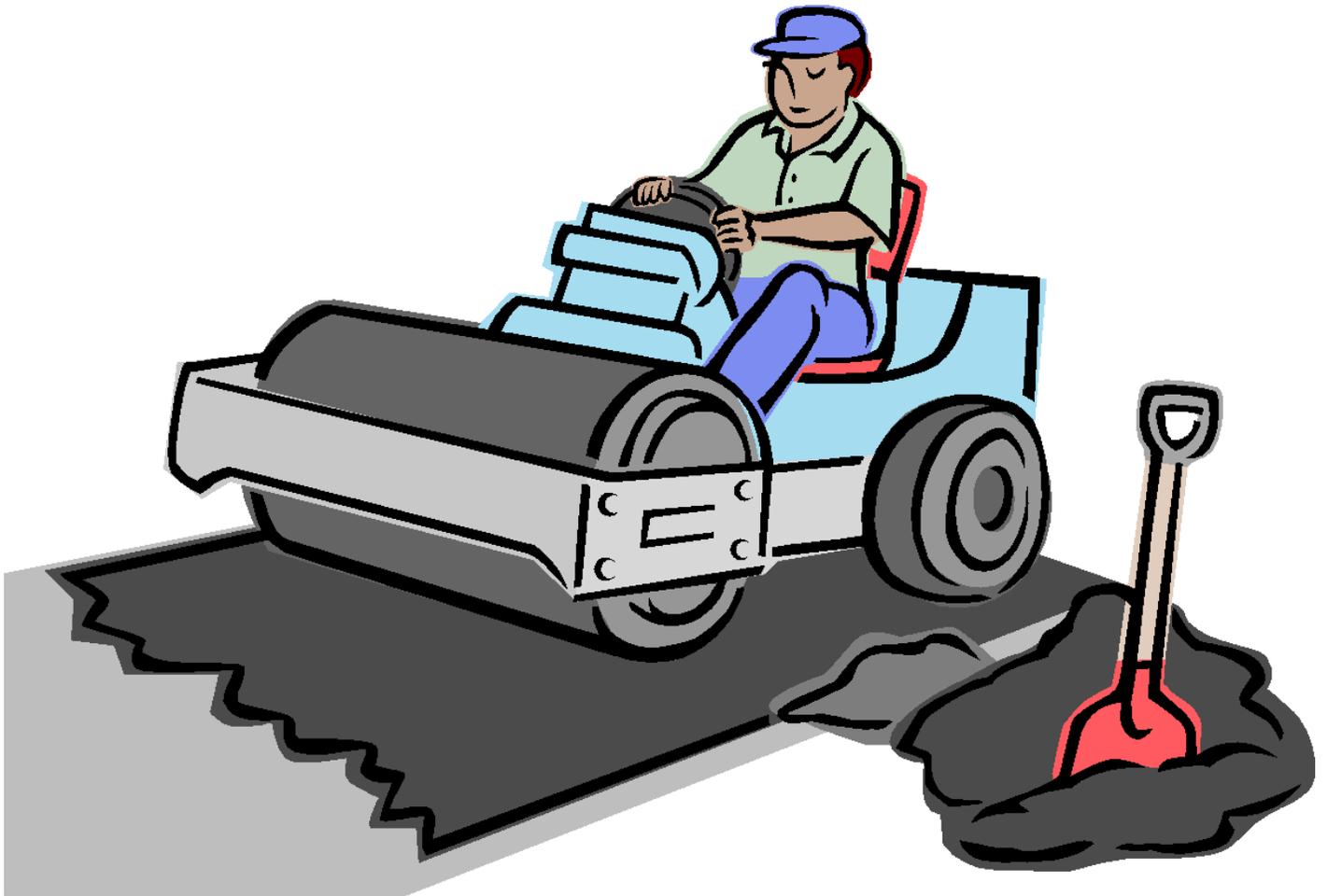


# MASTER SAFETY MANUAL



**GEDDIS PAVING & EXCAVATING, INC.**

1019 Wamba Avenue • Toledo, Ohio 43607  
Phone: 419-536-8501 • Fax: 419-536-0551 • [geddispaving.com](http://geddispaving.com)

## **POLICY STATEMENT**

It is Geddis Paving and Excavating, Inc.'s belief that our people are our most important asset and the preservation of employee Safety and Health must remain a constant consideration in every phase of our business. We will provide the resources necessary to manage, control, or eliminate all safety and health hazards.

All employees are responsible for working safely and productively, as well as recognition and awareness of hazards in their work areas. Employees are also responsible for following safe work practices, including the use of Personal Protective Equipment (PPE) where necessary.

It is our belief that any safety and health program must have total employee involvement. Therefore, this program has management's highest priority, support, and participation.

**PRODUCTION IS NOT SO URGENT  
THAT WE CANNOT TAKE TIME TO DO OUR WORK SAFELY.**

**Robert Geddis, Owner**

# Safety Guidelines

Safety begins at the top and continues throughout the company. The primary goal of Geddis Paving & Excavating is to continue operating a profitable business while protecting employees from injuries, illness and harm. This can be achieved in part by delegating responsibility and accountability to all involved in this company's operation. Working safely is a condition of employment and it is our belief that all injuries are preventable.

- **Responsibility:** Having to answer for activities and results.
- **Accountability:** The actions taken by management to insure the performance of responsibilities.

In other words, to reach our goal of a safe workplace everyone will need to take responsibility and be held accountable for their actions.

## ***Benefits of achieving our goals are:***

- Minimizing injuries and accidents.
- Minimizing the loss of property and equipment.
- Elimination of potential fatalities.
- Elimination of potential permanent disabilities.
- Elimination of potential OSHA fines.
- Reductions in workers' compensation costs.
- Reductions in operating costs.
- Having the best Safety and Health conditions possible in the workplace.
- All injuries can be preventable.
- Working safely is a condition of employment.

## MANAGEMENT COMMITMENT

The management of Geddis Paving & Excavating, Inc. is committed to the company's safety policy, and to provide direction and motivation by:

- Appointing a responsible person as our Safety Director.
- Establishing company safety goals and objectives.
- Developing and implementing a written Safety and Health program.
- Ensuring total commitment to the Safety and Health program.
- Facilitating employees' safety training.
- Establishing responsibilities for management and employees to follow.
- Ensuring that management and employees are held accountable for performance of their safety responsibilities.
- Establishing and enforcing disciplinary procedures for employees.
- Reviewing the Safety and Health program annually, and revising or updating as needed.
- **It is extremely important to have employee participation, to work safely and to report any unsafe working conditions.**

# ASSIGNMENT OF RESPONSIBILITY

## SAFETY DIRECTOR

Geddis Paving and Excavating, Inc. has designated Jeremy Oliver as our Safety Director. She can be reached at the following phone number:

**Office: (419) 536-8501    Cell: (419) 407-0785**  
**Email: JOliver@geddispaving.com**

It shall be the duty of the Safety Director to assist the Supervisor/Foreman and all other levels of Management in the initiation, education, and execution of an effective safety program including the following:

- Introducing the safety program to new employees.
- Following up on recommendations, suggestions, etc., made at the Quarterly safety meetings.
- All topics of safety concerns must be documented accordingly.
- Assisting the personnel in the execution of standard policies.
- Conducting safety inspections on a periodic basis.
- Addressing all hazards or potential hazards as needed.
- Preparing monthly accident reports and investigations.
- Maintaining adequate stock of first aid supplies and other safety equipment to insure their immediate availability.
- Ensuring there are an adequate number of qualified first aid certified personnel on the work site.
- Becoming thoroughly familiar with OSHA regulations and local and state safety codes.
- Defining the responsibilities for safety and health of all subordinates and holding each person accountable for their results through the formal appraisal system and where necessary, disciplinary procedures.
- Emphasizing to employees that accidents create unnecessary personal and financial losses.
- Create and maintain all reporting documentation per OSHA's regulations.
- Support management in the attitude that safety comes first.

## SUPERVISOR/FOREMAN

The Supervisors and/or Foreman will establish an operating atmosphere that insures that safety and health is managed in the same manner and with the same emphasis as production, cost, and quality control.

- Regularly emphasizing that accident and health hazard exposure prevention are not only moral responsibilities, but also a condition of employment.
- Take immediate action to correct any unsafe condition or action and report such occurrences to the Safety Director.
- Identifying operational oversights that could contribute to accidents, which often result in injuries and property damage.

- Participating in safety and health related activities, including routinely attending safety meetings, reviews of the facility, and correcting employee behavior that can result in accidents and injuries.
- Spending time with each person hired explaining the safety policies and the hazards of his/her particular work.
- The Safety Director will ensure the initial orientation of all new employees.
- Making sure that if a “Competent Person” is required, that one is present to oversee and instruct employees when necessary.
- Never short cutting safety for expediency, or allowing workers to do so.
- Enforcing safety rules consistently, and following company’s discipline and enforcement procedures.
- Conducting a daily, job-site safety inspection on provided checklists and correcting noted safety violations. Turning all documentation of inspections into Safety Director.
- Conducting weekly safety meetings (toolbox talks) onsite and turning documentation of those meetings into the Safety Director

## **EMPLOYEES**

It is the duty of each and every employee to know the safety rules, and conduct his work in compliance with these rules. Disregard of the safety and health rules shall be grounds for disciplinary action up to and including termination. It is also the duty of each employee to make full use of the safeguards provided for their protection. Every employee will receive a copy of the Company Safety Manual along with a complete safety orientation when hired.

Employee responsibilities include the following:

- Reading, understanding and following safety and health rules and procedures.
- Signing the Policies & Procedures Acknowledgement included in Appendix B.
- Wearing Personal Protective Equipment (PPE) at all times when working in areas where there is a possible danger of injury.
- Wearing suitable work clothes as determined by the supervisor/foreman.
- Performing all tasks safely as directed by their supervisor/foreman.
- Reporting ALL injuries, no matter how slight to their supervisor/foreman immediately, and seeking treatment promptly.
- Knowing the location of first aid, firefighting equipment and other safety devices at each worksite.
- Attending any and all required safety and health meetings.
- Not performing potentially hazardous tasks, or using any hazardous material until properly trained, and following all safety procedures when performing those tasks.

**IF YOU ARE EVER IN DOUBT ABOUT THE SAFETY OF ANY OPERATION**

**STOP AND ASK QUESTIONS!**



## **SAFETY COMMITTEE & SAFETY MEETINGS**

The Committee shall consist of representatives from management and non-management employees with Kurt Rasmusson as the chairman. The committee is a forum, created for the purpose of fostering safety and health through communication.

The responsibilities of Safety Committee Members include:

- Discussing safety policies and procedures with management and making recommendations for improvements.
- Reviewing accident investigation reports on all accidents and “near-misses”.
- Identifying unsafe conditions and work practices and making recommendations for corrections.

All employees of Geddis Paving and Excavating, Inc. shall attend and participate in weekly toolbox talk safety meetings. The Safety Director shall conduct the weekly safety meeting. Problems that have arisen or that are anticipated shall be discussed along with any other safety and health topics. The meeting shall be kept a valuable educational experience by:

- Keeping the meetings moving.
- Starting and Stopping on time.
- Using illustrated material and demonstrations to make the point.
- Discussing each topic thoroughly, providing handouts if possible.
- Reviewing accidents, injuries, property losses, and “near misses”.
- Evaluating accidents, injuries, property losses, and “near misses” for trends and similar causes to initiate corrective actions.

The Safety Director must document the meetings by maintaining a record of meetings via attendance sign in sheets. These records shall be maintained for a period of three (3) years.

## **SAFETY RULES AND PROCEDURES**

- No employee is expected to undertake a job until said employee has received adequate training.
- All employees shall be trained on every potential hazard that they could be exposed to and how to protect themselves from said hazards.
- All Foremen will make the necessary safety inspections daily on each job before work is to commence for the day including Excavation Checklist in Appendix D and/or the Daily Safety Checklist in Appendix E.
- No employee is required to work under conditions which are unsanitary, dangerous or hazardous to their health.
- Only qualified trained personnel are permitted to operate machinery or equipment.
- All injuries must be reported to your supervisor/foreman.
- Manufacturer's specifications/limitations/instructions shall be followed.
- Particular attention should be given to new employees and to employees moving to new jobs or doing non-routine tasks.
- All OSHA posters shall be posted and the corporate office in the shop area.
- Emergency numbers shall be posted and reviewed with employees
- Each employee in an excavation/trench shall be protected from cave-ins by an adequate protective system.
- Employees working in any area where there is a possible danger of injury shall wear appropriate Personal Protection Equipment (PPE).
- All hand and power tools and similar equipment, whether furnished by the employer or the employee, shall be maintained in a safe condition.
- All materials stored in tiers shall be stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, falling or collapse.
- The employer shall insure that electrical equipment is free from recognized hazards that are likely to cause death or serious physical harm to employees.
- All scaffolding shall be erected in accordance with the CFR 1926.451 subpart L. Standard guardrails for fall protections and ladders for safe access shall be used.
- All places of employment shall be kept clean, the floor of every workroom shall be maintained, so far as practicable, in a dry condition; standing water shall be removed. Where wet processes are used drainage shall be maintained and false floors, platforms, mats or other dry standing places or appropriate waterproof footwear shall be provided.
- To facilitate cleaning, every floor, working place, and passageway shall be kept free from protruding nails, splinters, loose boards, and holes and openings.
- All floor openings, open sided floor and wall openings shall be guarded by a standard railings and toe boards or cover.
- The employer shall comply with the manufacturer's specifications and limitations applicable to the operation of any and all cranes and derricks.
- No construction loads shall be placed on a concrete structure, or portion of a concrete structure, unless the employer determines, based on information received from a person who is qualified in structural design, that the structure or portion of the structure is capable of supporting the loads.
- A stairway or ladder shall be provided at all personnel points of access where there is a break in elevation of 19 inches or more and no ramp, runway, sloped embankment, or personnel hoist is provided.

## DISCIPLINE/ENFORCEMENT

Geddis Paving & Excavating, Inc. seeks to establish and maintain standards of employee conduct and supervisory practices, which will support and promote safe and effective business operations. These supervisory practices include administering corrective action when employee safety performance or conduct could jeopardize this goal. This policy sets forth general guidelines for a corrective action process aimed to document and correct undesirable employee behavior. Major elements of this policy include:

- Constructive criticism/instruction by the employee's supervisor/foreman to educate and inform employee of appropriate safety performance and behavior.
- Correcting employee's negative behavior to the extent required.
- Informing the employee that continued violation of company safety policies may result in termination.
- Written documentation of disciplinary warnings and corrective action taken.

Depending on the facts and circumstances involved with each situation, **the company may choose any corrective action up to, and including, immediate termination.**

However, in most circumstances the following steps will be followed:

### **Step One:**

**VERBAL WARNING:** informally documented, by supervisor/foreman or safety director for minor infractions of company safety rules. Supervisor/foreman or safety director must inform the employee what safety rule or policy was violated and how to correct the problem.

### **Step Two:**

**WRITTEN WARNING:** documented in employee's file. Repeated minor infractions or a more substantial safety infraction requires issuance of a written warning. Every attempt should be made to re-educate the employee on the desired performance. The employee should acknowledge the warning by signing the document before it is placed in their personnel file.

### **Step Three:**

**SUSPENSION:** for three (3) working days. If employee fails to appropriately respond or management determines the infraction is sufficiently serious.

### **Step Four:**

**TERMINATION:** for repeated or serious safety infractions or repeated written warnings or repeated suspensions.

## ACCIDENT INVESTIGATION

### Supervisors/Foreman

- Provide first aid, call for emergency medical care if required.
- If further medical treatment is required, arrange to have an employer representative accompany the injured employee to the medical facility.
- Secure area, equipment and personnel from injury and further damage.
- Contact Safety Director

### Safety Director

- Investigate the incident (injury) – gather facts, employee and witness statements; take pictures and physical measurements of incident site and equipment involved.
- Complete an incident investigation report form (Included in Appendix C) and the necessary workers' compensation and OSHA paperwork within 24 hours whenever possible.
- Insure that corrective action to prevent a recurrence is taken.
- Discuss incident, where appropriate, in safety and other employee meetings with the intent to prevent a recurrence.
- Discuss incident with other supervisors/foremen and other management.
- If the injury warrants time away from work, insure that a physician authorizes the absence and that you maintain contact with your employee while he/she remains off work.
- Monitor status of employee(s) off work, maintain contact with employee and encourage return to work even if the physician imposes restrictions.
- When injured employee(s) return to work they shall not be allowed to return to work without "return to work" release forms from the physician. Review the release carefully and insure that you can accommodate the restrictions, and that the employee follows the restrictions indicated by the physician.

## TRAINING AND EDUCATION

Training is an essential component of an effective safety and health program. It should address the responsibilities of both management and employees at the worksite. Training is most effective when incorporated into other education on performance requirements and job practices. No employee will be permitted to work with hazardous equipment, or any hazardous material until they have been properly trained.

Training programs should be provided as follows:

- Initially when the safety and health plan is developed
- For all new employees before beginning work
- When new equipment, materials, or processes are introduced
- When procedures have been updated or revised
- When experiences/operations show that employee performance must be improved
- At least annually

Besides the standard training, employees should also be trained in the recognition of hazards – to be able to look at an operation and identify unsafe acts and conditions. A list of typical hazards employees should be able to recognize may include:

- **Fall Hazards** – Falls From – Floors, roofs and roof openings, ladders (straight and step), scaffolds, wall openings, tripping, trenches, steel erection, stairs, chairs, etc.
- **Electrical Hazards** – Appliances, damaged cords, outlets, overloads, overhead high voltage, extension cords, portable tools (broken casing and/or damaged wiring), grounding, metal boxes, switches, ground fault circuit interrupters (GFCI), etc.
- **Housekeeping Issues** – Exits, walkways, floors, trash, storage of materials (hazardous and non-hazardous), protruding nails, icy walkways, etc.
- **Fire Hazards** – Oily-dirty rags, combustibles, fuel gas cylinders, exits blocked, trips/slips stairs, un-even flooring, electrical cords, etc.
- **Health Hazards** – Silicosis, asbestos, loss of hearing, eye injury due to flying objects, etc.

Employees trained in the recognition and reporting of hazards and supervisors/foreman trained in the correction of hazards will substantially reduce the likelihood of serious injury.

## **EMPLOYEE EMERGENCY ACTION PLAN: FIRE AND OTHER EMERGENCIES**

1. **Emergency escape procedures:** Immediately leave the building through the closest practical exit. If on a job site at the time of an emergency, meet up at the foreman's truck.
2. **Critical plant operations:** Shut off appropriate electric on the way out if possible and fuel or oil lines, otherwise evacuate the building.
3. **Accounting for Employees:** Foreman/Supervisor is to account for all employees after emergency evacuation has been completed and assigned duties as necessary. Evacuations held on the company's corporate location will report across the street from the building in Toledo Plywood parking lot. Foreman will account for their crew members and Safety Director will account for all management or office personnel.
4. **Means of reporting fires and other emergencies: *On Site:*** The Foreman will designate someone to dial 911 while they access and/or administer CPR/First aid. The Safety Director will dial 911 for all Office personnel on a cell-phone, report the location of the emergency and provide directions to the responders.
5. **Further Information:** Contact the Safety Director for further information or explanation of duties under the plan.

**ALARM SYSTEMS/ EVACUATION:** Geddis Paving and Excavating establishes the call: Fire, Fire, Fire across the paging system or on the jobsite by any employee, as the signal to immediately evacuate the building/facility for fire and other emergencies.

**TRAINING:** Before implementing the emergency action plan, a sufficient number of persons to assist in the safe and orderly emergency evacuation of employees will be designated and trained.

The plan will be reviewed with each employee covered by the plan at the following times:

1. Initially when the plan is developed or upon initial assignment.
2. Whenever the employee's responsibilities or designated actions under the plan change.
3. Whenever the plan is changed.

The plan will be kept at the worksite and made available for employee review.

# EMERGENCY RESPONSE PLAN

This must be filled out BEFORE beginning work on each site.

FOR \_\_\_\_\_ JOBSITE

CITY/LOCATION: \_\_\_\_\_

SUBDIVISION: \_\_\_\_\_

STREET NAME: \_\_\_\_\_

JOB ADDRESS: \_\_\_\_\_

JOB PHONE CONTACT: \_\_\_\_\_

## EMERGENCY PHONE CONTACT NUMBERS

LOCAL FIRE DEPT/EMS AREA: 911

AMBULANCE SERVICE: 911

NEAREST MEDICAL TREATMENT: \_\_\_\_\_

DIRECTIONS (EMS/Clinic/Dr.): \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DIRECTIONS TO WORKSITE: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

NOTES: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

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## EMERGENCY RESPONSE TO HAZARDOUS SUBSTANCES

If any substance is found of unknown origin, company policy is to **LEAVE IT ALONE!** Immediately evacuate the area and contact the nearest hazardous material response team. Do not allow employees on site until declared safe by the response team.

### FIRST AID

- First Aid providers should assess the area for hazards first before attempting to provide first aid.
- First Aid providers should don appropriate protective equipment before providing first aid. (Example: Gloves, CPR face shield.)
- Arrangements must be made BEFORE starting the project, to provide for prompt medical response in the event of an emergency.
- In areas where severe bleeding, suffocation, or severe electrical shock can occur, a 3 to 4 minute response time is required.
- If medical attention is not available within 4 minutes, then a first aid trained person must be available on the jobsite at all times.
- An appropriate, weatherproof first aid kit must be on site. It must be checked weekly.
- Provisions for an ambulance or other transportation must be made in advance.
- Contact methods must be provided.
- Telephone numbers must be posted where 911 is not available.

Geddis Paving and Excavating, Inc. has designated Steve Oliver or the onsite Foreman as having adequate training to render first aid in the event of a medical emergency in areas where emergency response time is in excess of 4 minutes. They will maintain appropriate first aid kits and check them weekly to assure they are properly stocked.

First aid kits are located at the following locations:

- Foreman Pick-up Trucks
- Job Trailer if Provided
- Every employee shall be trained in the following emergency procedures:
  - Evacuation plan
  - Alarm Systems
  - Shutdown procedures for equipment
  - Types of potential emergencies

It is the Employer's responsibility to review their job sites addressing all potential emergency situations.

# Environmental Management Policy

## **We are committed to do and will:**

- Provide a safe and healthful workplace and ensure that personnel are properly trained with the appropriate safety and emergency equipment.
- Be an environmentally responsible neighbor in the community where we operate, and correct incidents or conditions that endanger health, safety, or the environment.
- Conserve natural resources by adopting pollution prevention practices. Ex: extending the life of equipment through preventive maintenance scheduling, purchasing and reworking used equipment etc.
- Develop and improve operations and technologies to minimize waste, and other pollution, minimize health and safety risks, and dispose of waste safely and responsibly.
- Ensure the responsible use of energy throughout our business, including conserving energy improving energy efficiency, and giving preference to renewable over non-renewable energy when feasible.
- Participate in efforts to improve environmental protection and understanding. Sharing appropriate pollution prevention technology, knowledge and methods with other farms.
- Utilize university and regulatory agents to assist in the development of solutions of environmental problems. Promote cooperation and understanding with the public and government agencies in developing economically feasible and environmentally sound wastewater treatment objectives.
- Meet and exceed all applicable Federal and State requirements set and adhere to stringent requirements no matter where we do business.
- Promptly report all noncompliance issues in accordance with applicable governmental reporting requirements, evaluate causes of noncompliance, and implement corrective actions.
- Establish procedures for periodic review of environmental compliance with all laws and regulations.
- Establish procedures to ensure all that employees are knowledgeable of, understand and comply with all applicable environmental laws and regulations.
- Promptly correct any practice or condition not in compliance with this policy.

**Robert Geddis, Owner**

## RECORDKEEPING AND OSHA LOG REVIEW

In the event of a fatality (death on the job) or catastrophe (accident resulting in hospitalization of three or more workers) contact Steve Oliver. His office and cell-phone numbers are:

**Office: 419-536-8501**

**Cell: 419-466-5140**

**Email: [soliver@geddispaving.com](mailto:soliver@geddispaving.com)**

Steve will contact the Safety Director who will in turn report it to the OSHA Toledo Area Office at (419) 259-7542, within 8 hours after the occurrence.

If an injury or accident should ever occur, you are to report it to your supervisor/foreman **as soon as possible**. A log entry and summary report shall be maintained for every recordable injury and illness. The entry shall be done within 7 days after the injury or illness has occurred. The OSHA 300 or equivalent shall be used for the recording.

An OSHA recordable injury or illness is defined as an injury resulting in loss of consciousness, days away from work, days of restricted work, or medical treatment beyond first aid.

First Aid includes:

- Tetanus shots
- Band-aids or butterfly bandages
- Cleaning, flushing or soaking wounds
- Ace bandages and wraps
- Non-prescription drugs at non-prescription strength (Aspirin, Tylenol, Etc.)
- Drilling fingernails/toenails
- Eye patches, eye flushing and foreign body removal from eye with Q-tips
- Finger guards
- Hot or cold packs
- Drinking fluids for heat stress

An annual summary of recordable injuries and illnesses must be posted at a conspicuous location in the workplace and contain the following information: Calendar year, company name-establishment name, establishment address, certifying signature, title, and date. If no injury or illness occurred in the year, zeroes must be entered on the total line.

The OSHA logs should be evaluated by the employer to determine trends or patterns in injuries in order to appropriately address hazards and implement prevention strategies.

# SEXUAL HARRASSMENT POLICY

## EEO POLICY



## SEXUAL HARRASSMENT POLICY

Geddis Paving and Excavating Inc. is committed to providing a work environment that is free from all forms of discrimination and conduct that can be considered harassing, coercive, or disruptive, including sexual harassment. Actions, words, jokes, or comments based on an individual's sex, race, color, national origin, age, religion, disability, or any other legally protected characteristic will not be tolerated.

Sexual harassment is defined as unwanted sexual advances, or visual, verbal, or physical conduct of a sexual nature. This definition includes many forms of offensive behavior and includes gender-based harassment of a person of the same sex as the harasser. The following is a partial list of sexual harassment examples:

- Unwanted sexual advances.
- Offering employment benefits in exchange for sexual favors.
- Making or threatening reprisals after a negative response to sexual advances.
- Visual conduct that includes leering, making sexual gestures, or displaying of sexually suggestive objects or pictures, cartoons or posters.
- Verbal conduct that includes making or using derogatory comments, epithets, slurs, or jokes.
- Verbal sexual advances or propositions.
- Verbal abuse of a sexual nature, graphic verbal commentaries about an individual's body, sexually degrading words used to describe an individual, or suggestive or obscene letters, notes, or invitations.
- Physical conduct that includes touching, assaulting, or impeding or blocking movements.

