runoff diverted or controlled to prevent accumulation in the excavation.	
D. Inspections made after every rainstorm or other hazard-increasing occurrence.	
5. Hazardous Atmosphere:	
A. Atmosphere within the excavation tested where there is a reasonable possibility of an oxygen deficiency, combustible or other harmful contaminant exposing employees to a hazard.	
B. Adequate precautions taken to protect employees from exposure to an atmosphere containing less than 19.5% oxygen and/or to other hazardous atmospheres.	
C. Ventilation provided to prevent employee exposure to an atmosphere containing flammable gas in excess of 10% of the lower explosive limit of the gas.	
D. Testing conducted often to ensure that the atmosphere remains safe.	
E. Emergency equipment, such as breathing apparatus, safety harness and lifeline, and/or basket stretcher readily available where hazardous atmospheres could or do exist.	
F. Employees trained to use personal protective and other rescue equipment.	
G. Safety harness and lifeline used and individually attended when entering bell bottom or other deep confined excavations.	
6. Support Systems:	
A. Materials and/or equipment for support systems selected based on soil analysis, trench depth, and expected loads.	
B. Materials and equipment used for protective systems inspected and in good condition.	
C. Materials and equipment not in good condition have been removed from service.	
D. Damaged materials and equipment used for protective systems inspected by a registered professional engineer (RPE) after repairs and before being placed back into service.	
E. Protective systems installed without exposing employees to the hazards of cave-ins, collapses, or threat of being struck by materials or equipment.	
F. Members of support system securely fastened to prevent failure.	
G. Support systems provided in ensure stability of adjacent structures, buildings, roadways, sidewalks, walls, etc.	

H. Excavations below the level of the base or footing supported, approved by an RPE.	
I. Removal of support systems progresses from the bottom and members are released slowly as to note any indication of possible failure.	
J. Backfilling progresses with removal of support system.	
K. Excavation of material to a level no greater than two feet below the bottom of the support system and only if the system is designed to support the loads calculated for the full depth.	
L. Shield system placed to prevent lateral movement.	
M. Employees are prohibited from remaining in shield system during vertical movement.	
CORRECTIVE ACTIONS AND REMARKS:	

Soil Classification Methods and Results

Visual Analysis – Choose at least one A or B

Manual Analysis - Use at least one – C, D, E, F,

G, H, or I

<u>Analysis/Test</u>	<u>A. Observations</u>	<u>B. Determining Particle Size</u>	<u>C. Sedimentation Test</u>	<u>D. Plasticity</u>	<u>E. Dry Strength Test</u>	<u>F. Thumb Penetration Test</u>	<u>G. Drying Test</u>	<u>H. Penetrometer</u>	<u>I. Torvane Shear</u>
<u>Result</u> (Identify Soil Type(s) determined by the Analysis and Tests that were used)	A A or B B B or C C	A A or B B B or C C	A A or B B B or C C	A A or B B B or C C	A A or B B B or C C	A A or B B B or C C	A A or B B B or C C	A A or B B B or C C	A A or B B B or C C

Notes:

Environmental, Health & Safety Manual - Novel Geo-Environmental, Inc.				
Procedure Name	Training Policy			
Applicability	Novel Geo-Environmental, Inc.– Employees & Subcontractors			
Procedure Number	NGE-HSE-063	Pages	2	Rev. 0.0
Procedure Owner	Safety Manager	Effective Date	12-21-23	

Purpose

The purpose of this procedure is to ensure employees are properly and adequately trained for their jobs.

Scope

This Program is applicable to all employees of Novel Geo-Environmental, Inc.

Responsibilities

Novel Geo-Environmental, Inc. Management

- Management accepts responsibility for the implementation of this policy.

Site Manager/Supervisor

- Responsible for ensuring all employees participate in all scheduled training.

Employees

- All shall be familiar with this procedure and participate in all scheduled training.

Procedure

No employee, new or current, will be permitted to engage in any company operation/procedure until trained properly and adequately.

No employee, new or current, will be permitted to operate any equipment or machinery until having been trained on that equipment or machinery. Training will include safe operation and safety devices.

Only employees qualified or certified by documented training and/or experience will be permitted to operate equipment or machinery.

Training is continuous—Supervisors will point out unsafe practices, as noted, to the employee/employees involved and inform them of proper procedures to be followed.

Supervisors will provide for the necessary “hands-on” training of all employees, new and current, on machines/equipment/procedures required for company operations.

New equipment or machinery will not be operated until the appropriate Supervisor has developed and provided training plans for its operation.

Training records will be documented and maintained current as documentation of employees having been trained on specific equipment and the extent of training involved.

New employees will participate in the Short Service Employee Program.

Safety procedures training will be conducted so that all safety procedures are trained upon every two years unless OSHA requires otherwise.

Initial & Annual Safety Training

The New Hire Safety Orientation Checklist (Appendix B) will be conducted as listed.

The training listed on the Safety Procedures Training Requirements_Tracker_and_Job (Appendix A) will be conducted as listed.

Refresher Safety Training

Refresher training will be conducted based upon the Refresher Training requirement as listed on the Safety Procedures Training Requirements_Tracker_and_Job Certs (Appendix A).

Job Training

Job training and technical training will be conducted upon hire and then as needed to ensure the workers are capable to perform their job duties based upon their job classification. The Short Service Program will be used to document training needed for each job classification.

Attachments

Appendix A - Safety Procedures Training Requirements_Tracker_and_Job Certs.

Appendix B - New Hire Safety Orientation Checklist