Unwelcome sexual advances (either verbal or physical), requests for sexual favors, and other verbal or physical conduct of a sexual nature constitute sexual harassment when: 1.) Submission to such conduct is made either explicitly or implicitly a term or condition of employment; 2.) Submission or rejection of the conduct is used as a basis for making employment decisions; or 3.) The conduct has the purpose or effect of interfering with work performance or creating an intimidating, hostile, or offensive work environment.

If you experience or witness any sexual or unlawful harassment in the workplace, report it immediately to your supervisor. If the supervisor is unavailable or you believe it would be inappropriate to contact that person, you should immediately contact the Safety Director or other senior staff member. You can raise concerns and make reports without fear of reprisal or retaliation from any of these individuals.

All allegations of sexual harassment will be quickly and discreetly investigated. To the extent possible, your confidentiality and that of any witnesses and the alleged harasser will be protected against unnecessary disclosure. When the investigation is completed, you will be informed of the outcome of the investigation.

Any supervisor or foreman who becomes aware of possible sexual or other unlawful harassment must immediately advise a senior staff member so it can be investigated in a timely and confidential

manner. Anyone engaging in sexual or other unlawful harassment will be subject to disciplinary action, up to and including termination of employment.

Any employee who believes he or she is a victim of sexual harassment must immediately report any incident to the company's designated EEO Officer. The company will not tolerate retaliation against any employee who complains of sexual harassment or provides information in connection with any such complaint.

If you have any questions regarding this policy, please contact Steven Oliver, President at: 419-536-8501 or Jeremy Oliver, Safety Director & EEO Officer at: 419-536-8501.

## **Equal Employment Opportunity Policy**

**Geddis Paving & Excavating, Inc.** recognizes the Equal Employment Opportunity Commission (EEOC) as a governing commission regulating certain employer/employment rights and liberties. We understand that under Title VII of the Civil Rights Act of 1964, the Americans with Disabilities Act (ADA), and the Age Discrimination in Employment Act (ADEA), it is illegal to discriminate in any aspect of employment, including:

- hiring and firing
- compensation, assignment, or classification of employees
- transfer, promotion, layoff, or recall
- job advertisements
- recruitment
- testing
- use of company facilities
- training and apprenticeship programs
- fringe benefits
- pay, retirement plans, and disability leave
- other terms and conditions of employment

Geddis Paving & Excavating, Inc. also recognizes that discriminatory practices under these laws also include:

- harassment on the basis of race, color, religion, sex, national origin, disability, or age
- retaliation against an individual for filing a charge of discrimination, participating in an investigation, or opposing discriminatory practices
- employment decisions based on stereotypes or assumptions about the abilities, traits, or performance of individuals of a certain sex, race, age, religion, or ethnic group, or individuals with disabilities
- denying employment opportunities to a person because of marriage to, or association with, an individual of a particular race, religion, national origin, or an individual with a disability

The company understands that Title VII also prohibits discrimination because of participation in schools or places of worship associated with a particular racial, ethnic, or religious group.

**EEO Officer: Benjamin Geddis Cell: 419-601-0601 Office: 419-536-8501**

## **Nondiscrimination**

Geddis Paving & Excavating, Inc. agrees that in the hiring of employees for the performance of work, including without limitation work to be performed by a subcontractor, no contractor or subcontractor, and no person acting on behalf of the contractor or subcontractor, shall, by reason of race, religion, national origin, age, sex, disability, or veteran status discriminate against any person in the employment of labor or workers who are qualified and available to perform the work to which the employment relates.

Geddis Paving & Excavating, Inc. further agrees that no contractor or subcontractor, and no person acting on behalf of the contractor or subcontractor, shall, in any manner, discriminate against or intimidate any employee hired for the performance of work on account of race, religion, national origin, age, sex, disability, or veteran status.

Geddis Paving & Excavating, Inc. agrees that it will fully cooperate with the State Equal Opportunity Coordinator, with any other official or agency of the State or Federal Government, which seeks to eliminate unlawful employment discrimination, and with all other State and Federal efforts to assure equal employment practices.

## **State Public Improvement Contacts**

Any provision of a hiring hall contract or agreement which obligates a Geddis Paving & Excavating, Inc. to hire, if available, only such employees as are referred to Geddis Paving & Excavating, Inc. contractor by a labor organization shall be void as against public policy and unenforceable with respect to employment under any public improvement contract unless, at the date of execution of such hiring hall contract or agreement, or within thirty (30) days thereafter, such labor organization has in effect procedures for referring qualified employees for hire without regard to race, religion, national origin, age, sex, disability, or veteran status and unless such labor organization includes in its apprentice and journeymen membership, or otherwise has available for job referral without discrimination, qualified employees.

## **As Lead Contractor, Affirmative Action**

Geddis Paving & Excavating, Inc. shall comply with the Equal Opportunity Employment requirements set forth in Section 123:2-3 through 123:2-9, OAC.

Geddis Paving & Excavating, Inc. shall demonstrate its good faith efforts to comply with the utilization goals currently established for minority and women employees and shall submit certain documentation to the Ohio Department of Administrative Services, Equal Opportunity Division (EOD) as required by Section 123:2, OAC.

Geddis Paving & Excavating, Inc. shall provide monthly reporting of its workforce by the tenth (10) day of each month for the preceding month to the EOD. The Contractor shall submit the Ohio Construction Contract Information Report Input Form 29 (I-29) via the Internet. The form and instruction for completing the form are available at the EOD web site:

[www.das.ohio.gov/eod/ccsubmitreportswitchboard.htm](http://www.das.ohio.gov/eod/ccsubmitreportswitchboard.htm)

**Geddis Paving & Excavating, Inc. will not tolerate discrimination based on any of the above criteria including, but not limited to, age, disability, equal pay, national origin, pregnancy, race, religion, sex, or sexual harassment. Such actions are a violation of Title VII and will result in disciplinary actions on the part of the employee acting against said title including, but not limited to, verbal and/or written warnings, suspension, and/or termination of employment.**

# SUBSTANCE ABUSE POLICY



# SUBSTANCE ABUSE POLICY

## I. Purpose

It is the policy of Geddis Paving and Excavating, Inc. ("the Company") that its employees, including but not limited to, commercial drivers, union employees, and non-union employees, including those who work on-site or off the paving or excavating site, be free of substance and alcohol abuse. Consequently, the use of illegal drugs by all employees is prohibited. Further, employees shall not engage in 'prohibited conduct' as defined herein. The overall goal of this policy is to help prevent accidents and injuries resulting from the misuse of alcohol or use of controlled substances by any employee of Geddis Paving and Excavating, Inc.

*SPECIAL NOTE:* In part, this policy addresses Department of Transportation ("DOT") regulations applicable to certain commercial "Drivers" (defined below), who are subject to those regulations. Those regulations impose various obligations and standards on covered Drivers and their employers. **In addition to, and separate from those federal regulations,** the Company also has established its own rules and standards regarding drugs and alcohol that apply to **all** Company employees, including Drivers ("Employees"). Those rules are also addressed in this policy. And, in many instances, Company rules are more stringent than federal requirements.

Therefore, throughout this policy, please note the distinctions we have made between rules and penalties applicable to "Drivers," and those applicable to all "Employees." In the event that any provision of this policy expressly conflicts with DOT Regulations for covered Drivers, the DOT regulations will control.

## II. Definitions

A. "Alcohol" means the intoxicating agent in beverage alcohol, ethyl alcohol, or other low molecular weight alcohols including methyl and isopropyl alcohol.

B. "Alcohol concentration (or content)" means the alcohol in a volume of breath expressed in terms of grams of alcohol per 210 liters of breath as indicated by an evidential breath test.

C. "Alcohol use" means the consumption of any beverage, mixture, or preparation, including any medication, containing alcohol.

D. "Commercial motor vehicle" means a motor vehicle or combination of motor vehicles used in commerce to transport passengers or property if the motor vehicle:

- (1) Has a gross combination weight rating of 26,001 or more pounds inclusive of a towed unit with a gross vehicle weight rating of more than 10,000 pounds; or
- (2) Has a gross vehicle weight rating of 26,001 or more pounds; or

(3) Is designed to transport 16 or more passengers, including the driver; or

(4) Is of any size and is used in the transportation of materials found to be hazardous for the purposes of the Hazardous Materials Transportation Act and which require the motor vehicle to be placarded under the Hazardous Material Regulations (49 CFR Part 172, subpart F).

E. "Confirmation test" for alcohol testing means a second test, following a screening test with a result of 0.02 or greater that provides quantitative data of alcohol concentration. For controlled substances testing, it means a second analytical procedure to identify the presence of a specific drug or metabolite which is independent of the screen test and which uses a different technique and chemical principle from that of the screen test in order to ensure reliability and accuracy. (Gas chromatography/mass spectrometry (GC/MS) is the only authorized confirmation method for cocaine, marijuana, opiates, amphetamines, and phencyclidine).

F. "Employee" means any and all employees of Geddis Paving and Excavating, Inc., including but not limited to, Drivers (defined below), union employees, and non-union employees, including those who work on-site at the office or on the paving or excavating site.

G. "Driver" means any person who operates a commercial motor vehicle in commerce in any State, and who is subject to: (1) the commercial driver's license requirements of part 383 of the Federal Motor Carrier Safety Regulations, (2) the Licencia Federal de Conductor (Mexico) requirements; or (3) the commercial driver's license requirements of the Canadian National Safety Code. This includes, but is not limited to: full time, regularly employed drivers; casual, intermittent or occasional drivers; leased drivers and independent, owner-operated contractors who are either directly employed by or under lease to the Company or who operate a commercial motor vehicle at the direction of or with the consent of the Company. For the purposes of pre-employment/pre-duty testing only, the term "driver" includes a person applying to the Company to drive a commercial motor vehicle.

H. "Performing (a safety-sensitive function)": An Employee is considered to be performing a safety-sensitive function during any period in which he or she is actually performing, ready to perform, or immediately available to perform any safety-sensitive functions.

I. "Refusal to submit (to an alcohol or controlled substances test)" means that an Employee:

- (1) Fails to appear for any test (except a pre-employment test) within a reasonable time, as determined by the Company, consistent with applicable DOT agency regulations, after being directed to do so by the Company.
- (2) Fails to remain at the testing site until the testing process is complete (except for pre-employment tests).
- (3) Fails to provide a urine specimen or an adequate amount of saliva or breath.
- (4) Fails to permit the observation or monitoring of his/her provision of a specimen in the case of a directly observed or monitored collection in a drug test.

- (5) Fails to provide a sufficient specimen when directed and when there is no adequate medical explanation for the failure.
- (6) Fails or declines to take an additional test that the Company or collector has directed the Employee to take.
- (7) Fails to undergo a medical examination or evaluation, as directed by the MRO as part of the verification process, or as directed by the Company as part of the insufficient breath procedures outlined in the federal regulations.
- (8) Fails to sign the certification at Step 2 of the ATF.
- (9) Fails to cooperate with any part of the testing process.
- (10) Fails to follow the observer's instructions for an observed collection.
- (11) Possess or wears a prosthetic or other device that could be used to interfere with the collection process.
- (12) Admits to the collector or MRO that he/she adulterated or substituted the specimen.

J. "Safety-sensitive function" means all time from the time a driver begins to work or is required to be in readiness to work until the time he/she is relieved from work and all responsibility for performing work, including: in

- (1) All time at the Company's property, or on any public property, waiting to be dispatched, unless the Driver has been relieved from duty by the Company;
- (2) All time inspecting equipment or otherwise inspecting, servicing, or conditioning any commercial motor vehicle at any time;
- (3) All time spent at the driving controls of a commercial motor vehicle in operation;
- (4) All time, other than driving time, in or upon any commercial motor vehicle except time spent resting in a sleeper berth ;
- (5) All time loading or unloading a vehicle, supervising, or assisting in the loading or unloading, attending a vehicle being loaded or unloaded, remaining in readiness to operate the vehicle, or in giving or receiving receipts for shipments loaded or unloaded; and
- (6) All time repairing, obtaining assistance, or remaining in attendance upon a disabled vehicle.

K. "Screening test (also known as initial test)" - In alcohol testing, it means an analytical procedure to determine whether an employee may have a prohibited concentration of alcohol in his or her system. In controlled substance testing, it means an immunoassay screen to eliminate "negative" urine specimens from further consideration.

L. "Substance abuse professional" means a licensed physician (Medical Doctor or Doctor of Osteopathy), or a licensed or certified psychologist, social worker, employee assistance professional, or addiction counselor (certified by the National Association of Alcoholism and Drug Abuse Counselors Certification Commission) with knowledge of and clinical experience in the diagnosis and treatment of alcohol and controlled substances-related disorders.

### **III. Assistance/Rehabilitation Program**

1. Any Employee who feels that he or she has developed an addiction to, dependence upon or problem with alcohol or drugs, legal or illegal, is encouraged to seek assistance, and may do so without fear of disciplinary actions against him for doing so. Assistance may be sought by writing in confidence to, or asking for a personal appointment with the Health and Safety Officer, or a person of comparable management position.

2. Each request for assistance will be treated as confidential and shall only be disclosed on a need to know basis and with notice to the Employee of the disclosure. 3. The Company may develop contacts with substance abuse professionals, local hospitals and community organizations offering alcohol or drug treatment programs (e.g., care units, Alcoholics Anonymous, Narcotics Anonymous, community health centers, etc.) and for referring Employees seeking assistance to an appropriate organization.

4. Rehabilitation (treatment and prescribed follow-up care) itself is the responsibility of the Employee. Any Employee seeking professional or medical attention for alcoholism or drug addiction will be entitled to benefits under the group medical insurance plan referred to in the collective bargaining agreement on the basis and with the same restrictions and limits as set forth in the collective bargaining agreement and plan documents. For Employees enrolled in a formal treatment program, the Company may grant a rehabilitation leave.

5. Once a person successfully completes rehabilitation (treatment and prescribed follow-up care), he may be returned to his regular duty assignment. Employment and reassignment during and/or after treatment shall be at the Company's sole discretion and based on each person's circumstances. If follow-up care is prescribed after treatment, this may be a condition of continued employment.

6. In addition, testing may be required as a part of a follow-up to counseling or rehabilitation for alcohol or substance abuse, for a period of up to sixty (60) months following the employee's return to duty. No fewer than six (6) tests shall be performed in the first twelve (12) months of follow-up testing.

### **IV. Prohibited Conduct**

Pursuant to applicable federal regulations, the following shall be considered "Prohibited Conduct for Drivers"

No Driver shall perform any safety-sensitive function while having an alcohol concentration of .04 or greater.

No Driver shall be on duty or operate a commercial motor vehicle while the Driver possesses alcohol unless the alcohol is manifested and transported as part of a shipment.

No Driver shall use alcohol while performing safety-sensitive functions.

No Driver shall perform safety-sensitive functions within four (4) hours after using alcohol.

No Driver required to take a post-accident alcohol test shall use alcohol for eight (8) hours following the accident or until he or she undergoes a post-accident alcohol test, whichever occurs first.

No Driver shall refuse to submit to a post-accident, random, reasonable suspicion, return-to-duty, or follow-up alcohol or drug test.

No Driver shall perform a safety-sensitive function, report for duty or remain on duty when the Driver uses any controlled substance, except when use is pursuant to the instructions of a physician who has advised the Driver that the substance does not adversely affect the Driver's ability to safely operate a commercial motor vehicle.

No Driver shall perform a safety-sensitive function, report for duty or remain on duty if he or she has tested positive or has adulterated or substituted a test specimen for controlled substances.

Pursuant to Company policy and the Company's independent authority to implement policies and procedures to ensure a safe work environment, the following shall be considered "Prohibited Conduct for all Employees":

No Employee shall engage in any of the acts of Prohibited Conduct for Drivers listed above.

No Employee shall unlawfully use, sell, distribute, dispense, manufacture, or have in his or her possession any drug, including a prescription or over-the-counter drug that might adversely impair performance, while engaged in Company business, no matter the location.

No Employee shall report to work or perform any job duties, no matter the location, while under the influence of alcohol.

Prescription or over-the-counter drug use must be within the limits of a valid prescription and/or manufacturer's guidelines. Such use must not adversely impair the individual's ability to function safely and effectively or adversely affect judgment or perception.

Off-the-job possession, sale, use or involvement with drugs or alcohol, which leads to adverse publicity, or impacts the Company's credibility with any outside concern, or has the potential for that publicity or impact, as determined solely by the Company, will be dealt with on an individual case basis.



## **V. Consequences of Policy Violation**

Pursuant to applicable federal regulations, no Driver shall perform safety-sensitive functions, including driving a commercial motor vehicle, if the Driver has engaged in “Prohibited Conduct for Drivers” as defined above. Pursuant to its authority independent of any applicable federal regulations, it is the Company’s policy that any Employee, who engages in “Prohibited Conduct for all Employees” as set forth above, will be subject to disciplinary action, up to and including immediate termination. In its sole discretion, the Company may condition the continued employment of an Employee who violates this policy on that Employee’s successful completion of a rehabilitation and/or treatment.

## **VI. Refusal to Submit**

It is the Company’s policy that refusal to submit to the types of drug and alcohol tests employed by the Company will be grounds for refusal to hire employee/applicants and to terminate employment of existing employees. **Again, you will be subject to termination of employment for refusal to submit to drug or alcohol testing.**

## **VII. Drug and/or Alcohol Tests for Drivers**

Pursuant to regulations promulgated by the Department of Transportation (DOT), the Company has implemented six circumstances for drug and alcohol testing for Drivers: (1) pre-employment (drug testing only); (2) post-accident testing; (3) random testing; (4) reasonable suspicion testing; (5) return-to-duty testing; and (6) follow-up testing. Testing for Drivers will be conducted in accordance with applicable DOT regulations. Drivers are required to submit to alcohol and controlled substances tests administered in accordance with applicable federal regulations.

### **Pre-Employment Testing**

All offers of employment with the Company will be conditioned upon the applicant’s successful completion of a urine drug test.

### **Random Testing**

The Company conducts random drug and alcohol testing. The Company or its agents will submit all Drivers’ names to a random selection system. The random selection system provides an equal chance for each Driver to be selected each time random selection occurs. Random selections will be reasonably spread throughout the year. The Company will drug test, at a rate established by the Department of Transportation for the given year. The Company will perform random alcohol testing, at the rate established by the DOT for the given year. Random selection, by its very nature, may result in Drivers being selected in successive selections or more than once a calendar year. Alternatively, some Drivers may not be selected in a calendar year. The selection of Drivers for random alcohol and controlled substances testing shall be made by a scientifically valid method, such as a random number generator that is matched with Driver’s Social Security Numbers, payroll identification numbers, or other comparable identifying numbers. Random tests are unannounced.



If a Driver is selected at random for either drug or alcohol testing, a Company official will notify the Driver. Once notified, every action the Driver takes must lead to a collection. If the Driver engages in conduct that does not lead to a collection as soon as possible after notification, such conduct may be considered a refusal to test. A Driver shall only be randomly tested for alcohol while the Driver is performing safety-sensitive functions, just before the employee is to perform safety-sensitive functions, or just after the employee has ceased performing such functions.

### **Post-Accident Testing**

As soon as practicable following an accident, the Company will test for alcohol and controlled substances for each of its surviving Drivers:

(1) who was performing safety-sensitive functions with respect to the vehicle, if the accident involved the loss of human life; or (2) who receives a citation within 8 hours (for alcohol testing) or 32 hours (for controlled substance testing) of the occurrence under State or local law for a moving traffic violation arising from the accident, if the accident involved: (i) bodily injury to any person who, as a result of the injury, immediately receives medical treatment away from the scene of the accident; or (ii) one or more motor vehicles incurring disabling damage as a result of the accident, requiring the motor vehicle to be transported away from the scene by a tow truck or other motor vehicle.

Following any accident, the Driver must contact the Company as soon as possible and report for post-accident testing as soon as safely practicable. The Driver has been presented with an information card setting forth certain instructions for post-accident drug and alcohol testing. The Driver shall follow the instructions contained on the information card as well as any additional instructions from the Company or its representatives.

Any time a post-accident drug or alcohol test is required, it must be performed as soon as safely practicable following the accident. If no alcohol test can be made within eight (8) hours, attempts to perform an alcohol test shall cease. If no urine collection can be obtained for purposes of post-accident drug testing within thirty-two (32) hours, attempts to make such collection shall cease.

In the event that federal, state or local officials conduct breath or blood tests for the use of alcohol and/or urine tests for the use of controlled substances following an accident, these tests may meet the requirements of this section, provided the tests conform to applicable federal, state or local requirements. The Company may request testing documentation from such agencies and may ask the Driver to sign a release allowing the Company to obtain such test results.

In the event a Driver is so seriously injured that the employee cannot provide a sample of urine, breath or saliva at the time of the accident, the Driver must provide necessary authorization for the Company to obtain hospital records or other documents that would indicate the presence of controlled substances or alcohol in the Driver's system at the time of the accident.

## **Reasonable Suspicion Testing**

The Company shall require a Driver to submit to an alcohol test or controlled substances test when the Company has reasonable suspicion to believe that a Driver has violated this policy. The Company's determination that reasonable suspicion exists to require the Driver to undergo an alcohol test or controlled substances test must be based on specific, contemporaneous, articulable observations concerning the appearance, behavior, speech or body odors of the employee. The observation may include indications of the chronic and withdrawal effects of controlled substances.

The required observations for alcohol and/or controlled substances reasonable suspicion testing shall be made by a supervisor or company official who is trained in accordance with applicable federal regulations. The person who makes the determination that reasonable suspicion exists to conduct an alcohol test shall not conduct the alcohol test of the employee. Alcohol testing is authorized under this section only if the observations required by this section are made during, just preceding, or just after the period of the workday that the Driver is required to perform safety-sensitive functions. A written record shall be made of the observations leading to a controlled substance reasonable suspicion test and signed by the supervisor or company official who made the observations, within 24 hours of the observed behavior or before the results of the controlled substances test are released, whichever is earlier.

Whenever possible, the Driver's steward or other responsible Union representative shall be summoned before the Driver is approached. The steward or Union representative shall be present when the Driver is first told of the reasonable suspicion and may accompany the Driver to the place where the testing will be conducted.

## **Substance Abuse Evaluation, Return to Duty and Follow Up Testing**

Any Driver who engages in Prohibited Conduct for Drivers shall be provided with the names, addresses and telephone numbers of qualified substance abuse professionals (SAPs). If the Company decides, in its sole discretion, to continue to employ a Driver who has violated this policy, the Company will place the employee on a leave of absence for up to three months, during which time the Driver must, as a condition of continued employment, be evaluated by a SAP and submit to any treatment the SAP prescribes. Following evaluation and treatment, if any, the Driver must submit to and successfully complete a return-to-duty drug and/or alcohol test. Such Driver is also subject to follow-up testing. Follow-up testing is separate from and in addition to the Company's reasonable suspicion, post-accident, and random testing procedures. The schedule for follow-up testing shall be unannounced and in accordance with the instructions of the SAP. Follow-up testing may continue for a period of up to sixty (60) months following the Driver's return to duty. No fewer than six (6) tests shall be performed in the first twelve (12) months of follow-up testing. The costs of any SAP evaluation or prescribed treatment shall be borne by the Driver.

## **Authorization for Previous Test Records**

As a condition of employment, Drivers, who are seeking a position in which they will be performing safety-sensitive duties for the Company for the first time, must provide the Company with written authorization to obtain certain drug and alcohol testing records from DOT-regulated employers who employed the Driver during any period during the previous two years. The Company will make good faith efforts to obtain and review this information as soon as it is feasible to do so, but no later than 30 days after the Driver first begins performing a safety-sensitive function for the Company. If the Company obtains information that the Driver has violated a DOT agency drug and alcohol regulation, it will not employ the Driver to perform safety-sensitive functions; however, the Company may, in its sole discretion, employ such a Driver to perform a safety-sensitive function if the Company also obtains information that the Driver subsequently complied with applicable return-to-duty requirements.

## **Drug Urinalysis**

Drug testing will be performed through urinalysis and, where applicable, in a manner consistent with applicable federal regulations. Urinalysis will test for the presence of drugs and/or metabolites of the following controlled substances (or their metabolites): (1) marijuana; (2) cocaine; (3) opiates; (4) amphetamines; and (5) phencyclidine (PCP).

Testing Procedures. All specimen collection shall be performed at a laboratory that is certified by the U.S. Department of Health and Human Services.

All drug testing will be done from urine specimens collected under highly controlled conditions and in accordance with applicable law. To ensure integrity of the specimen collection and transfer process and dignity and privacy of the specimen donor, specimen collection will occur at a designated, secure collection site that utilizes requisite chain of custody documentation, properly qualified collection personnel, and appropriate equipment, supplies and procedures.

Driver protection is built into the testing procedures. Only laboratories that are certified by the Department of Health and Human Services will be used. These laboratories have been rigorously inspected and tested and meet the highest standards for analytical competence.

Testing Levels. A selected laboratory shall do the testing and, where applicable, testing shall be conducted in accordance with applicable federal regulations. An initial immunoassay test will be performed. This is a screening test to determine drug usage for the above five classes of drugs. If the results of the initial test are negative, the testing laboratory will advise the Company's Medical Review Officer ("MRO") that the drug test was negative. No additional tests on the specimen will be done.

If any prohibited controlled substance registers above designated cut-off levels on the immunoassay screen, a confirmation test of the same urine specimen will be performed. The confirmation test is independent of the initial test and uses a different technique and chemical principle from that of the initial test in order to ensure reliability and accuracy. Gas chromatography/mass spectrometry (GC/MS) is the only authorized confirmation method for cocaine, marijuana, opiates, amphetamines, and phencyclidine.

All results of controlled substances tests will be reported by the laboratory to a qualified MRO, who is a licensed physician responsible for receiving controlled substance testing laboratory results. The MRO will, among other things, review the chain of custody form to ensure its accuracy; review and interpret a confirmed positive, adulterated, substituted, or invalid test result; report each verified test result to the Company; take appropriate steps to protect the Driver's privacy and testing program confidentiality; contact the Driver directly and on a confidential basis to determine whether the Driver wants to discuss the test result; and notify the Driver of his/her rights to request a test of the split specimen, if applicable (see below). Only specimens that are confirmed positive on the second or confirmatory test are reported positive to the MRO for the review and analysis.

Before reporting a positive test result to the Company, the MRO will attempt to contact the Driver to discuss the test result. If the MRO is unable to contact the Driver directly, the MRO will contact the Company management official designated in advance by the Company, who shall, in turn, contact the Driver and direct the Driver to contact the MRO. Upon being so directed, the Driver shall contact the MRO immediately or, if after the MRO's business hours and the MRO is unavailable, at the start of the MRO's next business day. In the MRO's sole discretion, a determination will be made as to whether a result is positive or negative. If, after failing to contact the MRO after five days, or if the Driver cannot be contacted at all within 30 days, the MRO may verify the test as positive. After any positive verification the Driver may petition the MRO to reopen the case for reconsideration.

Individual test results for applicants and Drivers will be released to the Company and will be kept strictly confidential unless consent for the release of the test results has been obtained or unless disclosure is otherwise required by applicable law or court order. Any individual who has submitted to drug testing in compliance with this policy is entitled to receive the results of such testing upon timely written request.

An individual testing positive may make a request of the MRO to have the secondary vial tested. The secondary vial must be tested by a different SAMHSA-certified lab than tested the primary specimen. The individual making the request for a test of the second specimen must pre-pay all costs associated with the test. The request for testing of a secondary specimen is timely if it is made to the MRO within 72 hours of the individual being notified by the Company of a positive test result. If the second laboratory test is positive, the Driver shall pay for all costs associated with the second test. If the second laboratory test is negative, the Company will pay/reimburse the Driver for all costs associated with the second test.

## **Alcohol Tests**

The Company will perform alcohol-testing using a device that is on the National Highway Traffic Safety Administration's (NHTSA) Conforming Products List (CPL) and meets the DOT's testing requirements. This may be a breath-testing device or a saliva-based testing device and may be provided through a vendor or agent. A technician who is certified and trained on the specific device he or she will be operating will operate the device. The Driver shall report to the alcohol-testing site as notified by the Company. The Driver shall follow all instructions given by the alcohol technician.

Any initial test indicating a blood alcohol concentration (BAC) of .02 or greater will be confirmed on an evidential breath testing device (EBT) operated by a breath alcohol technician (BAT). The confirmation test will be performed no sooner than 15 minutes and no later than 30 minutes following the completion of the initial test. In the event the confirmation test indicates a BAC of .02 to .0399, the Driver shall be removed from duty for at least 24 hours or until his/her next scheduled on-duty time, whichever is longer. Drivers with tests indicating a BAC of .04 or greater will be removed immediately from his/her safety-sensitive function. All alcohol tests shall be performed just prior to, during or just after duty.

### **VIII. Testing for Employees**

The Company reserves the right, independent of DOT regulations, to require any Employee to undergo testing as provided above or to otherwise require pre-employment, reasonable suspicion, post-accident and/or random drug and/or alcohol testing as the Company deems necessary and/or appropriate to maintain a safe working environment. Failure to submit to or fully cooperate with any such test or any other violation of this policy may result in disciplinary action, up to and including immediate termination.

### **IX. Educational Materials**

Attached to this policy are written materials providing information concerning the effects of alcohol and controlled substance use on an individual's health, work, and personal life; signs and symptoms of an alcohol or a controlled substances problem; and available methods of intervening when an alcohol or controlled substances problem is suspected, including confrontation, referral to any employee assistance program and/or referral to management.

### **X. Confidentiality**

All results of tests included in this substance abuse policy shall be considered medical records and held confidential to the extent permitted and/or required by law. When testing is performed, the Company shall establish an employee file to indicate the employee's name, the date, location and result of the test; the lab performing the test; and any other relevant information pertaining to the test; and these files shall be kept separate from other employee files and in all cases must be kept extremely confidential. However, this information may be divulged for grievances, arbitration, and/or litigation with respect to these matters.

### **XI. Union Rights**

1. Right of Appeal. Each employee covered by a collective bargaining agreement has the right to challenge the results of drug and alcohol testing in the same manner that he may grieve any Company action.

2. Right of Union Participation. At any time, the Union, upon request, will have the right to inspect and observe any aspect of the drug and alcohol-testing program with the exception of

individual test results. The Union may inspect individual test results if the employee involved authorizes the release of this information.

## **XII. Conflict With Other Laws**

The provisions of this Substance Abuse Policy shall not apply to the extent that they are inconsistent with applicable State or Federal law.

## **XIII. Questions**

If you have any questions about this policy, you should contact the Director of Human Resources.

# Stop Work Authorization Safety Policy

## Purpose

The purpose of this Stop Work Authorization (SWA) Safety Policy is to empower employees to stop work when they encounter unsafe conditions or acts and ensure that such actions are taken without fear of retaliation. This policy outlines the procedures for training employees on their roles and responsibilities, reporting and stopping unsafe conditions, anti-retaliation measures, and notification protocols.

## Scope

This policy applies to all employees, contractors, and subcontractors of Geddis Paving Inc.

## Roles and Responsibilities

- **Employees:** All employees are responsible for identifying and reporting unsafe conditions or acts. They are authorized to stop work if they perceive an immediate risk to health or safety.
- **Supervisors:** Supervisors must respond promptly to reports of unsafe conditions, ensure corrective actions are taken, and communicate with affected employees.
- **Safety Manager:** The Safety Manager oversees the SWA program, ensures proper training, investigates reports of unsafe conditions, and enforces anti-retaliation measures.

## Training

1. **Initial Training:** All new employees will receive training on the SWA policy during their orientation. This training will cover:
  - o The importance of safety and the role of SWA.
  - o How to identify and report unsafe conditions.
  - o Procedures for stopping work and reporting incidents.
  - o The company's anti-retaliation policy.
2. **Ongoing Training:** Annual refresher training will be conducted for all employees to reinforce the importance of the SWA policy and ensure continuous awareness.
3. **Documentation:** Attendance and completion of training sessions will be documented and maintained by the Safety Manager.

## Procedure for Stopping and Reporting Unsafe Acts or Conditions

1. **Identification:** When an employee identifies an unsafe condition or act, they must assess the immediacy of the risk.
2. **Stop Work:** If the risk is immediate and severe, the employee must stop work immediately and move to a safe location.
3. **Report:** The employee must report the unsafe condition or act to their supervisor or the Safety Manager as soon as possible.

4. **Documentation:** The report should include a detailed description of the unsafe condition or act, the date and time, and any immediate corrective actions taken.

### **Anti-Retaliation Measures**

1. **Policy Statement:** Geddis Paving Inc. strictly prohibits any form of retaliation against employees who stop work or report unsafe conditions in good faith.
2. **Reporting Retaliation:** Employees who believe they have been retaliated against must report the incident to the Safety Manager or Human Resources immediately.
3. **Investigation:** All reports of retaliation will be investigated promptly and thoroughly by the Safety Manager and Human Resources.
4. **Corrective Actions:** If retaliation is confirmed, appropriate disciplinary action, up to and including termination, will be taken against the retaliator.

### **Notification Procedure**

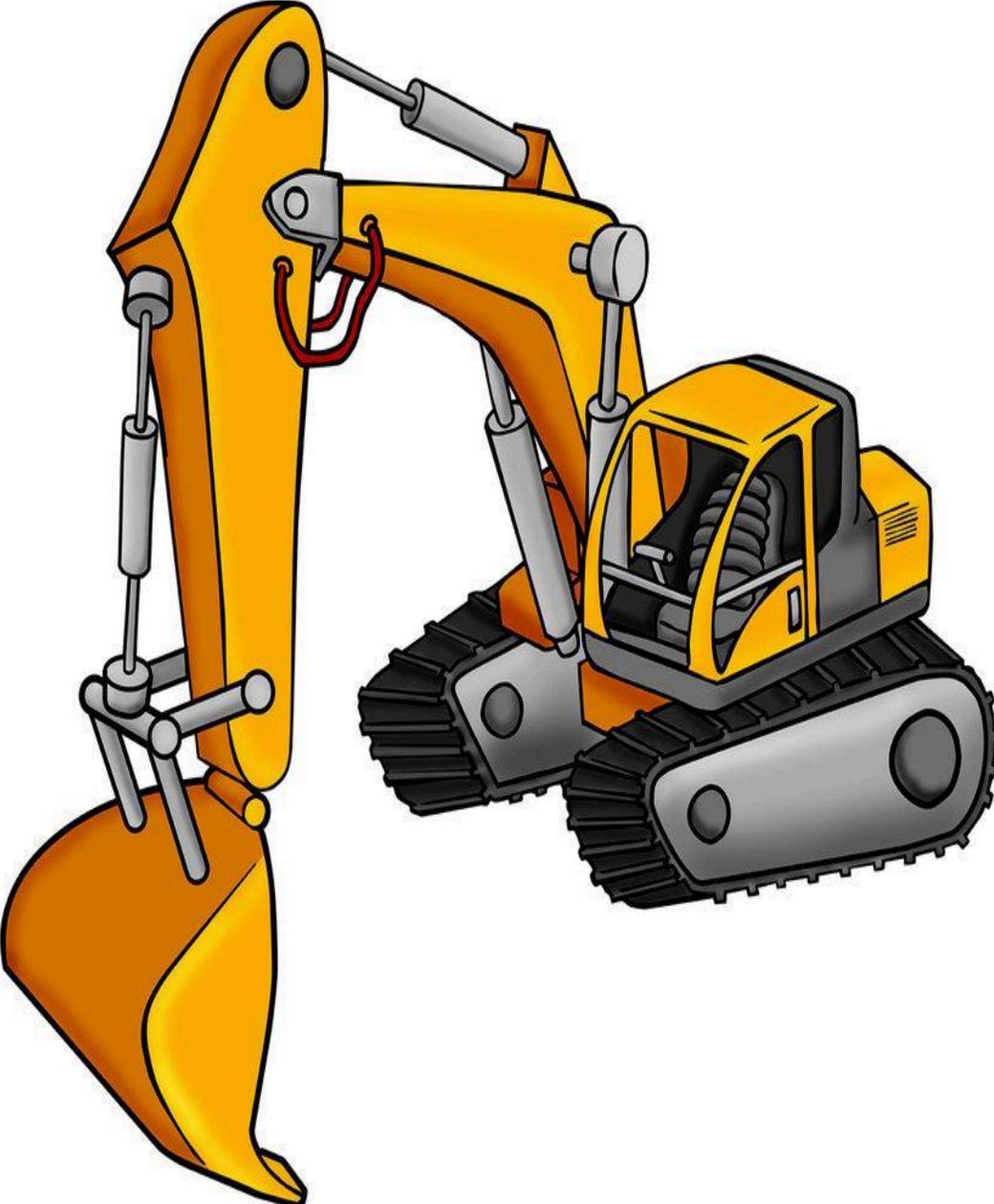
1. **Immediate Notification:** When an unsafe condition is identified or reported, the supervisor must immediately inform all affected employees and halt operations if necessary.
2. **Supervisor's Response:** The supervisor must assess the situation, implement corrective actions, and ensure the safety of all employees before resuming work.
3. **Follow-Up:** The Safety Manager will follow up with the reporting employee and other affected employees to ensure the corrective actions were effective and the unsafe condition has been resolved.
4. **Communication:** Supervisors must communicate the status of the unsafe condition, actions taken, and any additional safety measures to all affected employees.

### **Review and Continuous Improvement**

- The SWA policy will be reviewed annually by the Safety Manager to ensure its effectiveness and make improvements as needed.
- Feedback from employees and supervisors will be solicited to enhance the SWA policy and training programs.

By implementing this policy, Geddis Paving Inc. commits to fostering a safe working environment where employees feel empowered to stop work and report unsafe conditions without fear of retaliation.

# EXCAVATION & TRENCHING PROCEDURES



## **Scope & Application**

This policy sets the official practices required for excavations made by Geddis Paving & Excavating, Inc. employees on property owned by any and all clients/customers.

## **Definitions**

### ***Aluminum Hydraulic Shoring***

An engineered shoring system comprised of aluminum hydraulic cylinders (cross braces), used in conjunction with vertical rails (uprights) or horizontal rails (walers). Such a system is designed specifically to support the sidewalls of an excavation and prevent cave-ins.

### ***Benching***

A method of protecting employees from cave-ins by excavating the sides of an excavation to form one of a series of horizontal levels or steps, usually with vertical or near-vertical surfaces between levels.

### ***Cave-in***

The separation of a mass of soil or rock material from the side of an excavation, or the loss of soil from under a trench shield or support system, and its sudden movement into the excavation, either by falling or sliding, in sufficient quantity so that it could entrap, bury, or otherwise injure and immobilize a person.

### ***Competent Person***

One who is capable of identifying existing and predictable hazards in the surroundings, or working conditions that are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them. All competent persons must complete competent person trenching and shoring training, and be certified as a competent person. The competent person should have and be able to demonstrate the following:

Training, experience, and knowledge of:

- Soil analysis
- Use of protective systems
- Requirements of 29 CFR 1926 Subpart P

Ability to detect:

- Conditions that could result in cave-ins
- Failures in protective systems
- Hazardous atmospheres
- Other hazards including those associated with confined spaces
- Authority to take prompt corrective measures to eliminate existing and predictable hazards and to stop work when required.



# Safety Policy: Locating and Protecting Buried Utilities

## Policy Statement

Geddis Paving Inc. is committed to ensuring the safety of all employees and contractors by adhering to strict procedures for locating and protecting buried utilities prior to any excavation or ground-penetrating activities. This policy outlines the necessary steps to identify, mark, and safeguard underground utilities to prevent damage, service disruptions, and potential injuries.

## Scope

This policy applies to all employees, contractors, and subcontractors involved in excavation or ground-penetrating activities on any Geddis Paving Inc. project site.

## Procedure

### 1. Pre-Excavation Planning

- o **Site Assessment:** Conduct a thorough assessment of the project site to identify potential underground utilities.
- o **Review Plans:** Review site plans, blueprints, and as-built drawings to locate known utilities.

### 2. Utility Notification

- o **Contact Utility Owners:** Notify utility owners at least 48 hours prior to any planned excavation. This includes contacting the Ohio Utilities Protection Service (OUPS) at 8-1-1 or 1-800-362-2764.
- o **Document Notification:** Keep a record of all communications with utility owners, including date, time, and contact details.

### 3. Utility Location and Marking

- o **Request Utility Marking:** Arrange for utility owners to mark the locations of their underground utilities using color-coded markers (e.g., paint, flags).
- o **Verify Markings:** Ensure that all utilities are marked accurately and visibly. If markings are unclear or missing, contact the utility owner for clarification.

### 4. Safety Precautions During Excavation

- o **Hand Digging:** For areas within 24 inches of a marked utility, use hand tools instead of mechanical equipment to expose the utility.
- o **Spotting Personnel:** Assign a designated spotter to monitor the excavation and ensure the safety of all workers.
- o **Protective Measures:** Implement protective measures (e.g., barricades, covering exposed utilities) to prevent damage during excavation.

### 5. Post-Excavation Procedures

- o **Inspection:** Inspect the exposed utilities for any signs of damage. Report any damage immediately to the utility owner and Geddis Paving Inc. Safety Manager.
- o **Documentation:** Document the location and condition of all utilities encountered during excavation.

- **Restoration:** Ensure that all utilities are properly backfilled and restored to their original condition after the completion of work.
6. **Training and Compliance**
- **Employee Training:** Provide training for all employees on the procedures for locating and protecting buried utilities.
  - **Compliance Monitoring:** Regularly monitor compliance with this policy and conduct audits to ensure adherence to safety standards.

## Responsibilities

- **Project Manager:** Ensure all procedures are followed and proper notifications are made.
- **Safety Manager (Jeremy Oliver, 419-407-0785):** Oversee the implementation of safety measures and training.
- **Employees and Contractors:** Follow all procedures and report any issues or discrepancies immediately.

# Hazard Identification, Risk Assessment, and Control Policy

## Policy Statement

Geddis Paving Inc. is dedicated to maintaining a safe work environment by systematically identifying, assessing, and controlling hazards. This policy establishes the procedures for evaluating, identifying, and mitigating risks in a timely manner to protect the health and safety of all employees, contractors, and visitors.

## Scope

This policy applies to all employees, contractors, and subcontractors engaged in activities at any Geddis Paving Inc. project site.

## Procedures

### 1. Hazard Identification and Evaluation

- **Routine Inspections:** Conduct regular site inspections to identify potential hazards. These inspections should be performed at least weekly by the Safety Manager or designated safety personnel.
- **Employee Reporting:** Encourage employees to report hazards immediately to their supervisors or the Safety Manager. Provide hazard reporting forms and ensure employees know how to use them.
- **Incident Analysis:** Review incidents and near-misses to identify underlying hazards that may not have been previously recognized.
- **Pre-Task Analysis:** Conduct a Job Safety Analysis (JSA) or Job Hazard Analysis (JHA) before beginning any new task or project phase to identify potential hazards.

### 2. Risk Assessment

- **Risk Evaluation:** Evaluate identified hazards based on their severity and likelihood of occurrence using a standardized risk matrix.
  - **Prioritization:** Prioritize risks that require immediate attention based on their potential impact on health and safety.
  - **Documentation:** Record all identified hazards and their risk assessments in a hazard log or risk register.
3. **Risk Control**
- **Elimination:** Where possible, eliminate hazards entirely from the workplace.
  - **Substitution:** Replace hazardous materials or processes with less hazardous alternatives.
  - **Engineering Controls:** Implement physical changes to the workplace, such as machine guards or ventilation systems, to reduce risks.
  - **Administrative Controls:** Develop procedures and safe work practices to minimize exposure to hazards, including job rotation, training, and scheduling changes.
  - **Personal Protective Equipment (PPE):** Provide appropriate PPE and ensure employees are trained in its proper use and maintenance.
4. **Roles and Responsibilities**
- **Safety Manager (Jeremy Oliver, 419-407-0785):** Oversee the implementation of hazard identification, risk assessment, and control procedures. Conduct regular site inspections and ensure compliance with safety policies.
  - **Supervisors:** Monitor work areas for hazards, ensure employees follow safety procedures, and report any hazards to the Safety Manager.
  - **Employees and Contractors:** Participate in safety training, report hazards, and adhere to safety protocols and procedures.
5. **Addressing Hazards from Unrelated Tasks or Personnel**
- **Coordination Meetings:** Hold regular safety meetings with all personnel on-site, including those from unrelated tasks, to discuss potential hazards and coordinate control measures.
  - **Site Access Control:** Restrict access to hazardous areas and ensure that only authorized personnel are allowed in high-risk zones.
  - **Communication:** Use clear signage and communication channels to inform all personnel of current hazards and control measures in place.
6. **Internal Safety Inspections**
- **Frequency:** Conduct formal internal safety inspections at least quarterly, in addition to routine weekly inspections.
  - **Criteria:** Inspections should evaluate compliance with safety standards, effectiveness of hazard controls, and overall site safety conditions. Use a standardized checklist to ensure consistency.
  - **Documentation and Follow-Up:** Document findings from all inspections and track corrective actions to ensure timely resolution of identified issues. Review inspection results during safety meetings to promote continuous improvement.

***Excavation***

Any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal.

***Registered Professional Engineer***

A person who is registered as a professional engineer.

***Shield (shield system)***

A structure that is able to withstand the forces imposed on it by a cave-in and thereby protects employees with the structure. Shields can be permanent structure or can be designated to be portable and moved along as work progresses. Also known as trench box or trench shield.

***Shoring (shoring system)***

A structure such as a metal hydraulic, mechanical or timber shoring system that supports the sides of an excavation and which is designed to prevent cave-ins.

***Sloping (sloping system)***

A method of protecting employees from cave-ins by excavating to form sides of an excavation that is inclined away from the excavation so as to prevent cave-ins. The angle of incline varies with differences in such factors as the soil type, environmental conditions of exposure, and application of surcharge loads.

***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 is not greater than 15 feet. If forms or other structures are installed or constructed in an excavation as to reduce the dimension measured from the forms or structure to the side of the excavation to 15 feet or less, the excavation is also considered to be a trench.

**General Requirements**

All excavations shall be made in accordance with the rules, regulations, requirements, and guidelines set forth in 29 CFR 1926.650, .651, and .652; the Occupational Safety and Health Administration's standard on Excavations, except where otherwise noted below.

## ***Procedures***

A competent person shall be placed in charge of all excavations. Underground utilities must be located and marked before excavation begins. Employees are not allowed in the excavation while heavy equipment is digging.

## ***Inspections***

The competent person shall conduct inspections:

- Daily and before the start of each shift.
- As dictated by the work being done in the trench.
- After every rainstorm.
- After other events that could increase hazards, such as snowstorm, windstorm, thaw, earthquake, dramatic change in weather, etc.
- When fissures, tension cracks, sloughing, undercutting, water seepage, bulging at the bottom, or other similar conditions occur.
- When there is a change in the size, location, or placement of the spoil pile.
- When there is any indication of change or movement in adjacent structures.

(For excavations 4 feet or greater in depth, a trench inspection form shall be filled out for each inspection.)

## ***Soil Types***

**Type A** – Most stable: clay, silty clay, and hardpan (resists penetration). No soil is Type A if it is fissured, is subject to vibration of any type, has previously been disturbed, or has seeping water.

**Type B** – Medium stability: silt, sandy loam, medium clay and unstable dry rock; previously disturbed soils unless otherwise classified as Type C; soils that meet the requirements of Type A soil but are fissured or subject to vibration.

**Type C** – Least stable: gravel, loamy sand, soft clay, submerged soil or dense, heavy unstable rock, and soil from which water is freely seeping.

**Layered geological strata** (where soils are confined in layers) – The soil must be classified on the basis of the soil classification of the weakest soil layer. Each layer may be classified individually if a more stable layer lies below a less stable layer, i.e. where a Type C soil rests on top of stable rock.

## ***Testing Methods***

The competent person in charge of the excavation shall be responsible for determining whether the soil is a Type B or C. If the competent person wants to classify the soil as Type C, they do not need to do any tests. However, tests must be conducted to determine if the soil can be classified as Type B. To do this, the competent person shall use a visual test coupled with one or more manual tests.

## **Visual Test**

In addition to checking the items on the trench inspection form, the competent person should perform a visual test to evaluate the conditions around the site. In a visual test, the entire excavation site is observed, including the soil adjacent to the site and the soil being excavated. The competent person also checks for any signs of vibration. During the visual test, the competent person should check for crack-line openings along the failure zone that would indicate tension cracks, look for existing utilities that indicate that the soil has been previously disturbed, and, if so, what sort of backfill was used, and observe the open side of the excavation for indications of layered geological structuring.

## **Manual Tests**

### **Thumb penetration test**

Attempt to press the thumb firmly into the soil in question. If the thumb penetrates no further than the length of the nail, it is probably Type B soil. If the thumb penetrates the full length of the thumb, it is Type C. It should be noted that the thumb penetration test is the least accurate testing method.

### **Dry strength test**

Take a sample of dry soil. If it crumbles freely or with moderate pressure into individual grains it is considered granular (Type C). Dry soil that falls into clumps that subsequently break into smaller clumps (and the smaller clumps can only be broken with difficulty) it is probably clay in combination with gravel, sand, or silt (Type B).

### **Plasticity or Wet Thread Test**

Take a moist sample of the soil. Mold it into a ball and then attempt to roll it into a thin thread approximately 1/8 inch in diameter by two inches in length. If the soil sample does not break when held by one end, it may be considered Type B. A pocket penetrometer, shear vane, or torvane may also be used to determine the unconfined compression strength of soils.

## ***Spoil***

**Temporary spoil** shall be placed no closer than 2 feet from the surface edge of the excavation, measured from the nearest base of the spoil to the cut. This distance should not be measured from the crown of the spoil deposit. This distance requirement ensures that loose rock or soil from the temporary spoil will not fall on employees in the trench. Spoil should be placed so that it channels rainwater and other run-off water away from the excavation. Spoil should be placed so that it cannot accidentally run, slide, or fall back into the excavation.

**Permanent spoil** should be placed some distance from the excavation.

### ***Surface Crossing of Trenches***

Surface crossing of trenches should not be made unless absolutely necessary. However, if necessary, they are only permitted under the following conditions:

- **Vehicle crossings** must be designed by and installed under the supervision of a registered professional engineer.
- **Walkways or bridges** must:
  - Have a minimum clear width of 20 inches,
  - Be fitted with standard rails, and
  - Extend a minimum of 24 inches past the surface edge of the trench

### ***Ingress and Egress***

Trenches 4 feet or more in depth shall be provided with fixed means of egress.

Spacing between ladders or other means of egress must be such that a worker will not have to travel more than 25 feet laterally to the nearest means of egress.

Ladders must be secured and extend a minimum of 36 inches above the landing.

Metal ladders should not be used when electric utilities are present.

### ***Exposure to Vehicles***

Employees exposed to vehicular traffic shall be provided with and required to wear reflective vests or other suitable garments marked with or made of reflectorized or high visibility materials.

Trained flag persons, signs, signals, and barricades shall be used when necessary.

### ***Exposure to Falling Loads***

All employees on an excavation site must wear hard hats.

Employees are not allowed to work under raised loads.

Employees are not allowed to work under loads being lifted or moved by heavy equipment used for digging or lifting.

Employees are required to stand away from equipment that is being loaded or unloaded to avoid being struck by falling materials or spillage.

Equipment operators or truck drivers may remain in their equipment during loading and unloading if the equipment is properly equipped with a cab shield or adequate canopy.

### ***Warning Systems for Mobile Equipment***

The following steps should be taken to prevent vehicles from accidentally falling into the trench:

- **Barricades** must be installed where necessary.
- **Hand or mechanical signals** must be used as required,
- **Trenches left open overnight** shall be fenced and barricaded.

### ***Hazardous Atmospheres and Confined Spaces***

Employees shall not be permitted to work in hazardous and/or toxic atmospheres. Such atmospheres include those with:

- Less than 19.5% oxygen,
- A combustible gas concentration greater than 20% of the lower flammable limit, and,
- Concentrations of hazardous substance that exceed those specified in the Threshold Limit Values for airborne contaminants established by the ACGIH.

All operations involving such atmospheres must be conducted in accordance with OSHA requirements for occupational health and environmental controls for personal protective equipment and for lifesaving equipment. Engineering controls (such as ventilation) and respiratory equipment may be required.

### ***Testing for Atmospheric Contaminants***

If there is any possibility that the trench or excavation could contain hazardous atmosphere, atmospheric testing must be conducted prior to entry. Conditions that might warrant atmospheric testing would be if the excavation was made in a landfill area or if the excavation was crossed by, was adjacent to, or contained pipelines containing a hazardous material (for example, natural gas lines).

Testing should be conducted before employees enter the trench and should be done regularly to ensure that the trench remains safe. The frequency of testing should be increased if equipment is operating in the trench.

Testing frequency should also be increased if welding; cutting or burning is done in the trench.

Employees required to wear respiratory protection must be trained, fit-tested, and enrolled in a respiratory protection program.

Some trenches qualify as confined spaces. When this occurs, compliance with Geddis Paving & Excavating, Inc. Confined Space Program is also required.



### ***Standing Water and Water Accumulation***

Methods for controlling standing water and water accumulation must be provided and should consist of the following if employees must work in the excavation:

- Use of special support or shield systems approved by a registered professional engineer.
- Water removal equipment, such as pumps, used and monitored by a competent person.
- Employees removed from the trench during rainstorms.
- Trenches carefully inspected by a competent person after each rain and before employees are permitted to re-enter the trench.

### **Benching, Sloping, Shoring, and Shielding Requirements**

**All excavations or trenches 4 feet or greater in depth shall be appropriately benched, shored, or sloped according to the procedures and requirements set for in the OSHA's Excavation standard, 29 CFR 1926.650, .651, and .652.**

**Excavations or trenches 20 feet deep or greater must have a protective system designed by a registered professional engineer.**

Excavations under the base of footing of a foundation or wall require a support system designed by a registered professional engineer.

Sidewalks and pavement shall not be undermined unless a support system or another method of protection is provided to protect employees from their possible collapse.

### ***Benching***

There are two basic types of benching, single and multiple, which can be used in conjunction with sloping.

In Type B soil, the vertical height of the benches must not exceed 4 feet. Benches must be below the maximum allowable slope for that soil type. In other words, a 10-foot deep trench in Type B soil must be benched back 10 feet in each direction, with the maximum of a 45-degree angle.

***Benching is not allowed in Type C soil.***

### ***Sloping***

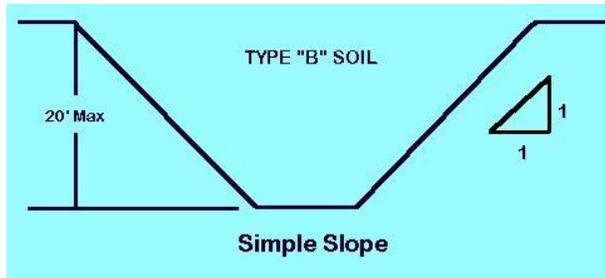
Maximum allowable slopes for excavations less than 20' based on soil type and angle to the horizontal are as follows:

<b>Soil Type</b>	<b>Height/Depth ratio</b>	<b>Slope angle</b>
Type B	1:1	45 degrees
Type C	1 ½:1	34 degrees

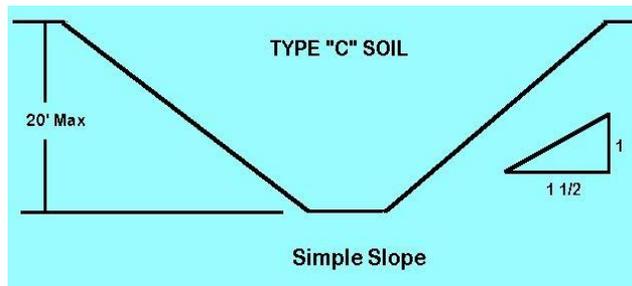
A 10-foot-deep trench in Type B soil would have to be sloped to a 45-degree angle, or sloped 10 feet back in both directions. Total distance across a 10-foot-deep trench would be 20 feet, plus the width of the bottom of the trench itself. In Type C soil, the trench would be sloped at a 34-degree angle, or 15 feet back in both directions for at least 30 feet across, plus the width of the bottom of the trench itself.

**Illustrations of Simple Slope Trenching in B and C type soils.**

**Type "B" Soil**



**Type "C" Soil**



**Shoring**

Shoring or shielding is used when the location or depth of the cut makes sloping back to the maximum allowable slope impractical. There are two basic types of shoring, timber and aluminum hydraulic.

Because the Physical Plant has aluminum hydraulic shores, they will be the focus of this section. Hydraulic shoring provides a critical safety advantage over timber shoring because workers do not have to enter the trench to install them. They are also light enough to be installed by one worker; they are gauge-regulated to ensure even distribution of pressure along the trench line; and they can be adapted easily to various trench depths and widths. However, if timber shoring is used, it must meet the requirements of 29 CFR 1926.650, .651, and .652.

All shoring shall be installed from the top down and removed from the bottom up. Hydraulic shoring shall be checked at least once per shift for leaking hoses and/or cylinders, broken connections, cracked nipples, bent bases, and any other damaged or defective parts.

The top cylinder of hydraulic shoring shall be no more than 18 inches below the top of the excavation.

The bottom of the cylinder shall be no higher than four feet from the bottom of the excavation. (Two feet of trench wall may be exposed beneath the bottom of the rail or plywood sheeting, if used.)

Three vertical shores, evenly spaced, must be used to form a system.

Wales are installed no more than two feet from the top, no more than four feet from the bottom, and no more than four feet apart, vertically.

Hydraulic shores must be installed in accordance with Table D – 1.2 and Table D 1.3 in soil Type B.

Hydraulic shores must be installed in accordance with Table D – 1.4 in soil Type C.

Here are some typical installations of aluminum hydraulic shoring:

Vertical aluminum hydraulic shoring (spot bracing).

Vertical aluminum hydraulic shoring (with plywood).

Vertical aluminum hydraulic shoring (stacked).

Aluminum hydraulic shoring water system (typical).

### ***Shielding***

Trench boxes are different from shoring because, instead of shoring up or otherwise supporting the trench face, they are intended primarily to protect workers from cave-ins and similar incidents.

The excavated area between the outside of the trench box and the face of the trench should be as small as possible. **The space between the trench box and the excavation side must be backfilled to prevent lateral movement of the box.** Shields may not be subjected to loads exceeding those, which the system was designed to withstand.

Trench boxes are generally used in open areas, but they also may be used in combination with sloping and benching.

The box must extend at least 18 inches above the surrounding area if there is sloping toward the excavation. This can be accomplished by providing a benched area adjacent to the box.

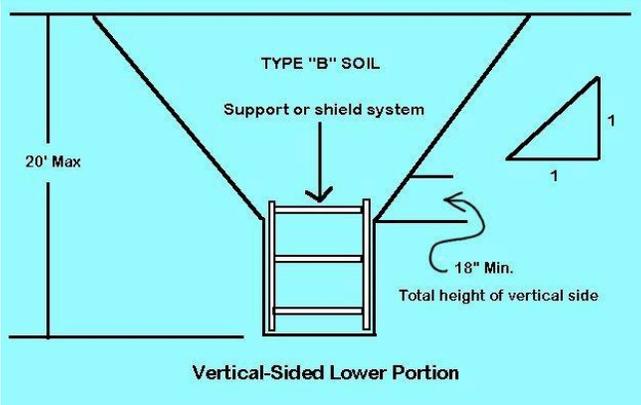
The manufacturer must approve any modifications to the shields.

Shields may ride two feet above the bottom of an excavation, provided they are calculated to support the full depth of the excavation and there is no caving under or behind the shield.

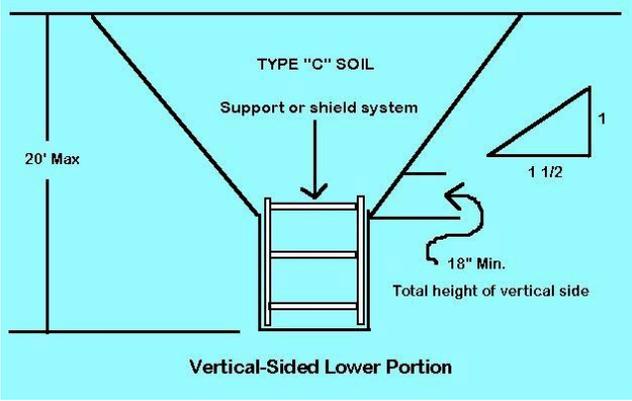
Workers must enter and leave the shield in a protected manner, such as by a ladder or ramp. Workers may not remain in the shield while it is being moved.

### Illustration of Shielding Systems in Type B and C Soils

#### Type "B" Soil



#### Type "C" Soil



**Excavation Checklist**  
**(To be completed by a “Competent Person”)**

Site Location: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Competent Person: \_\_\_\_\_

Soil Type: \_\_\_\_\_

Soil Classification: \_\_\_\_\_ Excavation Depth: \_\_\_\_\_ Excavation Width: \_\_\_\_\_

(Indicate for each item: Yes - No - N/A (for not applicable))

<b>1) General Inspection of Jobsite:</b>			
<b>A</b>	Excavations, adjacent area, and protective systems inspected by a competent person daily prior to the start of work.	Y	N NA
<b>B</b>	Competent person has the authority to remove employees from the excavation immediately.	Y	N NA
<b>C</b>	Surface encumbrances removed or supported.	Y	N NA
<b>D</b>	Employees protected from loose rock or soil that could pose a hazard by falling or rolling into the excavation.	Y	N NA
<b>E</b>	Hard hats and safety glasses worn by all employees.	Y	N NA
<b>F</b>	Spoils,, materials, and equipment set back at least 2 feet from the edge of the excavation.	Y	N NA
<b>G</b>	Barriers provided at all remotely located excavations, wells, pits, shafts, etc.	Y	N NA
<b>H</b>	Walkways and bridges over excavations 4 feet or more in depth are equipped with standard guardrails and toe boards.	Y	N NA
<b>I</b>	Warning vests or other highly visible clothing provided and worn by all employees exposed to public vehicular traffic.	Y	N NA
<b>J</b>	Employees required to stand away from vehicles being loaded or unloaded.	Y	N NA
<b>K</b>	Warning system established and utilized when mobile equipment is operating near the edge of the excavation.	Y	N NA
<b>L</b>	Employees prohibited from going under suspended loads.	Y	N NA
<b>M</b>	Employees prohibited from working on the faces of sloped or benched excavations above other employees.	Y	N NA
<b>2) Utilities</b>			
<b>A</b>	Utility companies contacted and/or utilities located.	Y	N NA
<b>B</b>	Exact location of utilities marked.	Y	N NA
<b>C</b>	Underground installations protected, supported, or removed when excavation is open.	Y	N NA
<b>3) Means of Access &amp; Egress:</b>			
<b>A</b>	Lateral travel to means of egress no greater than 25 feet in excavations 4 feet or more in depth.	Y	N NA
<b>B</b>	Ladders used in excavations secured and extended 3 feet above the edge of a trench.	Y	N NA
<b>C</b>	Structural ramps used by employees designed by a competent person.	Y	N NA
<b>D</b>	Structural ramps used for equipment designed by a registered professional engineer (RPE).	Y	N NA
<b>E</b>	Ramps constructed of materials of uniform thickness, cleared together on the bottom, equipped with no-slip surface.	Y	N NA
<b>F</b>	Employees protected from cave-ins when entering or exiting the excavation.	Y	N NA



<b>4) Wet Conditions:</b>		
<b>A</b>	Precautions taken to protect employees from the accumulation of water.	Y N NA
<b>B</b>	Water removal equipment monitored by a competent person.	Y N NA
<b>C</b>	Surface water or run off diverted or controlled to prevent accumulation in the excavation.	Y N NA
<b>D</b>	Inspections made after every rainstorm or other hazard increasing occurrence.	Y N NA
<b>5) Hazardous Atmosphere:</b>		
<b>A</b>	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.	Y N NA
<b>B</b>	Adequate precautions taken to protect employees from exposure to an atmosphere containing less than 19.5% oxygen and/or to other hazardous atmospheres.	Y N NA
<b>C</b>	Ventilation provided to prevent employee exposure to an atmosphere containing flammable has in excess of 10% of the lower explosive limit of the gas.	Y N NA
<b>D</b>	Testing conducted often to ensure that the atmosphere remains safe.	Y N NA
<b>E</b>	Emergency equipment, such as breathing apparatus, safety harness and lifeline, and/or basket stretcher readily available where hazardous atmospheres could or do exist.	Y N NA
<b>F</b>	Employees trained to use personal protective and other rescue equipment.	Y N NA
<b>G</b>	Safety harness and lifeline used and individually attended when entering bell bottom or other deep confined excavations.	Y N NA
<b>6) Support Systems:</b>		
<b>A</b>	Material and/or equipment for support systems selected based on soil analysis, trench depth, and expected loads.	Y N NA
<b>B</b>	Materials and equipment used for protective systems inspected and in good condition.	Y N NA
<b>C</b>	Materials and equipment not in good condition have been removed from service.	Y N NA
<b>D</b>	Damaged materials and equipment used for protective systems inspected by a registered professional engineer (RPE) after repairs and before being placed back into service.	Y N NA
<b>E</b>	Protective systems installed without exposing employees to the hazards of cave-ins, collapses, or threat of being struck by materials or equipment.	Y N NA
<b>F</b>	Members of support system securely fastened to prevent failure.	Y N NA
<b>G</b>	Support systems provided to insure stability of adjacent structures, buildings, roadways, sidewalks, walls, etc.	Y N NA
<b>H</b>	Excavations below the level of the base or footing supported, approved by an registered professional engineer (RPE)	Y N NA
<b>I</b>	Removal of support systems progresses from the bottom and members are released slowly as to note any indication of possible failure.	Y N NA
<b>J</b>	Backfilling progresses with removal of support system.	Y N NA
<b>K</b>	Excavation of material to a level no greater than 2 feet below the bottom of the support system and only if the system is designed to support the loads calculated for the full depth.	Y N NA
<b>L</b>	Shield system placed to prevent lateral movement.	Y N NA
<b>M</b>	Employees are prohibited from remaining in shield system during vertical movement.	Y N NA

**7) Corrective Actions and Remarks:**

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**Head Protection**

Approved hard hats must be worn if employees could be struck by falling objects, are in danger of striking their heads on fixed objects, or there is a shock hazard from working near exposed electrical conductors.

Do not drill holes in the hard hat for ventilation; it destroys the integrity to protect you from blows to the head.

Hard hats shall comply with ANSI Z89.1-1986, Class A or B. Class B is required for exposure to high voltage shocks, above 600 volts.

Where there is risk of injury from hair entanglements in moving parts of machinery, combustibles, or toxic contaminants, employees shall confine their hair with nets, or other suitable restrictive devices to eliminate the hazard.

## **Eye and Face Protection**

Employees working in locations where there is a risk of receiving eye injuries such as punctures, abrasions, contusions, or burns as a result of coming in contact with flying particles, hazardous substances, projections, or injurious light rays which are inherent to the work or environment shall be safeguarded by means of face or eye protection.

Suitable screens or shields isolating the hazardous exposure may be considered adequate safeguarding for nearby employees, i.e. welding screens.

Protection against light rays and radiant energy is spelled out in Title 8, GISO, 3382, Tables EP-1 and EP-2.

Where eye protection is required and the employee requires vision correction, the following eye protection shall be provided:

1. Safety glasses with suitable corrected lenses, or
2. Safety goggles designed to fit over glasses, or
3. Protective goggles with corrective lenses mounted behind the protective lenses.

The wearing of contact lenses is prohibited in working environments having harmful exposure to materials, or light flashes, except with medically approved devices.

Side shields shall be worn whenever the hazard of flying objects is angular as well as frontal.

## **Body Protection**

Protection such as rubber aprons or sleeves may be necessary in certain environments where splashing of hazardous materials, or other common substances such as water would pose a risk to the employee. Flying metal particles or molten metal are examples of hazards that could penetrate normal clothing and injure the employee, requiring leather protective sleeves and/or vests.

In all cases, clothing appropriate for the work being done shall be worn. Loose sleeves, tails, ties, lapels, cuffs, or other loose clothing which can become entangled in moving machinery will not be worn.

Clothing containing flammable liquids, corrosive substances, pesticides, irritants, or oxidizing agents shall be removed and not worn until properly laundered.

## Hand Protection

There are many types of gloves and made of many different types of materials, each with a specific application. Gloves will be worn as precaution from the following exposures:

- Chemicals - check the Safety Data Sheets (SDS) for listed PPE required for safe handling
- Cuts
- Hot work

No one glove can protect against all hazards so select the appropriate glove for the job.

Where there is risk of injury from glove entanglement in moving parts of machinery, employees shall not wear gloves and use other methods to protect their hands from injury exposure.

Jewelry, such as rings, have caused the loss of many fingers. Be aware that wrist watches, and other jewelry can be caught in moving machinery, or caught on a protruding hook or nail. Never wear metallic jewelry or other objects when working around electrically energized equipment.

## Foot Protection

For work in areas where feet are in danger of:

- Being struck by falling, or heavy rolling objects and crushed or penetrated, steel-toed shoes, or steel covers are recommended.
- Working around boards with nails, or scrap metal, you need protection from punctures.

## Hearing Protection

Hearing protection will be made available to all employees exposed to sources of noise 85 dB or greater, as measured by a sound level meter or identified by the contracting company. In general, anytime someone must elevate their voice to be heard, hearing protection will be worn.

Hearing protector equipment consists of ear plugs (various NRR) or muffs (industrial).

# QUALITY CONTROL PROGRAM & POLICIES



# QUALITY CONTROL PROGRAM

**Geddis Paving and Excavating, Inc.**  
**Quality Control Program**  
**(To meet the requirements of a Field Quality Control Supervisor**  
**For the Ohio Department of Transportation)**

Company Address: 1019 Wamba Ave.  
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Date: January 9, 2026  
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**General Requirement:** 403.03 section A. Provide a Field Quality Control Supervisor, holding a Supplement 1041 Field Quality Control Supervisor approval and who is a company employee, who is routinely and usually at the paving site during placement of any non-temporary asphalt concrete pavement.

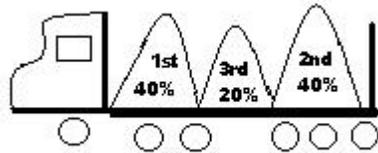
**Loading and Hauling of Asphalt Mixes.**

Inspect dump boxes for material that may contaminate asphalt mixes.

- Confirm truck tarps are covering the asphalt material.

All truck beds hauling asphalt must be insulated.

Discuss with truck drivers the importance of depositing the asphalt mix in a mass at multiple locations within the truck bed in order to avoid truckload-to-truckload (or end-of-load) segregation of the asphalt material.



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☐ Properly Loaded Truck

Make certain that materials are not excessively sticking in the truck beds after each load is dumped into the paver.

**Weather Limitations.**

Place Asphalt only if surface is dry and if weather conditions are such that proper handling, finishing and compaction can be accomplished. Never place asphalt concrete if the surface temperature is below the minimum established in table 401.06.1.

Course Thickness	Minimum Surface Temperature
* 3" and Over	36° F
1.5" to 2.9"	40° F
1.0" to 1.4"	50° F
Less than 1"	60° F
Variable Intermediate 0" to 3"	40° F
*Instead of 36°F, use a minimum air temperature of 40° F if paving on an aggregate base or subgrade.	

Do not place surface asphalt courses if the air temp. is less than 40° F.

Do not place any Type 1H asphalt concrete or surface course with a polymer modified asphalt binder after November 1<sup>st</sup> or when the surface and air temperature is less than 50° F.

**Spreading and Finishing**

Verify that the surface to receive the asphalt courses has been properly cleaned and or compacted according to ODOT CMS.

Inspect asphalt-paving equipment for defects that may affect the quality of the mat.

Confirm upon asphalt mix arrival at the site, the following temperature specifications are met:

Inspect	<b>Maximum Temperature CMS 702</b>
	325°F for normal Asphalt mixes
	350°F for Polymer Modified mixes
	<b>Minimum Temperature CMS 301.04, 302.04, 401.16</b>
	250°F for Item #301 & #302
	290°F for 1H and Polymer
	(Check BCJMF for other mixes)

Asphalt mixes to ensure that aggregates are uniformly coated.

Visually inspect the flow of the material from the truck to the paver for a uniform and continuous flow.

Make sure that the delivery trucks do not bump into the paving machine.

Continuously inspect the quality of the mat for uniform composition and surface texture.

**Compaction**

Certify the maximum capacity (sy/hr) of the roller train is greater than the rate of placement.

The roller train must conform to the specifications for compaction referenced in 401.13 and 401.16 CMS:

Table 401.13-1 Roller Capacity

Roller Type	Maximum Capacity square yards per hour (m <sup>2</sup> /hr)
Tandem	700 (600)
Three-Wheel	700 (600)
Trench	15 per inch width (13 per 25mm width)
Pneumatic Tire, Type 1	1000 (850)
Pneumatic Tire, Type 2	700 (600)
Vibratory, Vibrating Roll	15 per inch width (13 per 25mm width)
Vibratory, Static Roll (not vibrating)	3 per inch width (3 per 25mm width)

Table 401.13-2 Steel Wheel Rollers

Roller Type	Three-Wheel	Tandem	Vibratory Static	Trench
Total weight, tons (metric tons)	10 (9)	8 to 12 (7 to 11)	8 to 12 (7 to 11)	
Compression rolls, pounds per inch width (kN/m), minimum	300 (53)	200 (35)	120 (21)	300 (5)

Table 401.13-3 Pneumatic Tire Rollers

Type I	
Tire Size, minimum	9.00 x 20 in (229 x 508mm)
Wheel load, minimum	5000 lb (2250 kg)
Average tire contact pressure, minimum	85 psi (590 kPa)
Type II	
Tire Size, minimum	7.50 x 15 in (191 x 381mm)
Wheel load, minimum	2000 lb (900 kg)
Average tire contact pressure, minimum	55 psi (380 kPa)

Immediately after spreading the asphalt concrete, compact the mixture uniformly using rollers conforming to 401.13.

Verify design compaction temperature for Type 1H or Polymer modified asphalt binders prior to start of paving operations.

**Joint Construction**

Arrange longitudinal joints at the proper height above the adjacent construction to receive maximum compaction.

Establish that the paver is running in a straight line so the joint can be matched on the next pass of the paver.

When compacting the confined edge of the first lane, make the same number of passes over the edge of the first lane as are made over the rest of the width of the lane. The edge of the drums of the roller should extend over the free edge of the lane by at least six inches.

When compacting 301# or 302# with a pneumatic tire roller the edge of the outside tire should not be placed either on top of or over the edge of the mix.

Rather, the outside edge of the tire should be about six inches inside the unconfined edge of the mat. Compaction of the remaining six inches of the unconfined edge must be accomplished with a steel wheel roller in either the vibratory or static mode.

Name(s) of approved Field Quality Control Supervisor(s):  
Steven M Oliver

I have read and understand the responsibilities I have in my company's Quality Control Program.

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Signature of company authority to oversee all operations covered by this QCP:

\_\_\_\_\_ Date: \_\_\_\_\_

Mail a signed copy to:

John Neenan  
Ohio Dept of Transportation  
Office of Materials Management  
1600 West Broad Street  
Columbus, Ohio 43223

## **ELECTRICAL SAFETY WRITTEN POLICY**

Electricity is a serious workplace hazard, capable of causing both employee injury and property damage. It is the policy of Geddis Paving & Excavating to protect all employees and other personnel from potential electrical hazards. This will be accomplished through compliance with the work practices described in this policy along with effective application of engineering controls, administrative controls, and the use of personal protective equipment. All exposed de-energized parts must be treated as live.

The Electrical Safety Program is founded on the principle of avoiding energized work unless it is absolutely necessary. Live parts will be de-energized before an employee works on or near them unless one of the conditions applies:

- De-energizing introduces additional or increased hazards. Examples of additional or increased hazards would include deactivation of emergency alarm systems or shutdown of hazardous location ventilation systems.
- De-energizing is not possible due to equipment design or operational limitations. Examples of this situation would include testing and troubleshooting of electrical circuits that can only be performed with the circuit energized and work on circuits that form an integral part of a continuous process that would otherwise need to be completely shut down in order to permit work on one circuit or piece of equipment.
- Live parts are operating at less than 50 volts to ground and there is no increased exposure to electrical burns or to explosion due to electrical arcs.

Live parts are to be de-energized in accordance with the Lockout/Tagout Program.

**If live parts are not placed in an electrically safe condition, the work practices described in this document must be used to protect employees.**

### **PURPOSE**

This program has been established in order to:

- Ensure the safety of employees who may work on or near electrical systems.
- Ensure that employees understand and comply with safety standards related to electrical safety.
- Ensure that employees follow uniform practices during the completion of electrical work.

### **RESPONSIBILITIES**

Safety Director – Jeremy Oliver

- Assist shops in implementing the provisions of this program.
- Provide or assist in task specific training for electrical work qualifications.
- Periodically review and update this written program.
- Provide or coordinate general training for shops on the content of this program.
- Evaluate overall effectiveness of the electrical safety program on a periodic basis.

Supervisor – Richard Crace/Mike Snyder

- Determine the applicability of the electrical safety program to activities conducted within their respective areas.
- Supervisors are responsible for the implementation of the electrical safety program within their areas.
- Ensure employees comply with all provisions of the electrical safety program.
- Ensure employees receive training appropriate to their assigned electrical tasks and maintain documentation of such training.
- Develop and maintain a listing of all qualified employees in their areas.
- Ensure employees are provided with and use appropriate protective equipment.

Employees

- Follow the work practices described in this document, including the use of appropriate protective equipment and tools.
- Attend all training required relative to this program.
- Immediately report any concerns related to electrical safety to supervision.

## **DEFINITIONS**

The following terms are defined in order to allow a better understanding of this program.

- **Arc rating:** The maximum incident energy resistance demonstrated by a material (or a layered system of materials) prior to “breaking open” or at the onset of a second-degree skin burn. This rating is assigned to electrical protective clothing and is normally expressed in calories per square centimeter (cal/cm<sup>2</sup>).
- **Electrically safe work condition:** A state in which the conductor or circuit part to be worked on or near has been disconnected from energized parts, locked/tagged in accordance with GEDDIS PAVING & EXCAVATING policy, tested to ensure the absence of voltage, and grounded if determined necessary.
- **Energized:** Electrically connected to or having a source of voltage.
- **Exposed (as applied to live parts):** Capable of being inadvertently touched or suitably guarded, isolated, or insulated.
- **Flash hazard analysis:** A study investigating a worker’s potential exposure to arc-flash energy, conducted for the purpose of injury prevention and the determination of safe work practices along with appropriate levels of PPE.
- **Flash protection boundary:** An 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.
- **Flash suit:** A complete FR clothing and equipment system that covers the entire body, except for the hands and feet. (Such a suit typically includes pants, jacket, and a “bee-keeper” style hood fitted with a face shield).
- **FR apparel:** Flame-resistant apparel; describes a broad category of clothing designed to protect employees from electrical arc events during completion of energized tasks.
- **Incident energy:** The amount of energy impressed on a surface, a certain distance from the source, generated during an electrical arc event. One of the units used to measure incident energy is calories per square centimeter (cal/cm<sup>2</sup>).

- **Limited approach boundary:** An approach limit at a distance from an exposed live part within which a shock hazard exists.
- **Live parts:** Energized conductive components.
- **Prohibited approach boundary:** An approach limit at a distance from an exposed live part within which work is considered the same as making contact with the live part.
- **PPE:** An acronym for “Personal Protective Equipment”.
- **Qualified person:** One who has skills and knowledge related to the construction and operation of the electrical equipment and installation and has received training on the hazards involved.
- **Restricted approach boundary:** An approach limit at a distance from an exposed live part within which there is an increased risk of shock (due to electrical arc-over combined with inadvertent movement) for personnel working in close proximity to the live part.
- **Unqualified person:** Any person who does not meet the definition of a qualified person.
- **Working near (live parts):** Any activity within a Limited Approach Boundary.
- **Working on (live parts):** Coming in contact with live parts via tools, probes, test equipment, hands, feet, or other body parts regardless of the level of PPE worn.

## **TRAINING**

- All Employees must be trained.
- The level of electrical safety training provided is dependent on whether the employee is classified as a “qualified person” or “unqualified person”.
- A “qualified person” shall be trained and knowledgeable in all of the following topics:
  - Construction and operation of equipment on which work is assigned.
  - Skills and techniques necessary to distinguish exposed energized parts from other parts of electrical equipment.
  - Skills and techniques necessary to determine the nominal voltage of exposed live parts.
  - The approach distances specified in this document and the corresponding voltages to which the qualified employee will be exposed.
  - The process necessary to determine the degree and extent of electrical hazards along with the PPE and job planning necessary to perform the task safely.
- A person can be considered qualified with respect to certain equipment and methods but unqualified for others.
- An “unqualified person” shall be trained in the inherent hazards of electricity and any related work practices that are necessary for their safety.
- Training must be provided before the employee is assigned duties that involve work near or on electrical systems.
- Each supervisor shall maintain a record of all electrical training provided to their employees along with a listing of all employees classified as qualified persons.

## **WORKING ON OR NEAR LIVE PARTS**

Energized electrical work **under 600 volts does not require a work permit** if the employee performing the work follows the guidelines in this program (e.g. wears Endura work uniform and cotton

undershirt, uses appropriate PPE, etc.). It must be properly illuminated. Insulating shields/barriers must be used where necessary. Only non-conductive ladders are allowed.

#### Energized Electrical Work Permit – **Energized work over 600 volts**

- If live parts are not placed in an electrically safe condition, work to be performed shall be considered energized electrical work and will be performed by written permit only.
- A copy of the Facilities Management Energized Electrical Work Permit can be found in Appendix A of this document. The intent of this permit is to ensure that all appropriate safety precautions are taken prior to starting energized electrical work.
- Work related to testing, troubleshooting, and voltage measuring may be completed without a permit provided appropriate safe work practices and PPE are used.
- The permit is to be originated by the individual requesting that the energized work be completed. (This will normally be the supervisor of the employee who will be completing the work).
- All Energized Electrical Work Permits should be submitted to the Office of Environmental Safety & Health for approval.
- The permit must be posted in the area where the energized work is taking place for the duration of the task.
- Energized electrical work permits must be kept on file by the supervisor upon completion of the task.

#### Approach Boundaries to Live Parts

- Observing a safe approach distance from exposed energized parts is an effective means of maintaining electrical safety. As the distance between an individual and live parts increases, the potential for an electrical injury decreases.
- Safe approach distances will be determined for all tasks in which approaching personnel are exposed to live parts.
- Safe approach distances to fixed live parts can be determined by referring to Appendix B, “Approach Boundaries to Live Parts for Shock Protection”. This appendix can be used to identify the Limited, Restricted, and Prohibited Approach Boundaries associated with various system voltages.
- Unqualified persons may only cross the Limited Approach Boundary when they are under the direct supervision of a qualified person.
- Qualified persons may not cross or take any conductive object closer than the Restricted Approach Boundary unless one of the following conditions apply:
  - The qualified person is insulated or guarded from the live parts and no uninsulated part of the qualified person’s body crosses the Prohibited Approach Boundary.
  - The live parts are insulated from the qualified person and from any other conductive object at a different potential.
- Crossing the Prohibited Approach Boundary is considered the same as making contact with energized parts. Qualified persons may only cross this boundary when all of the following precautions have been taken:
  - The qualified person has specific training to work on energized parts.
  - The qualified person has obtained an approved Energized Electrical Work Permit.

- o The qualified person uses PPE appropriate for working on energized parts which are rated for the voltage and energy level involved.

#### Other Precautions for Personnel Activities

- Employees shall not reach blindly into areas that might contain exposed live parts.
- Employees shall 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) shall 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 shall 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 space (such as a manhole or vault) that contains exposed live parts, the employee shall use protective shields, barriers, or insulating materials as necessary to avoid contact with these parts. Doors, hinged panels, and the like shall be secured to prevent them from swinging into employees.

## **PERSONAL PROTECTIVE EQUIPMENT**

#### General Requirements

- Employees working in areas where electrical hazards are present shall be provided with, and shall use, protective equipment (Arc Flash Gear) that is designed and constructed for the specific body part to be protected and for the work to be performed.
- GEDDIS PAVING & EXCAVATING will provide electrical protective equipment (Arc Flash Gear) required by this program at no cost to employees. Such equipment shall include 11 calorie, and 40 calorie rated Arc Flash apparel, eye protection, head protection, hand protection, insulated footwear, and face shields where necessary. GEDDIS PAVING & EXCAVATING is not responsible for providing under layers.
- All protective equipment shall be maintained in a safe, reliable condition by the employee to whom it is issued.
- Employees shall wear nonconductive head protection whenever there is a danger of a head injury from electric shock or burns due to contact with live parts or from flying objects resulting from an electrical explosion.
- Employees shall wear nonconductive protection for the face, neck, and chin whenever there is danger of injury from exposure to electric arcs or flashes or from flying objects resulting from an electrical explosion.
- Employees shall wear protective equipment for the eyes and face whenever there is a danger of injury from electric arcs, flashes, or from flying objects resulting from an electrical explosion.
- Employees shall wear rubber insulating gloves where there is a danger of hand and arm injury due to contact with live parts or possible exposure to arc flash burn.

- Where insulated footwear is used as protection against step and touch potential, dielectric overshoes shall be required. Insulated shoes shall not be used as primary electrical protection.
- Face shields without an arc rating will not be used for electrical work. Safety glasses or goggles must always be worn underneath face shields.
- Additional illumination may be needed when using tinted face shields as protection during electrical work.

#### Flash Protection Boundary

- Personal protective equipment shall be provided to and used by all employees working within the “Flash Protection Boundary”.
- For systems that are 600 volts or less the Flash Protection Boundary shall be a minimum of four feet. The formula in Appendix C can be used to determine the exact Flash Protection Boundary for systems over 600 volts.
- For systems that are above 600 volts, the Flash Protection Boundary shall be determined through engineering analysis.
- The specific protective equipment to be worn within the Flash Protection Boundary can be determined by either of the following two methods:
  - Complete a flash hazard analysis that determines the incident exposure energy of each employee. Appropriate protective clothing can then be selected based on the calculated exposure level.
  - Determine the hazard level of the task by referring to NFPA 70E Table 130.7 (C) (9) (a), “Hazard/Risk Category Classifications” (Appendix D of this document). This table also indicates whether voltage-rated gloves and/or tools need to be used. Once the hazard level of the task has been determined, the required PPE can then be ascertained from NFPA 70E Table 130.7 (C) (10), “Protective Clothing and PPE Matrix”. (Appendix E of this document).
  - Facilities Management Shops shall develop and maintain a listing of the specific PPE requirements for each energized electrical task conducted by their employees using the form found in Appendix F of this document.

#### Flame-Resistant Apparel & Under Layers

- FR apparel shall be visually inspected before each use. FR apparel that is contaminated or damaged shall not be used. Protective items that become contaminated with grease, oil, flammable liquids, or combustible liquids shall not be used.
- The garment manufacturer’s instructions for care and maintenance of FR apparel shall be followed.
- When FR apparel is worn to protect an employee, it shall cover all ignitable clothing and allow for movement and visibility.
- FR apparel must cover potentially exposed areas as completely as possible. FR shirt sleeves must be fastened and FR shirts/jackets must be closed at the neck.
- Non-melting, flammable garments (i.e. cotton, wool, rayon, silk, or blends of these materials) may be used as under layers beneath FR apparel.

- Meltable fibers such as acetate, nylon, polyester, polypropylene, and spandex shall not be permitted in fabric under layers next to the skin. (An incidental amount of elastic used on non-melting fabric underwear or sock shall be permitted).
- FR garments worn as outer layers over FR apparel (i.e. jackets or rainwear) must also be made from FR material.
- Flash suits must permit easy and rapid removal by the user.
- A FR smock kit will be made available in case of call-ins.

#### Rubber Insulating Equipment

- Rubber insulating equipment includes protective devices such as gloves, sleeves, blankets, and matting.
- Insulating equipment must be inspected for damage before each day's use and immediately following any incident that could have caused damage.
- An air test must be performed on rubber insulating gloves before each use.
- Insulating equipment found to have defects that might affect its insulating properties must be removed from service until testing indicates that it is acceptable for continued use.
- Where the insulating capability of protective equipment is subject to damage during the use, the insulating material shall be protected by an outer covering of leather or other appropriate material.
- Rubber insulating equipment must be tested
- Rubber insulating equipment must be stored in an area protected from light, temperature extremes, excessive humidity, ozone, and other substances and conditions that may cause damage.

#### Insulated Tools and Materials

- Only insulated tools and equipment shall be used within the Limited Approach Boundary of exposed energized parts.
- Insulated tools shall be rated for the voltages on which they are used.
- Insulated tools shall be designed and constructed for the environment to which they are exposed and the manner in which they are used.
- Insulated tools shall be protected from damage and degrading the integrity of the insulation.
- Fuse or fuse holder handling equipment, insulated for the circuit voltage, shall be used to remove or install a fuse if the fuse terminals are energized.
- Ropes and handlines used near exposed energized parts shall be nonconductive.
- Portable ladders used for electrical work shall have nonconductive side rails.

## **ALERTING TECHNIQUES**

- Barricades shall be used in conjunction with safety signs to prevent or limit access to work areas containing live parts. Conductive barricades shall not be used where they might cause an electrical hazard. Barricades shall be placed no closer than the Limited Approach Boundary.
- Barricades, such as plastic fencing, must be in place if workers have to leave energized parts exposed over 600 volts.
- If signs and barricades do not provide sufficient protection, and attendant will be assigned to warn and protect pedestrians. The primary duty of the attendant shall be to keep unqualified

persons out of the work area where an electrical hazard exists. The attendant shall remain in the area as long as there is a potential exposure to electrical hazards.

## **CONTRACT EMPLOYEES**

- Safety programs used by contractors on GEDDIS PAVING & EXCAVATING jobsites must meet or exceed all applicable guidelines of this Safety Program.
- Contractors will be required to comply with applicable Safety and Health regulations such as OSHA, NFPA, EPA, etc.
- Contractors may be required to submit copies of their Safety Program to GEDDIS PAVING & EXCAVATING upon request.

## Appendix A: Energized Electrical Work Permit (Required for work over 600 volts only)

<b>Part 1: To be completed by the requestor or supervisor of the job</b>			
Description of Circuit & Equipment:	Job Location:		
Description of Work to be Done:			
Justification of why the circuit cannot be de-energized or the work delayed until the next scheduled outage:			
<b>Part 2: To be completed by the qualified person(s) completing the work</b>			
(1) Detailed description of procedure to be used in performing the above work:			
(2) Description of safe work practice to be employed:			
(3) Voltage exposure (shock hazard analysis):			
(4) Determination of shock protection boundaries:			
(5) Results of flash hazard analysis:			
(6) Determination of flash protection boundaries:			
(7) PPE required to safely perform the task:			
(8) Method used to restrict access to the work area:			
(9) Do you agree the above work can be done safely?    YES (proceed to Part 3) <div style="text-align: right; margin-left: 300px;">NO (return to requestor)</div> Qualified Person: _____ Date: _____ Qualified Person: _____ Date: _____ Qualified Person: _____ Date: _____			
<b>Part 3: To be completed by Supervisor</b>			
Approvals:			
	Name	Job Title	Date

Note: A supervisor must approve all energized work before starting.

## Appendix B: Approach Boundaries to Live Parts for Shock Protection

(All dimensions are distance from live part to employee)

Nominal System Voltage (phase to phase)	Limited Approach Boundary (fixed circuit parts)	Restricted Approach Boundary (includes inadvertent movement adder)	Prohibited Approach Boundary
Less than 50V	Not specified	Not specified	Not specified
50V to 300V	3 feet, 6 inches	Avoid contact	Avoid Contact
301V to 750V	3 feet, 6 inches	1 foot	1 inch
751V to 15 kV	5 feet	2 feet, 2 inches	7 inches
Over 15 kV or movable conductor	See NFPA 70 E Table 130.2 (C)		

- **Limited Approach Boundary:** Distance from an exposed live part within which a shock hazard exists. An unqualified person may not cross this boundary unless they are continuously escorted by a qualified person.
- **Restricted Approach Boundary:** Distance from an exposed live part within which there is an increased risk of shock (due to electrical arc-over combined with inadvertent movement) for personnel working in close proximity to the live part. This boundary may only be crossed by a qualified person who is safely insulated or guarded from the live parts.
- **Prohibited Approach Boundary:** Distance from an exposed live part within which work is considered the same as making contact with the live part. This boundary may only be crossed by a qualified person who has specific training to work on energized parts; has obtained an approved Energized Electrical Work Permit; and uses PPE appropriate for working on energized parts which are rated for the voltage and energy level involved. (Note: A permit is not required for work related to testing, troubleshooting, and voltage measuring).
- **Flash Protection Boundary (not listed in table):** Distance from exposed live parts within which a person could receive a second degree burn if an electrical arc flash were to occur. This boundary may only be crossed by a qualified person wearing the appropriate PPE. For systems that are 600 volts or less, the Flash Protection Boundary shall be a minimum of four feet. An analysis must be performed to determine the Flash Protection Boundary for systems that are above 600 volts.

## Appendix C: Formula for Calculation of Flash Protection Boundary

$$D_c = [2.65 \times MVA_{bf} \times t]^{1/2}$$

OR

$$D_c = [53 \times MVA \times t]^{1/2}$$

Where:

$D_c$  = Distance in feet from an arc source for a second-degree burn

$MVA_{bf}$  = Bolted fault capacity available at point involved (in mega volt-amps)

$MVA$  = Capacity rating of transformer (mega volt-amps). For transformers with MVA ratings below 0.75 MVA, multiply the transformer MVA rating by 1.25

$t$  = Time of arc exposure (in seconds)

Examples:

1. Transformer 1000kVA = 1.0 mVA, and breaker trip setting instantaneous of 0.1 seconds

$$D_c = [53 \times 1 \times 0.1]^{1/2}$$

$$D_c = (5.3)^{1/2}$$

$$D_c = 2.3 \text{ feet}$$

2. Transformer 1000kVA = 1.0mVA, and breaker trip setting at short time delay of 0.5 seconds

$$D_c = [53 \times 1 \times 0.5]^{1/2}$$

$$D_c = (26.5)^{1/2}$$

$$D_c = 5.1 \text{ feet}$$

Flash Protection Boundary increases with breaker trip settings.

## Appendix D: Hazard/Risk Category Classifications

Task (Assumes equipment is energized, and work is done within the Flash Protection Boundary)	Hazard/Risk Category	V-rated Gloves	V-rated Tools
Panelboards Rated 240 V and Below			
Circuit breaker (CB) or fused switch operation with covers on	0	N	N
CB or fused switch operation with covers off	0	N	N
Work on energized parts, including voltage testing	1	Y	Y
Remove/install CBs or fused switches	1	Y	Y
Removal of bolted covers (to expose bare, energized parts)	1	N	N
Opening hinged covers (to expose bare, energized parts)	0	N	N
Panelboards or Switchboards Rated > 240 V and up to 600 V (with molded case or insulated case circuit breakers)			
CB or fused switch operation with covers on	0	N	N
CB or fused switch operation with covers off	1	N	N
Work on energized parts, including voltage testing	2 (*)	Y	Y

### PPE Requirements can be found in Appendix E

Additional Information:

- V-rated Gloves are gloves rated and tested for the maximum line-to-line voltage upon which work will be done.
- V-rated Tools are tools that are rated and tested for the maximum line-to-line voltage upon which work will be done.
- 2(\*) means that a double-layer switching hood and hearing protection are required for this task in addition to the other Hazard/Risk Category requirements of Appendix E.
- Y = Yes (required)
- N = No (not required)

Notes:

- 25kA short circuit current available, 0.03 second (2 cycle) fault clearing time.
- For <10kZ short circuit current available, the hazard/risk category required may be reduced by one number.

## Appendix E: Personal Protective Equipment Matrix

Protective Clothing and Equipment Hazard/Risk Category Number	Protective Systems for Hazard/Risk Category					
	-1 <sup>(3)</sup>	0	1	2	3	4
Non-melting (according to ASTM F 1506-00) or Untreated Natural Fiber						
a. T-shirt (short-sleeve)	X			X	X	X
b. Shirt (long-sleeve)		X				
c. Pants (long)	X	X	X <sup>(4)</sup>	X <sup>(6)</sup>	X	X
FR Clothing <sup>(1)</sup>						
a. Long-sleeve shirt			X	X	X <sup>(9)</sup>	X
b. Pants			X <sup>(4)</sup>	X <sup>(6)</sup>	X <sup>(9)</sup>	X
c. Coverall			<sup>(5)</sup>	<sup>(7)</sup>	X <sup>(9)</sup>	<sup>(5)</sup>
d. Jacket, parka, or rainwear			AN	AN	AN	AN
FR Protective Equipment						
a. Flash suit jacket (multilayer)						X
b. Flash suit pants (multilayer)						X
c. Head protection						
1. Hard hat			X	X	X	X
2. FR hard hat liner					AR	AR
d. Eye protection						
1. Safety glasses	X	X	X	AL	AL	AL
2. Safety goggles				AL	AL	AL
e. Face and head area protection						
1. Arc-rated face shield or hood				X <sup>(8)</sup>		
2. Flash suit hood					X	X
3. Hearing protection (ear canal inserts)				X <sup>(8)</sup>	X	X
f. Hand protection						
Leather gloves			AN	X	X	X
g. Foot protection						
Leather work shoes			AN	X	X	X
<b>PPE Arc Flash Gear Required</b>	<b>N/R</b>	<b>N/R</b>	<b>4cal</b>	<b>8cal</b>	<b>25cal</b>	<b>40cal</b>

**Hazard categories up to 2 will require 11 calorie protection.**

**Hazard categories over 2 will require 40 calorie protection.**

**AN** = As needed    **AR** = As required    **AL** = Select one in group    **X** = Minimum required

**Notes:**

- (1) See Table 130.7 (C) (11). Arc rating for a garment is expressed in cal/cm<sup>2</sup>.
- (2) If voltage-rated gloves are required, the leather protectors worn external to the rubber gloves satisfy this requirement.
- (3) Hazard/Risk Category Number "-1" is only defined if determined by Notes 3 or 6.
- (4) Regular weight (minimum 12oz/yd<sup>2</sup> fabric weight), untreated, denim cotton blue jeans are acceptable in lieu of FR pants. The FR pants used for Hazard/Risk Category 1 shall have a minimum arc rating of 11 cal.
- (5) Alternate is to use FR coveralls (minimum arc rating of 11 cal) instead of FR shirt and FR pants.
- (6) If the FR pants have a minimum arc rating of 11 cal, long pants of non-melting or untreated fiber are not required beneath the FR pants.
- (7) Alternate is to use FR coveralls (minimum arc rating of 11 cal) over non-melting or untreated natural fiber pants and T-shirt.
- (8) A face shield with a minimum arc rating of 11 cal, with wrap around guarding to protect not only the face, but also the forehead, ears and neck is required.
- (9) Alternate is to use two sets of FR coveralls (the inner with a minimum arc rating of 4 cal and outer coverall with a minimum arc rating of 5) over non-melting or untreated natural fiber clothing, instead of FR coveralls over the FR shirt and FR pants over non-melting or untreated natural fiber clothing.



**Appendix G:  
Inspection Schedule for Rubber Insulating Equipment**

<b>Type of Equipment</b>	<b>When to Test</b>
Rubber insulating line hose	Upon indication that insulating value is suspect
Rubber insulating covers	Upon indication that insulating value is suspect
Rubber insulating blankets	Before first issue and every 12 months thereafter (*)
Rubber insulating sleeves	Before first issue and every 12 months thereafter (*)
Rubber insulating gloves	Before first issue and every 6 months thereafter (*)

(\*) – If the insulating equipment has been electrically tested but not issued for service, it may not be placed into service unless it has been electrically tested within the previous 12 months.

# **ACCIDENT PREVENTION PLAN**

**Geddis Paving & Excavating, Inc.**

**Sample Accident Prevention Plan**

**Site Specific Safety Prevention**

**To Be Customized By  
Site Manager**



## Accident Prevention Plan

Project Name:

---

Project Number:

---

Project Engineer:

Name: \_\_\_\_\_

Submitted By:

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Reviewing Agency:

---

Approved By:

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Date Submitted: \_\_\_\_\_

Date Approved: \_\_\_\_\_



1. **SCOPE OF WORK:**

This project involves (BRIEFLY DESCRIBE PROJECT)  
Quantities will be in accordance with the applicable contract.

2. **JOB LAYOUT:**

The road working equipment will be parked over night at safe distance from the traveled surface and under the direction of the Project Engineer. The asphalt plant will be located **LOCATION HERE.**

3. **PERSONNEL:**

- a. The project superintendent will be **NAME OF SUPERINTENDENT**
- b. We plan to use from 5 to 25 workers on this project on a single shift basis.
- c. The employees will be selected as to their physical fitness through personal interview or based on recent experience on other jobs for our company.
- d. All operators of hoisting equipment shall submit a certificate of physical examination within one year, by a practicing physician before operating such equipment.
- e. Each employee's qualifications, previous training, etc., is to be determined through personal interview. Each new driver or operator is to be accompanied by one of our experienced employees for several hours of actual work, for instruction and practical demonstration on how to operate the equipment properly. Manufacturer instruction manuals are utilized to the fullest extent in this instruction.

4. **ACCIDENT PREVENTION RESPONSIBILITY:**

Jeremy Oliver is responsible for the administration and prosecution of our safety program. The superintendent and foreman over individual phases of the work are responsible for enforcing all safety regulations, including those of our company and any applicable government agency.

5. **SUBCONTRACTORS:**

- a. All subcontractors will be furnished adequate copies of our safety plan before commencing any work on this project.
- b. All subcontractors will be required to comply with all phases of our safety plan and any additional measures deemed necessary. All or part of a subcontractor's work will be stopped for failure to comply with required safety regulations and procedures.
- c. **NAME HERE** will coordinate all work by Geddis Paving & Excavating, Inc. and its subcontractors.

6. **FIRST AID AND MEDICAL FACILITIES:**

- a. Fully equipped first aid kits for minor injuries are maintained in each foreman's pickup and the field shop area. Vehicles are available for traveling to the designated medical facilities as required.
- b. The following medical facilities are available as needed:
  - i. 911
  - ii. Urgent Care Center Location: \_\_\_\_\_
  - iii. Hospital Location: \_\_\_\_\_

**7. PERSONAL PROTECTION EQUIPMENT:**

Employees who work near overhead structures, equipment, or materials that create a hazard will wear hardhats. Dust protection goggles will be available to all concerned, should such conditions arise. All employees exposed to vehicular traffic will wear high visibility vests. All personnel will be required to wear hard-toed shoes.

**8. TRAFFIC CONTROL:**

- a. After personal interviews, only flagmen who have been certified by an authorized flagman school, and instructed on the provisions in "Instructions to Flagmen" will be placed on the job. Copies of "Instructions to a Flagmen" can be obtained from ODOT.
- b. Any detours will be properly signed and warning lights will be used at night under the direction of the Project Engineer to warn any oncoming traffic.
- c. All barricades will be properly marked and maintained to protect the traffic from accident.
- d. Speed will be controlled by flagmen and/or regulatory signs conspicuously placed under the direction of the Project Engineer.
- e. All construction signs will be placed according to ODOT and as per the Traffic Control Plans for this project.

**9. PUBLIC PROTECTION:**

To insure the traveling public has adequate warning to stop and reduce speed construction signs, barricades and/or flagmen, will be placed wherever directed by the project engineer.

**10. HOUSEKEEPING:**

- a. Good housekeeping will be practiced around the office and the yard. All new and used lumber will be placed in neat piles at safe distances from any flammable materials or shop areas where sparks may occur. All waste materials will be disposed of in an acceptable manner.
- b. Form will be stripped and then cleaned. Reusable materials will be neatly stockpiled; other materials will be removed to a disposal area in accordance with current regulations.

**11. TOOLS AND MACHINES:**

All small tools are owned by each mechanic or foreman. They are responsible for keeping their tools in good repair and replacing said tools when needed. All shovels or similar hand tools are in the foreman's pickup when not in use, and are checked daily by him as to their usefulness and state of repair.

**12. SCAFFOLDS AND LADDERS:**

Any scaffolds and ladders will be constructed from good materials in accordance with approved standards. The foreman will instruct all personnel who must use scaffolds or ladders in their proper use.

**13. FIRE AND PROTECTION AND PREVENTION:**

- a. All lumber is to be stored a safe distance from other flammable substances and fuels. Waste paper etc. is to be picked up and disposed of regularly.
- b. No highly flammable materials will be stored in van trailers. Adequate fire extinguishers will be provided as well as instructions to shop personnel as to their use and location.
- c. Greasers are to wear non-sparking shoes. Keep spilled fuels and oils cleaned up as much as possible. Fire extinguisher will be provided in each service truck.
- d. Welding will be carried out in open areas. Any and all burning will be conducted in accordance with local fire ordinances.
- e. All of our supervisors on the job have cellular phones. These phones will be used in case of fire or other critical emergency to summon help quickly.

**14. GASOLINE AND FUEL OIL:**

Vehicle and equipment ignitions will be shut off during fueling. Spillage will be avoided as much as possible. No smoking will be allowed in fueling areas. Approved dispensing equipment will be used. All fire extinguishers will be in working order. "No Smoking" signs will be posted in conspicuous places.

**15. CONSTRUCTION EQUIPMENT:**

- a. All licensed highway vehicles have passed the required Ohio State safety inspection. All other equipment has been carefully gone over by skilled mechanics.
- b. All equipment will be periodically serviced in accordance with manufacturers' recommendations. Each driver or operator will report any needed repairs to the foreman in writing on the Equipment Repair Request Form.

**16. ELECTRICITY AND LIGHTING:**

- a. All electrical tools and equipment will be grounded in accordance with applicable safety codes.
- b. Temporary lighting will be installed in accordance with applicable safety codes.

**17. MOTOR VEHICLES AND EARTH MOVING EQUIPMENT:**

- a. Our use of bottom dump hauling equipment has reduced the need for backings while dumping borrow or gravel. Signalmen will direct operators when backing if clear view to rear is impossible during dumping or any turning around.
- b. All personnel will be transported on this job only in the seat of pickups or automobiles.
- c. Lubrication will be provided from a portable service truck. Refueling will be accomplished from bulk fuel tanks near the shop area in the manner prescribed in item 14.

**18. EXCAVATING AND EQUIPMENT TRAFFIC:**

Truck crossing signs will be used whenever trucks enter or leave the highway. Flagmen will direct traffic in the immediate construction area whenever needed. All excavation for pipe or structures that are below ground level and more than five feet deep will be made on a flat enough slope to prevent possible caving.

**19. EXPLOSIVES:**

Explosives will be stored in approved magazines away from buildings and other activities. Only experienced, competent workmen will be allowed to handle explosives.

**20. CREATING INTEREST IN SAFETY:**

We propose to create and maintain employees' interest in safety through the use of safety posters wherever possible. Many of our foreman/employees have attended a safety and Red Cross first aid course within the last 2 years and will utilize this training, to instruct other employees on safe work habits. Various incentive awards are used to motivate employees to be safe. Foreman/Safety Director will conduct weekly toolbox safety meetings and enforce Geddis Paving and Excavating safety procedures.

**21. SAFETY MEETINGS:**

The project superintendent is responsible for insuring that weekly safety meetings are scheduled and conducted. they will see that each work area is given the weekly Geddis Paving safety topic and any other safety information that he/she feels needs to be passed on to the employees.

- a. Safety meetings will be conducted each week before regular work begins.
- b. All employees on the job will be expected to attend the weekly safety meetings.

**22. SANITARY FACILITIES:**

Portable toilet facilities will be provided near project work areas. Drinking water and cups will also be provided. Employees will be informed of the location of the toilet facilities and drinking water and cups. The project superintendent and the safety officer to insure proper sanitary conditions are maintained will inspect these facilities periodically.

**23. TRAFFIC CONTROL PROGRAM:**

The traffic control program for this project will be as specified in the contract. Plan is attached.

# FLEET SAFETY POLICY



# Fleet Safety

## Policy Statement

Operating a company vehicle is both a privilege and a responsibility – **it is not a right!** Drivers are responsible for operating the company vehicle according to corporate, local, state, and federal laws.

Specifically through this Vehicle Policy and Fleet Safety Manual we wish to:

- Establish a Zero (at fault) Accident Goal
- Prevent vehicle accidents and injuries to employees and drivers;
- Reduce indirect costs associated with accidents;
- Minimize insurance costs.

While your safety is our first concern, we also recognize that accidents have a negative effect on our potential for profit. Indirect costs associated with vehicle accidents, and the resulting increases in insurance premiums, are a serious concern. It's our goal to minimize these costs by keeping accidents to a minimum.

Preventing accidents begins with management's commitment. We take this responsibility seriously, and value it equally along with our other business objectives, including meeting product quality and volume standards, and our planned operating expenses.

**You** must also do your part. Through this program, we'll provide the leadership and direction that we expect our supervisors and employees to follow. Your attention to making the principles in this Fleet Safety Program an integral part of your day-to-day business operations is imperative!

Signature:

**Robert Geddis, Owner**

## **Driver Selection and Retention**

We allow only qualified and appropriately licensed drivers to operate company-owned vehicles. Anyone who drives on company business must comply with the following standards, or be subject to disciplinary action, up to and including termination:

1. A minimum of two years of verifiable driving experience with the type of vehicle being driven on the job.
2. An acceptable Motor Vehicle Record Grading Score, as outlined in our Motor Vehicle Record Policy.
3. A valid driver's license issued in the state of current residence, appropriate for the type of vehicle to be driven.
4. A favorable driving record, with no prior convictions or citations for reckless driving, or driving under the influence of drugs/alcohol.
5. Proof of automobile Insurance.
6. A driver's ability to meet all physical health qualifications of the Federal Motor Carrier Safety Regulations (if applicable).

## **Motor Vehicle Record Policy**

If your position requires job-related driving, our policy requires you to maintain a motor vehicle record (MVR) that meets or exceeds the grading requirements outlined below. This MVR policy applies whether you drive a company-owned vehicle, or use your personal vehicle for company business.

We will examine Motor Vehicle Records prior to your start date, and regularly thereafter and if a suspicion exists of non-reported violations may exist. Any job offer made to you as an applicant is contingent upon your MVR meeting our required standards. Your continued employment is also contingent upon maintaining these established standards:

- ✓ A valid driver's license, in place for at least two years.
- ✓ Minimum age of 19 - for operation of non-CDL required vehicles.
- ✓ Minimum age of 21 – for all commercial motor vehicle operators.
- ✓ Minimum age 23 - for semi-tractor trailer operators.
- ✓ For all new and existing drivers, an MVR will be reviewed based on the Motor Vehicle Record Grading Criteria (See Next Page).
- ✓ Driving records must remain Acceptable as defined by the MVR Grading Criteria for continued employment in positions with driving duties.

## Vehicle Usage Policy - Company Owned Vehicles

GPE vehicles are provided for business purposes. Personal use is a privilege and extended only to authorized employees (unless otherwise specified in writing). The company may withdraw this privilege at any time, without notice. The following rules apply to use of company vehicles:

1. Only an authorized GPE employee may drive company-owned vehicles. **ABSOLUTLY NO EXCEPTIONS** will be allowed. No other family member or any other drivers are permitted to operate company vehicles, unless previously approved in writing by company management.
2. Drivers are prohibited from using a company vehicle to push or tow another vehicle.
3. Drivers and passengers must use safety belts at all times – No exceptions.
4. Drivers must never operate a company vehicle while under the influence of alcohol or a controlled substance.
5. Drivers must not allow occupants to possess, transport, or consume alcohol, illegal drugs or firearms in the company vehicle at any time.

***Any exception to these rules requires advance approval, in writing, by GPE Violation of these rules will result in disciplinary action, ranging from discontinuation of driving privileges, up to and including termination of employment.***

## **Personal Vehicles Used for Company Business**

This policy applies to employees who drive their personally owned, leased, or borrowed vehicles for company business. In these situations, employees must submit annual proof of insurance coverage for the vehicle(s) used for company business.

The driver is required to carry a minimum of \$500,000 (Split) in liability limits on their vehicle. The company does not specify and assumes no responsibility for other coverage's an employee elects to purchase for personally owned vehicles.

The personal vehicle must meet or exceed all applicable local, state and federal guidelines for safety.

GPE assumes no responsibility for any loss or damage to the employee's personally owned, leased, or any other operated vehicle or for any loss or damage to the employee's personal property while driving for company business. Employees must obtain coverage for these exposures from their insurance agent.

GPE maintains the right to grant exceptions to this policy for special or extraordinary circumstances.

The company may request Additional Named Insured endorsement.

## **Rental Vehicles Used for Company Business**

When entering into a contract for a rental vehicle, employees agree to abide by all rental contract provisions and restrictions. Check with your Fleet Manager or other authorized person to determine if the additional insurance coverage's are needed.

The driver and all passengers must also agree to wear seat belts and shoulder restraints whenever operating the rental vehicle.

The driver will follow all policies as set forth by the Company Fleet and Safety policies.

## **Vehicle Maintenance and Inspection Procedures**

DOT requires each regulated company to: **“Systematically inspect, repair and maintain all vehicles under their control.”** This should be a guideline for all vehicles.

All maintenance records must be retained for each vehicle, and for a minimum of 18 months following the sale of the vehicle

Drivers are expected to document routine maintenance checks on a written log. Items to inspect daily include:

You are expected to report any unsafe mechanical conditions immediately and agree to never operate a vehicle that is unsafe to drive. ALWAYS observe loading and towing limitations.

Check the oil and tire pressure on a regular basis. Replace worn tires as needed. Also check bulbs on turn signals, taillights, and headlights. Check the horn.

Keep your windows and mirrors clean. Report broken or cracked glass immediately.

## **Driver Responsibilities – Company-owned Vehicles**

You are responsible for the care and use of a company vehicle in your possession. These responsibilities include, but are not limited to:

- Operating the vehicle in a manner consistent with reasonable practices, to avoid abuse, theft, neglect, or disrespect of the equipment. Additionally it is prohibited to use a company vehicle for personal use.
- Obeying all traffic laws.
- The mandatory use of seat belts and shoulder harness for yourself and passengers.
- Adhering to manufacturer’s recommendations regarding service, maintenance, and inspection. Reporting any defect that would prevent safe operation.
- Attention to and the practice of safe driving techniques and adherence to existing safety requirements.
- Restricting the use of vehicles by authorized driver(s) only.
- Reporting all moving violations within 7 working days of the violation.
- Accurate, comprehensive, and timely reporting of all vehicle thefts and/or accidents involving an authorized driver to Management.

- Cell phone use while driving a company-owned vehicle is prohibited.

***Failure to comply with any of these responsibilities will result in disciplinary action, up to and including termination.***

## **Traffic Violations**

Payment of fines and citations you receive for parking or moving violations are your personal responsibility. The company will not condone nor excuse non-payment of traffic citations that result in court summons directed to our business, due to the vehicle's ownership. You are required to report all moving violations to Management. This requirement applies to violations involving the use of any vehicle (company, personal, rental, etc.) used for company business. Failure to report violations will result in appropriate disciplinary action. Any traffic citations you receive while driving on personal business are also subject to review and may affect your driving status.

## **Alcohol and Drug Policy**

1. If you are assigned a company vehicle, or regularly drive a personally owned vehicle on company business, you are subject to random and unannounced drug testing. You are subject to immediate termination if you test positive for any banned substance.
2. If you drive a company vehicle, or regularly drive a personally owned vehicle on company business, and receive a DUI citation from state, federal, or local law enforcement officers, you are subject to disciplinary action, up to and including termination. This includes DUI citations received off-duty, while driving personal vehicles.
3. The transport of alcoholic beverages and all controlled substances in company owned vehicles are prohibited at all times.
4. You must agree to inform your physician(s) that driving is part of your job if he/she prescribes any medication for you. This may enable the physician to choose medications that will not cause drowsiness or other physical impairment.
5. GPE reserves the right to conduct a drug test after an accident. The test will be performed as soon as possible.
6. You must report all accidents immediately to your facility supervisor or manager and the GPE Human Resources Department.

## **Accident Scene Conduct**

1. Take these actions if you are involved in an accident:
  - a.) Move your vehicle off the road if the traffic and vehicle condition allow you to do so safely;
  - b.) Render care if appropriately trained for any injured individuals. Notify police and/or emergency responders at once;
  - c.) Clear the roadway of any hazardous debris; and
  - d.) Place reflective triangles and/or flares (if there are no fuels or flammable liquid leaks) near the scene. Place your emergency reflective equipment in accordance with state law and common sense.
  
2. Maintain a calm and controlled demeanor at the scene. Never admit fault, even if you believe you were at fault. Do not show anger or resentment, or accuse others. Listen and obey the responding police officer.
  
3. Use your accident investigation kit and immediately begin recording information about the accident. Do not leave important details to your memory.
  
4. Draw a diagram of the accident scene. Record road names, the placement of vehicles, access points, mile markers, number of lanes, pathways of vehicles involved, tire marks, signs, physical obstructions, and any other data you view as important. Always confirm the accurate number of passengers in each of the vehicles involved.
  
5. If you have a camera, photograph the vehicles and persons involved. Also take photos that show the physical damage caused to vehicles, skid marks and obstructions. Photograph witnesses, including passengers, and indicate each person's position in the vehicle. Include photos that show pavement conditions (wet, icy, debris covered, etc.), and any other evidence. Check for indications that any of the property damage may have resulted from a previous accident.
  
6. Observe the scene. Watch for items being tossed out of vehicles, or items being tucked out of site by other witnesses/passengers. Make a record if anyone places items in their trunk. Use your sense of smell to detect gasoline or alcohol odors. Listen to what the other parties are saying to each other, and to the police. Record your observations if anyone behaves unusually.
  
7. Get important driver information including name, address, home, and work phone numbers. Record the name(s) of other driver's insurance carrier(s), policy numbers, and coverage periods. Also, write down the names, addresses, and phone numbers of all witnesses.
  
8. DO NOT rely on law enforcement officers to take witness statements. Take the initiative to talk to those individuals who may have seen the accident. Do not "demand" information, but politely request pertinent information.
  
9. Obtain information from the responding police officer, including name, badge number, rank, and precinct/district. Obtain a telephone number and address to request a copy of the accident report.

## Accident Reporting

### **YOU MUST REPORT ALL ACCIDENTS, EVEN MINOR ONES.**

It is very important to report an accident immediately. Contact your facility supervisor/ manager or GPE Management Officer as quickly as possible. Failure to report an accident, regardless of severity, will result in disciplinary action, up to and including termination.

Use Your Accident Kit — Your Accident Kit contains the forms and provides the directions you need to help us complete the investigation.

### **Steps to Follow:**

1. Set your brake: An obvious moves, but immediately after an accident, such actions can be missed in an emergency.
2. Call 911 if injured parties require medical attention. Give aid if properly trained.
3. Set reflectors, flags or other warning devices.
4. Call the police. Record the name of the police officer and his/her phone number.
5. Call your work location to report the accident.
6. Get names, addresses, phone numbers, and license numbers of persons involved in the accident or possible witnesses.
7. Be polite, especially to the police, but offer no opinion as to the cause of the accident.
8. Don't discuss the accident with anyone unless they can prove they represent you and/or GPE
9. Complete the accident report in your accident kit and call Jeremy Oliver, Safety Director at: Office: (419) 536-8501 Cell: (419) 407-0785

## **Additional Emergency Procedures**

1. If a mechanical failure causes your vehicle to break down, make an effort to get it as far off the road as possible.
2. If you cannot maneuver the vehicle safely and completely off the road, place flares or reflectors behind it, as per DOT requirements. Activate emergency flashers immediately.
3. After placing emergency markers, call a service station, motor club, or other source to request immediate assistance. Do not delay reporting the accident or emergency. Removing your disabled vehicle off the roadway must be your priority.
4. Remove all valuable cargo and equipment from the disabled vehicle before towing.
5. Prompt reporting is important after all accidents, but especially critical following a serious accident that involves physical injuries and/or extensive property damage. Contact our insurance carrier immediately for advice on how to conduct an accident scene investigation.

## **Accident Preventability**

When an accident occurs, people commonly ask, “Whose fault was it?” From GPE’s perspective, we want to determine if you were able to prevent the accident and how to train our employees in future accident avoidance.

A **PREVENTABLE** accident is any accident in which you failed to do everything that you could have reasonably done to avoid it. By contrast, a **NON-PREVENTABLE** accident is any accident in which you took all measures possible to avoid it.

### **Intersections**

You are expected to drive defensively at all times when operating either a GPE vehicle or your own personal vehicle on company business. This includes taking defensive measures as you approach, enter, and cross intersections. Complex traffic movement, blind intersections, or failure or other drivers to obey laws does not automatically deem an accident **NON-PREVENTABLE**. Accidents occurring at intersections are often **PREVENTABLE**, even if you do not violate a law. Your failure to take appropriate precautionary measures is a factor in determining preventability.

### **What’s Ahead?**

Regardless of the abrupt or unexpected stop of a vehicle by the driver ahead, you can often prevent rear-end collisions by maintaining a safe following distance. Be prepared for possible obstructions ahead, either in plain view or hidden by the crest of a hill, or the curve of the highway.

### **Vehicle Behind**

An investigation often reveals that failing to maintain a margin of safety in his own following distance increases a driver’s risk of being struck from behind. Rear-end collisions prompted by a roll-back, an

abrupt stop at a grade crossing, when a traffic signal changes, or when a GPE driver fails to signal a turn at an intersection are classified as **PREVENTABLE**. Collisions arriving from a driver's failure to signal or to slow down gradually may be considered preventable.

### **Passing**

Failure to pass safely indicates faulty judgment and the possible failure to consider one or more of the important factors that a driver must observe before attempting this maneuver. Passing maneuvers are always voluntary actions, and it is the driver's responsibility to perform them safely.

### **Being Passed**

Sideswipes, collisions, and cutting off a driver while being passed are **PREVENTABLE** accidents, when a driver slows down or moves to the right, where possible.

### **Oncoming Traffic**

Sometimes drivers can prevent accidents when an opposing vehicle crosses the center lane. For example, if the opposing vehicle was in the process of passing and you failed to slow down, stop (if possible), or move to the right to allow the vehicle to re-enter his/her lane: you have failed to prevent the accident. Depending on the particular circumstances, failing to signal the opposing driver by flashing the headlights or sounding the horn may also factor into the decision.

### **Fixed Objects**

Collisions with fixed objects are **PREVENTABLE**. They usually involve failure to check or properly judge clearances. New routes, resurfaced pavement, inclined entrances and/or signs extending over the traveled portions of roadways are examples of situations that you must properly negotiate. You must always be on the lookout for these conditions and make the necessary allowances. Knowing the height, width, and other clearances or your vehicle is critical.

### **Pedestrians**

Pedestrian right-of-way is always the rule. Traffic regulations and court decisions generally favor a pedestrian when struck by a moving vehicle. You must be on the lookout for pedestrians that may appear from between parked vehicle or elsewhere outside intersections and take necessary precautions to prevent an accident. You are expected to exercise extreme caution in school zones, near retail stores, residential streets, and other areas with frequent pedestrian traffic.

### **Private Property**

If you are expected to travel to remote locations or along roadways or driveways that appear unable to support heavy vehicles, it is your responsibility to discuss the issue with the property owner and obtain permission prior to entering the area.

### **Non –Collision**

Accidents that involve overturning or running off the road may occur after you take steps to avoid a collision. The post-accident investigation will include an examination of your driving procedures immediately prior to the incident. If the investigation reveals that you were speeding, or that other factors contributed to the accident, you may be cited for a lack of appropriate defensive driving procedures.

### **Failure to Adjust for Conditions**

Adverse weather conditions are not a valid excuse for being involved in an accident. Rain, snow, fog, sleet, or icy pavement increase driving hazards. You are responsible for adjusting your driving to the prevailing weather conditions. These conditions merely increase the hazards of driving. Failure to adjust driving to the prevailing weather conditions should be cause for deciding an accident to be **PREVENTABLE**.

### **Accident Review Committee**

GPE Committee will review the accident to determine if it was PREVENTABLE. Factors used in determining whether an accident was preventable include the driver's statement, accident reports, police reports, witnesses' accounts, photographs, and post-accident drug/alcohol test results. As the driver, you may appeal the decision if you disagree with the Committee's findings.

### **Progressive Disciplinary Policy**

Safety is everyone's business. Violating safety rules, laws and practices will result in GPE Company's management taking action to re-evaluate and re-educate drivers to reduce accident frequency and severity.

All accidents are subject to review. The process will be determined whether progressive disciplinary action, up to and including termination, will be administered.

### **Cargo Security Policy**

Safety is our top priority, and in accordance with our commitment to maintaining a secure environment, all cargo must be adequately secured during transport. Properly securing cargo is essential to prevent shifting, spillage, or any potential hazards that may arise during transit. We adhere strictly to industry standards and regulations to ensure the safe and secure handling of all goods.

Employees involved in loading and unloading procedures are trained to use appropriate restraints, fasteners, and equipment to secure cargo effectively. Regular inspections will be conducted to verify that all shipments comply with our established safety protocols. By prioritizing the proper securing of cargo, we aim to mitigate risks and uphold the highest standards of safety for our employees, customers, and the community at large.

# CONFINED SPACES PROGRAM & POLICIES



# Geddis Paving & Excavating, Inc.

## Confined Space Safety Guidelines

This Confined Space Plan defines the structure of Geddis Paving & Excavating confined space Plan and describes specific procedures that must be followed to satisfy federal and OSHA safety requirements, and protect employees from injury. Components of the program include identification and inventory of permit required confined spaces, training, confined space entry permits, provisions for notifying contractors, air sampling, and emergency response procedure.

This Confined Space Plan is reviewed routinely and amended as necessary and when:

- Applicable regulations are revised;
- An employee is injured during a confined space project;
- A “near miss” accident occurs during a confined space project; or
- Property or the environment is negatively impacted as a result of a confined space project.

All revisions to this Confined Space Plan will be shared with the various parties identified in this document.

### Health and Safety Office Confined Space Program

#### Introduction

The procedures and guidance provided within this Plan are designed to protect employees from injury when working in or around confined spaces. The Occupational Safety and Health Administration (OSHA) requires that specific activities and forms be completed prior to and during a confined space entry. Geddis Paving & Excavating Health and Safety Office (SAFETY DIRECTOR) will provide or make available this Confined Space Plan to all employees, supervisors, and contractors who conduct activities subject to confined space regulations. This Plan provides guidance on training requirements, how to conduct a confined space entry, and emergency response procedures.

**Purpose:** The purpose of this document is to establish practices and procedures that can protect Geddis Paving & Excavating employees from hazards associated with permit and non-permit required confined space work. In addition to specific requirements for confined space entry, a complete confined space program incorporates other safety programs including, but not limited to, lockout/tagout (LOTO), hazard communication, hot work, and personal protective equipment (PPE).

**Scope:** Geddis Paving & Excavating Confined Space Plan applies to all Geddis Paving & Excavating employees working on Geddis Paving & Excavating property and leased spaces. Contractors must provide their own confined space plan for work in permit and non-permit required confined spaces on Geddis Paving & Excavating property.

### Confined Space Program

### **Roles and Responsibilities:**

All employees expected to perform confined space work or work around confined spaces are responsible for following the guidance provided within this document as well as instructions given by their supervisor. Additional title and employee responsibilities for entry into a confined space or permit required confined space are described in section.

The following individuals, offices, and units are responsible for ensuring that the directives, components, and maintenance of the Geddis Paving & Excavating's confined space program are achieved.

### **Safety Director:**

The Safety Director is responsible for the design, implementation, and maintenance of Geddis Paving & Excavating Confined Space Plan. Specific responsibilities are to:

- Assist supervisors in implementing Geddis Paving & Excavating Confined Space Plan.
- Provide employee Confined Space Awareness Training and Confined Space Entry Training and maintain training records.
- Identify and maintain an inventory of all known non-permit and permit required confined spaces; and make it available to employees, supervisors, and contractors.
- Conduct confined space classification and reclassification assessments as needed.
- Approve all monitoring equipment, safety equipment, and work materials that will be used during a permit required confined space project.
- Conduct inspections of confined spaces, confined space signage, and review confined space entry permits to evaluate compliance, identify deficiencies, and improve safety.
- Maintain confined space inspection records.
- Post and maintain appropriate warning signage on confined space entrances.
- Provide Confined Space Plan documents and updates as necessary to departments, employees, supervisors, and contractors who fall under the guidance of this Confined Space Plan.
- Review confined space entry projects that involve a contractor and Geddis Paving & Excavating employee both entering a confined space.
- Ensure that emergency responders are informed of all permit required confined spaces and have access to those spaces.
- Determine permit required confined spaces where standard retrieval systems may not be effective or would create additional hazards.
- Develop equipment-specific procedures for unique confined spaces and equipment within work area(s) in conjunction with Facilities supervisors.
- Update, revise, and edit this Confined Space Plan as necessary.

### **Supervisors**

Supervisors are responsible for ensuring that Geddis Paving & Excavating Confined Space Plan is implemented and followed by employees under their supervision.

Specific responsibilities are to:

- Be informed of the contents of this Confined Space Plan and how it applies to work areas under their responsibility and authority.

Health and Safety Office Confined Space Program

- Ensure employees comply with all aspects of this Confined Space Plan.
- Ensure that other Geddis Paving & Excavating safety programs and procedures such as LOTO, hot work, and hazard communication are followed when relevant.
- Ensure that employees are provided with and use appropriate PPE.
- Assist SAFETY DIRECTOR with identifying and inventorying confined spaces.
- Ensure that employees under their supervision receive appropriate confined space training commensurate with their duties.
- Approve and appoint employees to serve as entry supervisors, attendants, and entrants.
- Ensure that Confined Space Entry Permits are completed correctly.
- Post completed Confined Space Entry Permits at the entrance of the confined space while conducting operations.
- Develop equipment-specific procedures for unique confined spaces and equipment within their work area(s) in conjunction with SAFETY DIRECTOR.
- Assist in the investigation of injuries and incidents involving confined spaces.
- Take prompt and corrective action when unsafe conditions or practices are observed.
- Notify SAFETY DIRECTOR's Alternate Entry Procedures are to be used to enter a confined space.
- Notify SAFETY DIRECTOR when tasks or locations are identified where no entry retrieval is not possible.

Geddis Paving & Excavating employees who work in confined spaces are expected to comply with this Confined Space Plan.

Employee responsibilities are:

- Attend Confined Space Entry Training if they are expected to be an entry supervisor, attendant, or entrant for confined space work.
- Attend Confined Space Awareness Training if they are expected to work around confined spaces.
- Follow the directives and guidance provided in this Confined Space Plan.
- Notify their supervisor and SAFETY DIRECTOR if dangerous work conditions are observed, the Confined Space Plan is not followed, or an accident involving a confined space occurs.
- Complete Confined Space Entry Permits prior to beginning work in a confined space.
- Use appropriate PPE and follow all relevant Geddis Paving & Excavating safety programs.

### **Project Managers**

Project Managers are responsible for ensuring that contract personnel under their supervision are: capable of performing the work they are required to do; provide or have the appropriate level of training; and follow all relevant OSHA safety regulations and standards. Specific responsibilities required by this Confined Space Plan are to:

- Inform contract personnel of the work area(s) that contain permit required confined spaces and that entry is allowed only through compliance with a permit required confined space program meeting the requirements of 29 CFR 1910.146.
- Notify contract personnel of the known hazards within or around a confined space and any precautions or procedures that Geddis Paving & Excavating has implemented for the protection of employees.

- Coordinate entry operations with contract personnel when both Geddis Paving & Excavating and contractor personnel will work in a confined space simultaneously.
- Debrief the contractor at the conclusion of entry operations regarding the hazards confronted or created during entry operations and communicate to SAFETY DIRECTOR any new hazards that are created as a result of work within the confined space.

### **Contractors**

When contract personnel are engaged in activities involving confined spaces, the contractor shall provide a written confined space program/plan to the Geddis Paving & Excavating Facilities Management Project Manager. The contractor's written confined space program/plan must satisfy the requirements of OSHA standard. Procedures used by the contractor to enter a permit required confined space must be discussed with the Project Manager prior to entry.

Contractors are responsible for ensuring that employees under their supervision are competent, trained, understand, and comply with the requirements of OSHA standards for confined spaces. Contractors must show proof of confined space training for their employees prior to entry. In addition, contractors are obligated by OSHA to:

- Obtain information regarding permit required confined space hazards and other safety procedures followed by employees from Geddis Paving & Excavating.
- Coordinate entry operations with the appropriate Geddis Paving & Excavating supervisor when both Geddis Paving & Excavating employees and contract personnel will be working in a confined space simultaneously.
- Inform the Project Manager of any hazards confronted or created in permit spaces either through a debriefing or during the entry operation.
- Contractors must supply their own air monitoring and rescue/retrieval equipment.

### **Confined Spaces**

A confined space is any space which meets the following criteria:

- Large enough and so configured that an employee can enter and perform assigned work;
- Has limited or restricted means for entry or exit; and
- It is not designed for continuous employee occupancy.

Confined spaces can either be classified as either non-permit or permit required confined spaces depending on hazards that are or have the potential to be present in the confined space.

### **Non-permit Confined Space**

A non-permit confined space is a space that meets the definition of a confined space but does not possess or have the potential to possess any hazardous conditions. All non-permit confined spaces must be evaluated for hazards and documentation of the absence of hazardous conditions must be maintained so long as work is performed within the confined space.

### **Non-permit Confined Space Entry Procedures**

Confined spaces that do not contain or have the potential to contain hazards, as determined by the entry supervisor or SAFETY DIRECTOR, do not require a Confined Space Entry Permit, however, if the

confined space has not been previously identified as a non-permit confined space, a permit must be completed by the entry supervisor and monitoring must be conducted to ensure a safe and hazard-free atmosphere.

All non-permit confined space work must be conducted in teams of two or more employees to ensure that at least one employee is able to request help should the entrant encounter unforeseen problems or suffer an injury which prevents them from exiting the space.

**Permit Required Confined Space** A permit required confined space is one that meets all of the conditions of a confined space and has one or more of the following hazardous characteristics:

- Contains or has a potential to contain a hazardous atmosphere;
- Contains a material that has the potential for engulfing an entrant;
- 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
- Contains any other recognized safety or health hazard.

**Hazardous Conditions Entry** supervisors or SAFETY DIRECTOR shall evaluate all confined spaces to identify permit required confined spaces. Examples of hazards that elevate a confined space to a permit required confined space include but are not limited to:

- Gases or vapors which can displace oxygen;
- A potential for low or high levels of oxygen, 19.5% and below or 23.5% and above;
- Flammable gases at or above 10% of the lower explosive limit;
- The presence of hazardous chemicals at or above the permissible exposure limit (PEL), short-term exposure limit, ceiling, or recommended exposure limit (REL);
- Any condition that can be interpreted as immediately dangerous to life or health (IDLH);
- Temperatures that can contribute to heat stress;
- Liquids, steam, or flowable solids which can engulf an entrant;
- Sources of radiation;
- Bare, exposed, or ungrounded conductive parts of electrical equipment, machinery, wiring, fixtures, or installations;
- Sewer systems that have the potential to contain a hazardous atmosphere, low oxygen, or contain high pressure/temperature pipes; or
- Any other recognized hazard.

If a Geddis Paving & Excavating employee must enter a sewer to perform work, prior review by SAFETY DIRECTOR is required. If work is to be done in a sewer, SAFETY DIRECTOR must be notified at least 48 hours in advance when possible. Employees are not permitted to enter a sewer unless SAFETY DIRECTOR has evaluated the confined space, made recommendations, and are present during entry. These requirements are in addition to all other requirements of permit required confined space entry.

Signage Permit required confined space must be identified by posted warning signage notifying all employees of the existence and location of the confined space. Signs may not be removed without

approval from SAFETY DIRECTOR. Posted signs shall be prominently displayed on the entrance to the permit required confined space and must contain the following text:

**DANGER – PERMIT REQUIRED CONFINED SPACE - DO NOT ENTER**

**Permit Required Confined Spaces Entry Procedures:**

All entries into permit required confined spaces must be conducted by a minimum of two employees. Employees will be identified as the entry supervisor, attendant, or entrant. Respective responsibilities of each position are:

- Entry Supervisor – The trained individual with the responsibility to oversee the project and ensure that all provisions of this Confined Space Plan are met.
- Attendant – The trained individual stationed immediately outside the confined space who monitors entrants and records entry activities.
- Entrant – The trained individual(s) authorized by their supervisor who enters the confined space to conduct work.

**Entry Supervisor:** The entry supervisor has the primary role in evaluating and controlling access and activities within the permit required confined space. Specific procedures for this role are to:

1. Survey the confined space without entering, review the work to be performed, and identify existing or potential atmospheric, chemical, and physical hazards.
2. Determine the actions necessary prior to entry to eliminate or control the hazards, and record them on the Confined Space Entry Permit.
  - a. Eliminate engulfment and any other serious hazards by utilizing LOTO methods such as blanking, binding, double block and bleed, line braking, or other effective ways and means.
  - b. Control traffic, isolate the confined space from vehicular and pedestrian traffic, and only allow authorized individuals near the permit space.
  - c. Guard the opening of the confined space by installing guardrails or other temporary covers or barriers to prevent accidental falls through the opening and prevent foreign objects from entering the space and injuring the entrant(s).
3. Conduct atmospheric testing prior to entry in addition to the continuous monitoring being conducted by entrant.
  - a. Test for atmospheric hazards in the following order: oxygen content, combustible/flammable gases and vapors, carbon monoxide, and then any other potential toxic air contaminant(s).
  - b. Obtain and list the PEL and REL for each identified air contaminant.
  - c. Test for each identified or suspected air contaminant.
  - d. Determine if the atmospheric hazard can be eliminated or controlled by continuous forced-air ventilation. If the only hazard in a space is a hazardous atmosphere and alternate entry procedures are acceptable, they may be used.
  - e. Inform entrant of atmospheric test results
4. Determine and record the required PPE, extraction, and work equipment necessary for entry.
  - a. PPE must be used to protect against health and/or physical hazards that cannot be effectively eliminated or controlled. All employees expected to wear respiratory protection must be enrolled in Geddis Paving & Excavating Respiratory Protection Program.
  - b. Monitoring equipment must be available and used to test oxygen, flammable gases, and carbon monoxide.

- c. Monitoring equipment designed to test levels of identified airborne contaminants shall be required where airborne contaminants are suspected or have been identified.
- d. Other permits, training, procedures necessary to safely enter and work within the confined space must be in place or completed prior to beginning work.
- e. Emergency equipment necessary to summon rescue assistance must be available.
- f. Equipment such as ladders required for safe ingress and egress must be utilized whenever possible.
- g. Mechanical retrieval devices shall be used for vertical entries into spaces deeper than 5 feet. Wristlets may be used where body harnesses are not feasible.
- h. Communication equipment is required when the entrant(s) will be out of voice range of the attendant. Communication equipment must be intrinsically safe dependent upon the conditions existing in the space.
- i. Provide other equipment, PPE, and safety equipment, as necessary.

5. Identify the attendant and at least one entrant and record their names on the Confined Space Entry Permit.
6. Verify that entry conditions are acceptable before signing the permit and allowing entry.
7. Sign and issue the Confined Space Entry Permit, effective upon the date issued and expiring on the date indicated on the permit. A permit may not be issued for a period longer than 24 hours. The permit may be extended up to 24 hours upon recertification of conditions. Upon a change in shifts, the entry supervisor shall brief the incoming supervisor and/or shift on potential hazards, equipment, PPE, rescue, LOTO, and safe work procedures in the space.
8. Post the Confined Space Entry Permit at the entrance to the confined space.
9. Terminate the entry and cancel the permit when entry operations are finished or if a prohibited condition arises.
10. Keep the permit on file for one year.

### **Attendants**

1. Understand the hazards associated with the space and review the posted Confined Space Entry Permit.
2. Be stationed outside the permitted space at the opening and remain in place throughout the duration of the entry or until relieved by another authorized attendant.
3. Perform no other duties beyond those stated for attendants.
4. Maintain the identity and an accurate count of entrants within and outside of the space on the Confined Space Entry Permit.
5. Assist with atmospheric monitoring of spaces containing hazardous atmospheres, and record results on the Confined Space Entry Permit.
6. Periodically communicate with the entrant(s) to assure that all is well or relay information.
7. Monitor activities inside and outside of the confined space and order an immediate evacuation of the space whenever;
  - a. A prohibited condition is identified;
  - b. An entrant exhibits behavior effects of exposure to chemicals, physical hazards, or a hazardous atmosphere;
  - c. A situation outside of the confined space endangers the entrant(s); or
  - d. The attendant is unable to complete all attendant responsibilities.

8. Perform nonentry rescues or summon rescue services if needed using a cell phone.
9. Warn unauthorized persons to stay out of confined spaces and contact Geddis Paving & Excavating Police if persons do not respond to warnings.

### **Entrants**

1. Understand the hazards associated with a confined space and review the posted Confined Space Permit Entry.
2. Enter the space and perform the assigned work as expediently and as safely as possible.
3. Wear and use all PPE required by the permit.
4. Notify the attendant periodically or upon request of work progress and entrant safety.
5. Immediately alert the attendant and evacuate the space whenever any of the following occurs:
  - a. The development of a condition not in compliance with the documented conditions in the Confined Space Entry Permit or Alternate Entry Procedure Certification Form;
  - b. The development of a sign or symptom of exposure or injury to any employee involved with the entry;
  - c. Failure of any required safety or work equipment; or
  - d. The attendant or entry supervisor orders an evacuation.

### **Entry Completion or Termination**

1. The attendant shall assure that the entrant(s) have exited the confined space following an evacuation or completed project.
2. If the confined space was evacuated prior to the completion of work, the entry supervisor or shall:
  - a. Immediately terminate the permit by checking the appropriate box and describe the reasons for evacuation on the permit;
  - b. Immediately notify SAFETY DIRECTOR of any employee injuries or exposures; and
  - c. Determine if reentry is required to complete work, eliminate a hazard, or return the confined space to normal operation.
3. If reentry is required:
  - a. The confined space must be investigated to determine the cause of the evacuation.
  - b. A new Confined Space Entry Permit, which includes the elimination or control of the hazard causing the evacuation, must be completed.
4. If the entry was successfully completed, the attendant shall:
  - a. Oversee the completion of post-entry actions indicated on the permit.
  - b. Add any pertinent information concerning the entry on the permit.
  - c. Return the completed permit to the entry supervisor.
5. The entry supervisor will terminate the Confined Space Entry Permit with their signature and retain a copy of the permit for a period of at least one year.

**Alternate Entry Procedures** Alternate entry procedures may be used to enter confined spaces in which the only hazard is atmospheric and where continuous forced air ventilation alone will eliminate

the hazardous condition(s) and maintain a safe atmosphere. Only the Safety Director can determine that a confined space may be entered using an alternate entry procedures. Similar to permit required confined spaces, the alternate entry space must be clearly posted on the confined space signage. In order to implement alternate entry procedures the entry supervisor must observe the following;

- Work with SAFETY DIRECTOR to demonstrate that continuous forced-air ventilation alone is sufficient to maintain a safe atmosphere and provide monitoring or inspection data to support alternate entry procedures.
- Complete an Alternate Entry Procedure Certification Form prior to conducting an entry using alternate entry procedures and maintain a copy on file with the Confined Space Entry Permit.
- The entry supervisor must be able to demonstrate that the only hazard posed by the confined space is an actual or potential hazardous atmosphere and is free from all other health or physical hazards.
- If entry is required to collect data or conduct an inspection to determine if alternate entry procedures can be followed, a permit required confined space entry will be conducted and a Confined Space Entry Permit must be completed prior to entering.

The completed Alternate Entry Procedure Certification Form must be posted at the entry point in addition to the Confined Space Entry Permit and be available for review for the duration of the confined space project. The following steps must be observed:

1. The entry supervisor shall identify any conditions making it unsafe to remove an entrance cover and identify any steps required to eliminate or mitigate the hazardous atmosphere before the entrance cover is removed.
2. The atmosphere must be tested with a calibrated direct-reading instrument for oxygen content (19.5-23.5%), flammable gases and vapors, and potential toxic air contaminants in this order, and results must be recorded on the Confined Space Entry Permit.
3. Any entrant expected to enter the confined space must be provided the opportunity to observe preentry testing and results.
4. If forced-air ventilation is used, it must be:
  - a. Set up prior to entering the confined space and capable of eliminating the hazardous atmosphere;
  - b. Directed so as to ventilate the immediate area where an employee(s) is or will be present and continue operating throughout the duration of the entry;
  - c. The air supplied by forced-air ventilation must be from a clean source and cannot increase the hazard(s) within the confined space; and
  - d. All air ventilation equipment, vents, power, and auxiliary systems must be provided with a failsafe or backup system to protect employees in the event of a mechanical or power failure.
5. Testing must be continuous to ensure that a hazardous atmosphere does not exist or form. Test results must be recorded on the Confined Space Entry Permit periodically.
6. If a hazardous atmosphere is detected during entry:
  - a. All entrants shall evacuate the space immediately.
  - b. The space must be reevaluated to determine how the hazardous atmosphere developed. This reevaluation must involve SAFETY DIRECTOR.

c. Measures shall be implemented to protect employees from the hazards before any subsequent entry takes place. Reentry is not permitted until SAFETY DIRECTOR has conducted its evaluation and approved new procedures to mitigate the hazardous atmosphere.

### **Confined Space Reclassification**

A confined space may be reclassified as a non-permit, alternate entry, or permit required confined space whenever the condition, design, or environment of a confined space changes. Entry supervisors have the ultimate responsibility for ensuring that the correct entry procedure is followed based upon the configuration of the space, hazards, and testing results. A permit required confined space may be reclassified by the Safety Director as a non-permit confined space whenever the permit required confined space:

- Poses no actual or potential atmospheric hazards and if all the hazards within the space are eliminated without entry into the space; or
- Testing and inspection are conducted to verify that hazards have been eliminated.

If it is necessary to enter the space to eliminate the hazards that make it a permit required confined space, entry must be made using permit required confined space entry procedures.

**Monitoring:** Monitoring must be conducted prior to entering a confined space, continuously during entry operations, and any time a confined space is reclassified. Monitoring may require multiple instruments, specialized equipment, and specific training. All monitoring equipment used to evaluate confined spaces must be calibrated and used as directed by the manufacturer's user's manual. This requirement only applies to Geddis Paving & Excavating employees; contract personnel may choose to use an alternate monitoring method so long as it is consistent with 29 CFR 1910.146.

**Toxic Air Contaminants:** If a potential or actual toxic air contaminant exists in a confined space, SAFETY DIRECTOR must be notified prior to beginning work to coordinate testing and evaluation. SAFETY DIRECTOR will conduct initial monitoring and determine the appropriate equipment, PPE, and periodic testing schedule. SAFETY DIRECTOR will then conduct, oversee, or instruct employees on how to conduct periodic monitoring depending upon the circumstances, employee training, and identified toxic air contaminants.

**Monitoring Procedures:** The following procedures have been adopted from 29 CFR 1910.146 Appendix B and are appropriate for confined spaces and sewers. Testing conducted during the course of a routine confined space project must be completed by a competent and trained entry supervisor, entrant or attendant.

**Evaluation testing:** The atmosphere of a confined space must be analyzed using equipment of sufficient sensitivity and specificity to identify and evaluate hazardous atmospheres that may exist or arise so that appropriate entry procedures can be developed for the space. Evaluation and development of the entry procedure should be done or reviewed by a technically-qualified professional based on the evaluation of all serious hazards.

**Verification testing:** A permit required confined space that contains a hazardous atmosphere must be tested for residues of all identified contaminants to determine that residual concentrations at the

time of testing and entry are within the range of permissible exposure limits. Results of testing must be recorded on the Confined Space Entry Permit.

**Duration of testing:** Testing must be conducted continuously for the duration of the entry.

**Testing stratified atmospheres:** Entry involving a descent into atmospheres that may be stratified requires testing at a distance of approximately 4-feet in the direction of travel and 4-feet to each side. If a sampling probe is used, the entrant's rate of progress should be slowed to accommodate the sampling speed and detector response. Testing should be done at 2-foot increments when testing the air by lowering a meter or probe vertically into a confined space.

1. Oxygen must be performed first because most combustible gas meters are oxygen dependent and will not provide reliable readings in an oxygen-deficient atmosphere.
2. Combustible gases are tested next because the threat of fire or explosion is both more immediate and more life threatening, in most cases, than exposure to toxic gases and vapors.
3. Toxic gases and vapors are performed last. Equipment used by Geddis Paving & Excavating employees often test for these hazardous air conditions simultaneously, however a multigas meter may not detect all toxic gases and additional air monitoring equipment may be required.

**Training:** Confined space training is required for two types of employees; those working around confined spaces and those working within confined spaces entry either as an attendant, entrant, or entry supervisor.

**Confined Space Awareness Training:** All employees expected to work around or above confined spaces are required to attend Confined Space Awareness Training. Awareness training provides a cursory understanding of what constitutes a confined space, associated hazards, confined space entry procedures, and precautions that should be observed when working around confined spaces.

Confined Space Awareness Training is required by all employees prior to confined space entry and annually. This training is currently provided as part of the SAFETY DIRECTOR Safety Refresher Training.

**Confined Space Entry Training:** Confined Space Entry Training shall be provided to employees before they are assigned duties which require confined space entry. Confined Space Entry Training is required prior to entry. Training provides employees with the knowledge to:

- Retrieve and review Geddis Paving & Excavating Confined Space Plan.
- Identify a confined space and be able to determine if a confined space is a non-permit or permit required confined space.
- Calibrate, use, care, and clean monitoring equipment used during entry operations.
- Understand monitoring requirements and monitoring results.
- Set up retrieval equipment.
- Understand the duties and responsibilities of the entry supervisor, attendant, and entrant.
- Select and attend additional safety training as assessed and required to perform confined space work, including but not limited to Respiratory Protection, Hazard Communication, and Lockout/Tagout Training.
- Identify signs and symptoms of exposure, injury, and hazardous conditions.

- Understand emergency exit and rescue procedures.

**Retraining:** Supervisors are responsible for ensuring that employees attend Confined Space Entry Training once every three years and whenever one of the following situations occurs:

- There is a change in permit required space operations that presents a hazard in which an employee has not been previously trained; or
- A supervisor has reason to believe that an employee's knowledge of use of these procedures and plan is inadequate.

**Rescue and Emergency Services Retrieval:** systems or rescue services must be employed for all permit required confined space entry projects. Nonentry rescue (i.e., use of equipment that does not require additional personnel to enter the confined space) is the preferred method of rescue and should be utilized whenever possible. Nonpermit required confined spaces do not require retrieval or rescue services, however; retrieval systems should be utilized whenever possible

**Non-permit Required Confined Space:** Work in nonpermit confined spaces does not require retrieval systems or rescue services to be on site. If an accident or emergency occurs within a non-permit required confined space, any employee may enter a no-permit space to respond to an emergency but only after notifying emergency services (911) and determining no other hazards are present. If a non-permit required confined space rescue is necessary, the employee is responsible for the following:

- Summoning emergency responders;
- Attempting to rescue entrants using nonentry rescue procedures;
- If nonentry rescue procedures are not available, enter the space and attempt to retrieve the victim(s); and
- Monitoring the emergency and informing responders about the location, number of victims, their condition, and the hazards in the space.

**Permit Required Confine Space with Retrieval System:** A retrieval system must be available to retrieve entrants from vertical permit required confined spaces that are more than 5 feet deep. The retrieval system must be used to rescue an entrant unless the equipment would increase the entrant's risk of injury. Each authorized entrant must use a properly-attached full-body harness. Entrants may use wristlets if full-body harnesses put them at a greater risk of injury in an emergency. The other end of the retrieval line must be attached to a retrieval system outside the permit space so that rescue can begin immediately. If an entrant can be exposed to a hazardous substance a safety data sheet (SDS) is required to be kept so that it is available to the medical facility that treats the entrant.

Geddis Paving & Excavating does not possess horizontal retrieval systems. If horizontal nonentry rescue is required for a permit required confined space, onsite rescued services are required.

**Permit Required Confined Space without Retrieval System:** For any permit required confined spaces where non-entry retrieval systems cannot be utilized, a third-party emergency rescue service shall be on site. Supervisors must notify SAFETY DIRECTOR for further assessment for all confined spaces that require entry for rescue. Rescue services shall be available on site where the confined space has been

found to have an IDLH atmosphere, a hazardous atmosphere or the potential for engulfment or non-entry rescue cannot be performed. Emergency rescue service contact information must appear on all permit required Confined Space Entry Permits and must be provided to all entry supervisors, attendants, and entrants during confined space operations. SAFETY DIRECTOR will assist employees in finding an offsite emergency rescue contractor that can be present to perform entry rescue if needed. Calling 911 is not an appropriate means of emergency rescue due to the fact that an adequate response time cannot be guaranteed.

**Recordkeeping:**

The following confined space records must be maintained by supervisors for a period of one year and must be available to employees, SAFETY DIRECTOR, regulatory inspectors, and their authorized representatives:

- Confined Space Entry Permits; and
- Alternate Entry Procedure Certification Forms.

SAFETY DIRECTOR is responsible for maintaining the following records in accordance with this plan:

- An inventory of all permit required confined spaces;
- Inspections or reviews of confined space activities;
- Reports of accidents involving confined spaces; and
- A list of all Geddis Paving & Excavating employees who receive Confined Space Entry Training and Confined Space Awareness Training

# ASPHALT PAVING PROCESS SAFETY MANAGEMENT PROCEDURES



# **Asphalt Paving System Process Safety Management Compliance Program**

GEDDIS PAVING & EXCAVATING, INC. has processes within our operations which involve highly hazardous chemicals. In order to protect our employees and the environment GEDDIS PAVING & EXCAVATING, INC. has developed this Process Safety Management Compliance Program.

In recent years, a number of catastrophic accidents in the chemical industry have drawn attention to the safety of processes involving highly hazardous chemicals. OSHA determined that employees have been and continue to be exposed in their workplaces to the hazards of releases of highly hazardous chemicals which may be toxic, reactive, flammable, or explosive.

The requirements of the PSM standard are intended to eliminate or mitigate the consequences of such releases. The standard emphasizes the application of management controls when addressing the risks associated with handling or working near hazardous chemicals.

## **Administration**

GEDDIS PAVING & EXCAVATING, INC., Safety Manager is responsible for ensuring that this program is fully implemented and updated to ensure its effectiveness. The company's Process Safety Management Program is located in the Safety Manager's office.

## **Introduction**

This Program has been developed for the Asphalt Paving System at Geddis Paving & Excavating, Inc. to meet the requirements of OSHA Standard 29 CFR 1910.119 Process Safety Management of Highly Hazardous Substances (PSM). Additional program requirements have been taken from applicable ANSI & IIAR Standards.

## References

- 29 CFR 1910.119, Process Safety Management of Highly Hazardous Chemicals; Final Rule; February 24, 1992, Federal Register Vol. 57, No. 36, pp. 6356-6417.
- OSHA Instruction CPL 2.45B, June 15, 1989, the Field Operations Manual (FOM).
- OSHA Instruction STP 2.22A, CH-2, January 29, 1990, State Plan Policies and Procedures Manual.
- OSHA Instruction CPL 2.94, July 22, 1991, OSHA Response to Significant Events of Potentially Catastrophic Consequence.
- OSHA Instruction ADM 1-1.12B, December 29, 1989, Integrated Management Information System (IMIS) Forms Manual.

## Responsibilities

### *Company Management*

Management assigns sufficient resources and qualified operators to ensure safe operating and material conditions are maintained.

Management will assign a qualified supervisor to oversee and direct Asphalt Paving System operations, maintenance and training involve Asphalt Paving System operators in the various elements of this program request, as necessary, assistance from Company Engineering to execute the PSM Program and conduct effective audits.

### *Asphalt Paving System Manager*

The Process Manager will train all Asphalt Paving System operators in hazards of the Asphalt Paving System process, safe operating procedures, and good engineering practices assign tasks based on operators level of knowledge monitor maintenance and operations activities to ensure they comply with good engineering practice ensure contractors are provided the information required by this program document the information, activities, inspections, etc required by this program.

## *Asphalt Paving System Operators*

Process Operators actively participate in the PSM program exercise good engineering practices in the operation and maintenance of the Asphalt Paving System systems comply with all safety procedures.

## *Human Resource Manager*

The Human Resource Department provides PSM overview indoctrination training for all new employees as part of the New Hire Safety Orientation training.

## **PSM Elements**

The PSM Standard contains 14 Elements that must be addressed in this program.

- Employee Participation
- Process Safety Information (PSI)
- Process Hazard Analysis (PHA)
- Operating Procedures
- Training
- Contractor Safety
- Pre-Startup Safety Review
- Mechanical Integrity
- Hot Work Program
- Management of Change (MOC)
- Incident Investigation
- Emergency Planning and Response
- Compliance Audits
- Trade Secrets

## *Employee Participation*

GEDDIS PAVING & EXCAVATING, INC. has developed a Plan of Action for implementation of Employee Involvement. The Company has consulted with employees on the conduct of the development of PSM Elements. The Company provides Employee access to PSM information.

## *Process Safety Information (PSI)*

GEDDIS PAVING & EXCAVATING, INC. has compiled technical information on the process and equipment in the Asphalt Paving System. This requirement is to allow for PHA and maintaining information on the system for Operator training and reference.

### Specifically:

- Hazards of Hot Mix Asphalt pertaining to the technology of the Asphalt Paving System.
- Information pertaining to the equipment in the process.
- Documentation that equipment complies with recognized and generally accepted good engineering practices.

## **Process Hazard Analysis**

At GEDDIS PAVING & EXCAVATING, INC. an initial process hazard analysis has been conducted by a team with expertise in engineering and process operations, including at least one employee who has experience and knowledge on the Asphalt Paving System.

Completion date for PHA was August 30, 2013.

### *After Initial PHA*

The Company has established a system to

- Promptly address the team's findings and recommendations.
- Assure that the recommendations are resolved in a timely manner.
- Document resolutions.
- Document what actions are to be taken.
- Complete actions as soon as possible.
- Develop a written schedule of when these actions are to be completed.
- Communicate the actions to operating, maintenance.

PHA review is required at least every five (5) years to update and revalidate by a qualified person to assure that the process hazard analysis is consistent with the current process.

PHA must address:

- The hazards of the process;
- Identify previous incident which had a likely potential for catastrophic consequences in the workplace;
- Engineering and administrative controls;
- Detection methods for providing early warning of releases;
- Consequences of failure of engineering and administrative controls;
- Human factors ; and

- Qualitative evaluation of a range of the possible safety and health effects of failure of controls on employees.

## **Operating Procedures**

GEDDIS PAVING & EXCAVATING, INC. has developed and implemented written operating procedures that provide clear instructions for safely conducting operations and maintenance. Operating procedures will be readily accessible to employees. The operating procedures will be reviewed as often as necessary to assure that they reflect current operating practice. The Company will certify annually that these operating procedures are current and accurate.

The Company will develop and implement safe work practices to provide for the control of hazards during operations such as lockout/tagout; confined space entry; opening process equipment or piping; and control over entrance into a facility by maintenance, contractor, laboratory, or other support personnel. These safe work practices will apply to employees and contractor employees.

### Procedures will include:

1. Initial startup.
2. Normal, temporary and emergency operations.
3. Normal shutdown.
4. Startup following a turnaround or after an emergency shutdown.
5. Operating limits.
6. Consequences of deviation & Steps required to correct or avoid deviation.
7. Safety and health considerations.
8. Precautions necessary to prevent exposure, including engineering controls.
9. Administrative controls, and personal protective equipment.
10. Control measures to be taken if physical contact or airborne exposure occurs.
11. Quality control for raw materials and control of hazardous chemical inventory levels.
12. Safety systems and their functions.

## **Training**

### *Initial Training*

Each operator will be trained in an overview of the process and in the operating procedures. The training will include emphasis on the specific safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks.

## *Refresher Training*

Refresher training will be provided at least every three years, and more often if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process. The Company, in consultation with the employees involved in operating the process, will determine the appropriate frequency of refresher training.

## *Training Documentation*

The Company will ascertain that each employee involved in operating a process has received and understood the training required by this paragraph. The Company will prepare a record that contains the identity of the employee, the date of training, and the means used to verify that the employee understood the training.

## **Contractors**

In regard to contractors, GEDDIS PAVING & EXCAVATING, INC. will do the following:

- Obtain and evaluate information regarding the contract Company's safety performance and programs.
- Inform all contractors of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process.
- Inform all contractors of the applicable provisions of the emergency action plan.
- Develop and implement safe work practices to control the entrance, presence and exit of contract personnel.
- Evaluate the performance of contract Companies in fulfilling their obligations.
- Maintain a contract employee injury and illness log related to the contractor's work in process areas.

## **Pre-Startup Safety Review**

The Company will perform a pre-startup safety review for new facilities and for modified facilities when the modification is significant enough to require a change in the process safety information. The purpose of the Pre-Startup Review is to confirm that, prior to the introduction of highly hazardous chemicals to a process:

- Construction and equipment is in accordance with design specifications;
- Safety, operating, maintenance, and emergency procedures are in place and are adequate;

- Modified facilities meet the requirements contained in Management of Change; and
- Training of each employee involved in operating a process has been completed.

## **Mechanical Integrity**

GEDDIS PAVING & EXCAVATING, INC. will establish and implement written procedures to maintain the on-going integrity of Asphalt Paving System equipment. This includes:

- Test & Inspections (T&Is) on equipment following recognized and generally accepted good engineering practices, manufacturers recommendations and operating experience for the conduct and frequency;
- Documentation of T&Is, identifying:
  - o Date
  - o name of the person performing T&I
  - o serial number or other identifier of the description of the inspection or test performed
  - o results

- **Equipment Deficiencies**

Correct deficiencies in equipment that are outside acceptable limits before further use or in a safe and timely manner when necessary means are taken to assure safe operation.

- **New Equipment**

Assure that equipment as it is fabricated is suitable for the process application for which they will be used. Additionally, conduct appropriate checks and inspections to assure that equipment is installed properly and consistent with design specifications and the manufacturer's instructions.

- **Material Control**

Assure that maintenance materials, spare parts and equipment are suitable for the process application for which they will be used.

## **Hot Work**

The Company will issue a hot work permit for hot work operations conducted on or near a covered process. The permit will document that the fire prevention and protection requirements in 29 CFR 1910.252(a) have been implemented prior to beginning the hot work operations; it will indicate the date(s) authorized for hot work; and identify the object on which hot work is to be performed. The permit will be kept on file until completion of the hot work operations.

## **Management of Change (MOC)**

GEDDIS PAVING & EXCAVATING, INC. will establish and implement written procedures to manage changes (except for "replacements in kind") to process chemicals, technology, equipment, and procedures; and, changes to facilities that affect a covered process.

Prior to the change, address the following considerations:

- o The technical basis for the proposed change;
- o Impact of change on safety and health;
- o Modifications to operating procedures;
- o Necessary time period for the change; and,
- o Authorization requirements for the proposed change.

The Company will train affected employees and contract employees in the change prior to start-up of the process or affected part of the process.

The Company will up-date PSI, PHA and Operating Procedures.

## **Incident Investigation**

GEDDIS PAVING & EXCAVATING, INC. will investigate each incident that resulted in, or could reasonably have resulted in a catastrophic release of highly hazardous chemical in the workplace. An incident investigation will be initiated as promptly as possible, but not later than 48 hours following the incident.

Establish an incident investigation team which consists of at least one person knowledgeable in the process involved, including a contract employee if the incident involved work of the contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident

An incident report will be prepared at the conclusion of the investigation that includes at a minimum:

- o Date of incident

- o Date investigation began
- o Description of the incident
- o Factors that contributed to the incident
- o Recommendations resulting from the investigation

### *Corrective Actions*

The company will establish a system to promptly address and resolve the incident report findings and recommendations. Resolutions and corrective actions will be documented

### *Report Review*

The report will be reviewed with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable. Incident investigation reports will be retained for five years

### **Emergency Planning & Response**

GEDDIS PAVING & EXCAVATING, INC. will establish and implement an emergency action plan for the entire plant in accordance with the provisions of 29 CFR 1910.38(a). and 29 CFR 1910.120(a), (p) and (q). In addition, the emergency action plan will include procedures for handling small releases.

### **Compliance Audits**

The Company will certify compliance with the provisions of the PSM Standard at least every three years to verify that the procedures and practices developed under the standard are adequate and are being followed.

The compliance audit will be conducted by at least one person knowledgeable in the process.

A report of the findings of the audit will be developed.

The Company will promptly determine and document an appropriate response to each of the findings of the compliance audit, and document that deficiencies have been corrected.

The Company will retain the two (2) most recent compliance audit reports.

### **Trade Secrets**

GEDDIS PAVING & EXCAVATING, INC. will make all information necessary to comply with the section available to those persons responsible for compiling the process safety information, those assisting in

the development of the process hazard analysis, those responsible for developing the operating procedures, and those involved in incident investigations, emergency planning and response and compliance audits without regard to possible trade secret status of such information.

There is no restriction in the OSHA Standard 1910.119 which prevents the company from requiring any persons to whom the information is made available to enter into confidentiality agreements not to disclose the information.

Rules and procedures set forth in OSHA Standard 1910.1200, employees and their designated representatives will have access to trade secret information contained within the process hazard analysis and other documents required to be developed by this standard.

## **Employee Participation Plan of Action**

### *General*

There are between 5 to 35 employees at GEDDIS PAVING & EXCAVATING, INC., involved in the Asphalt Paving System. Since there is a relatively small number of personnel in the process, they will be involved on almost a daily basis in the various elements of the PSM program.

### *Documentation*

A combination of historical narrative, one-line entry log, training summary sheets, and other documents for the various elements will be used to document employee participation. The following Employee Participation Plan of Action will be followed for PSM activities:

### *Plan of Action*

Operator & Technicians will be:

- o Included in collection and review of Process Safety Information (PSI)
- o Included in the Process Hazard Analysis (PHA)
- o Included and utilized in the development of operating procedures
- o Trained in all aspects of operation of the refrigeration systems to ensure they are able to safely conduct assigned tasks
- o Trained to monitor Contractor Employees for compliance with good engineering practices and safety procedures
- o Included in all Pre-Startup Safety Reviews
- o Used for conducting Mechanical Integrity Inspections
- o Trained in the Company Hot Work Program
- o Included in the Management of Change (MOC) process
- o Included in all Incident Investigations

- o Trained in the Plant Emergency Response Plan
- o Utilized and interviewed for compliance audits
- o Provided access to all PSM information
- o All Employees will be provided PSM Overview Training

## **Process Hazard Analysis**

### *General*

GEDDIS PAVING & EXCAVATING, INC. established a PHA team to identify equipment, operating procedures, and conditions where the potential exists for employee exposure and environmental hazards associated with Hot Mix Asphalt.

Employee exposure hazards would typically involve liquid Hot Mix Asphalt spills and/or accidental releases of Hot Mix Asphalt.

Environmental hazards occur when vapor releases or liquid spills reach beyond the property line, into the atmosphere, or into the ground.

### *PHA Team*

The team consists of Operator/Technicians, Steve Oliver, Kurt Rasmusson, and Steve Majewski. Steve Oliver is experienced in Hot Mix Asphalt and has received training in Process Hazard Analysis.

### *PHA Method*

The What-If methodology has been selected as the process for PHA at this Company. The team develops What-If questions using sub-systems from the PI&Ds, and identified consequences, identified safeguards, identified recommendations, and ranked severity and likelihood.

Recommendations are made based upon the What-If questions and are submitted to Engineering for review.

PHAs are conducted for initial program development, when there are changes to PSI, and are revalidated at least every 5 years.

### *PHA Resolution System*

When PHAs are completed/reviewed by the team, the recommendations will be sent to Company Engineering for comment. After engineering review is completed, the PHA Team Leader will develop a plan of action for:

- Documenting reasons recommendations were not utilized
- Implementing necessary recommendations
- Documenting system changes in PSI
- Documenting PHA Recommendation completed items

### Basic Resolution Time Frame Guidelines:

- Submit PHAs to Engineering within 1 week of completion
- Document Engineering review when returned
- Develop PHA resolution POA within 2 weeks after Engineering Review

## **Process Safety Information (PSI)**

### *General*

Process Safety Information is the technical information on the process and equipment in the Hot Mix Asphalt system. This information allows for accurate Process Hazard Analysis and maintaining information on the system for operator training and reference.

### *Records*

PSI Records are contained in this section, equipment manuals, Operating Procedures section, Mechanical Integrity section, and in the mechanic shop area of Geddis Paving Office files.

Record maintenance and update is the responsibility of the Hot Mix Asphalt Manager.

### Record Content

Specific Technical Information includes:

- Hazards of Hot Mix Asphalt
- Block Flow Diagram
- Piping and Instrument Diagrams
- Process Chemistry
- Maximum Intended Inventory
- Technology of Process Changes
- Materials of Construction
- Electrical Classification
- Pressure Relief System

- Ventilation System Design
- Material and Energy Balances for Processes Built After May 26, 1992.
- Safety Systems
- Equipment List and Specifications
- Design Codes and Standards Employed and Documentation that equipment complies with recognized and generally accepted good engineering practices.
- For existing equipment designed and constructed in accordance with codes, standards, or practices that are no longer in general use, the Company will determine and document that the equipment is designed, maintained, inspected, tested, and operating in a safe manner.
- Site Plan which includes: The Hot Mix Asphalt facility, warehouses and buildings, roads and parking areas, access ways and walkways, fences, gates, and property lines.

## **Operating Procedures**

### *General*

Written Operating Procedures have been developed for Hot Mix Asphalt system. The Operating Procedures are located in binders and in the manufacturer's equipment manuals. Operating Procedures are available to the operating employees, maintenance employees, contractor employees, and representatives.

### *Operating Procedure Format*

Most Operating Procedures will follow the following format:

- Description/Purpose of the equipment
- Name of the procedure
- Listing of equipment involved in the procedure
- Desired operating ranges for temperature, pressure, etc.
- Consequences of deviation from desired temperature, etc.
- Steps required to correct and/or avoid deviation
- Safety systems
- Safety and health considerations
- Operator requirements
- Step by step procedures
- Comments, table of contents, and/or revisions section, with original date
- Developed and revision dates and distribution instructions.

### *Operating Procedure Content*

The following procedures will be addressed, as applicable, in each Operating:

- Procedure
- Initial startup
- Normal operations
- Temporary operations
- Emergency operations
- Power failure
- Emergency shutdown
- Normal shutdown
- Startup following a turnaround or emergency shutdown
- Alarm testing and response
- Charging Hot Mix Asphalt to the receiver or storage vessel
- Transferring Hot Mix Asphalt from a storage vessel to a receiver or seal vessel
- Valving in/Valving out Hot Mix Asphalt equipment in the system
- Tying multiple systems together (where applicable)
- Removal or disposal of Hot Mix Asphalt
- Draining compressor oil from Hot Mix Asphalt vessels
- Changes in operating limits and alarms during modes other than normal operation

### *Equipment Procedures*

Operating Procedures are to be maintained for the following equipment:

- Compressors
- Reactors
- Condensers
- Pressure Vessels
- Purgers
- Pumps
- Chillers
- Mixers
- Filter systems
- Alarm systems
- Distribution stations

## **Training**

### *General*

Training is an essential part of the PSM Program. It provides a means of conveying information and ensuring comprehension of information.

There are 3 categories of persons who must have training as required by the OSHA PSM Standard:

1. Operators/Technicians
2. Other employees
3. Contractor Employees (this training is discussed in the Contractor Safety Element)

### *Hot Mix Asphalt Operator/Technician Training*

The (Safety Manager) is responsible for conducting and ensuring effective training of Operators and Technicians. There are 4 types' phases of Operator Training:

1. Initial training covering the elements of the PSM Program and an overview of the process and operating procedures. The training will include emphasis on the specific safety and health hazards, normal and emergency operations including shutdown, and safe work practices applicable to the employee's job tasks. Initial training will also include understanding various parameters, identification of abnormal conditions and the procedures for restoring the system to normal. This training is required before any unsupervised tasks are assigned. Additional Emergency Response Team Training and training in other Safety Programs will be conducted in the same manner as for other employees.

Materials such as IIAR, Videos and computer review and examinations will be used to ensure the quality and correctness of the training.

Other training material will include documents such as PHA, PSI Operating Procedures specific to the equipment at this location.

2. On-the-Job Training on the system and the hazards associated will be a continuous process for each Operator. This continuing training will be accomplished by:
  - a. Assigning newer employees to assist more experienced Operators in complex tasks and evolutions.
  - b. Having Operators review the latest technical material such as IIAR Bulletins
  - c. Operator participation in Safety Meetings
3. Refresher Training will be conducted periodically by knowledgeable individuals covering all aspects of the initial training. Refresher Training will be conducted at least every 3 years.
4. Training on changes in the process or systems will occur when the Management of Change procedures dictates the need.

## *Other Employees*

Employees who do not work with the Hot Mix Asphalt system are provided a brief and written information on the PSM program as part of the New Employee Indoctrination Program conducted by the Human Resources Department.

## *Documentation*

Hot Mix Asphalt Operators: A training file is maintained on each Operator and Technician. This file documents all training and involvement in the PSM / Hot Mix Asphalt and Safety Programs. The personnel office maintains these training files.

Other Employees: Training records, required by the PSM Program, for other Employees are maintained by the Human Resources Manager.

## **Pre-Startup Safety Review**

### *General*

The purpose of the Pre-Startup Safety Review is to:

1. Verify that all construction is in accordance with specifications
2. Ensure that appropriate tests and inspections have been performed
3. Ensure safety, operating, and maintenance procedures are adequate
4. PHA has been conducted
5. PHA recommendations have been addressed prior to start up
6. Operating Procedures are current, reflecting system modifications
7. Training of operating personnel in changes has been completed

### *Conduct of Review*

Pre-Startup Safety Reviews will be conducted by the (Safety Manager) or designated alternate prior to introducing Hot Mix Asphalt into the system when:

1. New additions are made to the system.
2. Modifications are made that change Process Safety Information.

## Contractors

### *General*

Contractors under the Process Safety Management program are those who are involved in the installation or maintenance of Asphalt Paving System equipment and systems at this Company. All contractors, covered in this PSM Program will be provided necessary information concerning the Asphalt Paving System process, equipment and procedures.

### *Specific Requirements*

Pre-Work Review: Prior to allowing a contracting company to commence work in the Asphalt Paving System process the following requirements must be met:

- Obtain and evaluate information regarding the contract Company's safety performance and programs (written documentation required)
- Inform contract Company's of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process
- Explain to contract Company's the applicable provisions of the emergency action plan.
- Provide contractors with copies of local safety programs, safety and emergency procedures and a copy of this PSM program.
- Complete all the requirements of the Company Contractors Liability Agreement.
- Inform the contractor that a periodic performance evaluation will be conducted to ensure the contractor and contract employees are fulfilling their obligations
- Inform the Contractor that a contract employee injury and illness log related to the contractor's work in process areas must be maintained on site for the duration of the contract work.
- The contractor Company must provide information relating to any unique hazards presented by the contractor employees' work or any hazards found by the contractor employees.
- Prior to the start of any work the Contractor must provide the following documentation:

- o Their safety program information and other documentation required by the Company contractors Liability and Safety Agreement.
- o Certification that they have informed their employees of potential fire, explosion, or toxic release hazards may exist at or near their work area at this Company and that they have explained the Company Emergency Action Plan to their employees.
- o Training documentation concerning training provided to their employees to insure they understand the safe work necessary to safely perform tasks.
- o Certification that they have explained the Company Hot Works Permit Program and other permits Company uses that will be needed during their time on Company property.
- o Agreement to advise Company of any unique hazards presented by their work any found during their work.
- o Certification that materials, parts and equipment to be installed in the Asphalt Paving System meet industry and engineering standards for the application used.

The Asphalt Paving System Superintendent is responsible for issuing information and documents to the contractor and collection and review of contractor information and certifications

*Access Control*

GEDDIS PAVING & EXCAVATING, INC. maintains security around the Company and process area to insure that no unauthorized contractors or contractor employees have entrance or presence in or to the process area, and that a safe exit is provided and maintained.

Access to the Company is through \_\_\_\_\_ and \_\_\_\_\_ controlled by \_\_\_\_\_.

**Hot Work**

*General*

Hot work is classified as any welding, brazing, grinding, flame or spark producing operation. The requirements for hot work on Hot Mix Asphalt equipment are the same as those for all other hot work at this Company. These requirements are listed in the Geddis Paving & Excavating, Inc. Safety Manual.

*Qualifications*

Only certified welders employed by contractors approved by Geddis Paving & Excavating, Inc. are permitted to do any welding on refrigeration equipment. Company Maintenance personnel may conduct hot work operation on equipment that does not require a qualified welder.

## *Hot Work Restrictions*

Welding on or near refrigeration equipment is considered an unusual event. The following additional restrictions apply:

- Welding is not allowed on any Hot Mix Asphalt component that contains oil, flammable vapor/liquid or bitumous concrete.
- Prior to conducting hot work on Hot Mix Asphalt equipment, that section of the system will be de-pressurized and, if possible, voided.
- All system equipment and piping within the hot work boundary must be voided, cleaned or purged with inert gas to prevent fire, explosion or other hazardous conditions from developing.
- All oil will be removed from equipment interiors and the internal areas cleaned of residue prior to commencing hot work.
- A qualified Operator or Technician will be continually present during all hot work operations on the Hot Mix Asphalt system.

## **Mechanical Integrity**

### *General*

The purpose of the Mechanical Integrity Program is to provide written procedures for inspections and testing in order to properly maintain the equipment involved in the Hot Mix Asphalt. Aspects of the program are:

- Operator Training
- Identification and scheduling of tests and inspections
- Documentation of tests and inspections
- Development of maintenance procedures
- Scheduling of periodic maintenance procedures
- Correction of deficiencies to equipment that are outside acceptable limits
- Quality control of parts and materials
- Periodic monitoring and logging of system parameters by qualified Operators

### *Operator Training*

All Operators are trained to:

- Understand system parameters and actions for out of specification readings
- Properly conduct and document tests and inspections
- Use and understand proper maintenance procedures

- Identify and use correct material and parts for maintenance
- Properly tour the Hot Mix Asphalt system, including log taking requirements

### *Tests and Inspections*

A schedule of periodic tests and inspection has been developed to ensure pressure boundaries, safety systems and controls function to design standards. For all equipment the schedule will identify:

- Equipment name and/or specific identifier
- Required periodic maintenance, inspections & tests
- Periodicity of periodic maintenance, inspections and tests
- Procedure for conducting maintenance, tests and inspections

### *Maintenance Procedures*

Written Maintenance Procedures have been developed for all expected routine maintenance, tests and inspections. These procedures include:

- Equipment Identification
- Required tools and equipment
- Safety Hazards and Cautions
- Documentation required
- Step- by-step procedure
- Required inspections or tests

### *Correction of Deficiencies*

Prompt correction of deficiencies is an important part of the Mechanical Integrity Program. When any equipment is found to have a parameter out of normal or expected range for the current operating condition, corrective action will be taken to adjust the equipment/system to restore normal conditions or the specific equipment will be placed in a safe condition. Generally, a safe condition is off line and shutdown.

### *Deficiency Identification*

Deficiencies found during normal operations will be logged on the tour sheet with a remark as to the time identified, specific parameter, action taken to restore parameter to normal, and the time the parameter returned to normal range.

Deficiencies found during inspections and tests will be recorded on the Test and Inspection Sheet. All discrepancies found will be corrected prior to bringing the specific equipment back on line after the test or inspection.

Discrepancies found in piping or other pressure boundaries will be evaluated to ensure safe operation may continue. These deficiencies will be recorded and scheduled for further evaluation or repair.

### *Quality Control*

To maintain proper mechanical integrity of the ammonia Hot Mix Asphalt system, it is important that materials, parts and equipment meet the required design specifications for the application. Quality Control procedures provide the process for ensuring correct material and parts are used.

### *Parts & Material Identification*

Prior to using any material, part or equipment in the Hot Mix Asphalt system to following actions, as applicable, are required:

- Check part number and material against manufacturers parts list and specifications
- Conduct a visual inspection of the material to ensure there are no defects in manufacturing or damage caused by improper shipping or storage
- Compare old to new part to ensure same material, configuration and size
- Compare name-plate data to system application requirements
- Old gaskets will not be re-used unless designed for re-use. When a sealing surface has been disassembled, the old gasket is to be thrown away.

### *Parts Storage*

Proper storage and receipt inspection will prevent damage to spare parts. The parts storage and receipt guidelines are:

- All material, parts and equipment will be stored so as to prevent damage.
- When received, new material, parts and equipment will be properly labeled for identification
- Used and new material, parts or equipment will not be stored in the same bin or shelf.

### *Periodic Monitoring and Logging*

Monitoring of system parameters is essential for evaluating proper mechanical operation of equipment in the Hot Mix Asphalt process. A log sheet has been developed to record system parameters. This is in addition to the computer log generated by the automated control system.

### *Logging and Tours*

Every 4 hours a qualified Hot Mix Asphalt Operator will record specified readings on gages, thermometers and other direct reading instrumentation. Additionally, the Operator will complete a thorough inspection tour of the system every 4 hours and annotate the Inspection Tour Checklist. One checklist will be filled out for each tour.

### *Out of Normal Readings*

The log sheets have the normal range for each parameter logged. When out of normal readings are observed, the operator will take the necessary action to restore normal conditions. The operator will also record the actions taken on the comment section of the log sheet. If the Operator is unable to restore normal conditions, the Operator will immediately notify the Lead Hot Mix Asphalt Operator on shift.

### *Log Review*

Each day the Hot Mix Asphalt Supervisor will review the logs from the previous day to look for trends and ensure corrective action was taken for out of normal readings. A spot check of written log readings will be made against the computer generated data to ensure both the direct reading instrumentation and computer monitoring system agree within accepted tolerance.

### *Retention of Logs*

All written log and tour sheets will be retained permanently. The previous 90 days logs will be kept in the Hot Mix Asphalt Office. All other logs and tour sheets may be stored off site.

## **Emergency Planning & Response**

### *General*

Emergency plans have been established for this Company to coordinate actions in the event of a chemical release or other emergency event. The Emergency Action Plan is published under a separate binder.

The plan uses the Incident Command Structure for organization of response teams, actions and coordination with outside local emergency response agencies.

## **Management of Change**

### *General*

The Management of Change Program is an aid to ensure:

- Proper material and equipment is placed in the system
- Management and Engineering review of proposed changes
- PHA is conducted prior to changes
- PSI is updated
- Operator Training is accomplished for the changes

### *Scope*

This Management of Change procedure is applies to:

1. All modifications to equipment in the Hot Mix Asphalt system;
2. All changes in procedures;
3. All changes to control, indication or alarm systems;
4. Changes to facilities that affect the Hot Mix Asphalt process;

Management of Change does not apply to:

1. Changes in-kind;
2. Minor clarification revisions to operating, test or maintenance procedures;

### *Management of Change Procedure*

When a need for change is identified, the Hot Mix Asphalt Supervisor will initiate the Management of Change procedure. Approval from Company Engineering is required prior to implementing any changes in the Hot Mix Asphalt System design, parts or equipment.

### Procedure

1. Initiate MOC form, providing all required information
2. Conduct and document PHA for proposed change
3. Submit MOC form and documents to local management for review
4. Forward to Company Engineering for Approval

5. Obtain approval for change from Company Engineering
6. Obtain certification documents on all parts and equipment to be added to the system
7. Document all contractor requirements met
8. Conduct Change
9. Update and document PSI changes
10. Conduct and document Operator Training
11. Conduct and document Pre-Startup Review

## Definitions

**Change:** Any modification which affects the capability of a process to maintain control of the physical and chemical transformations taking place; including all modifications to equipment, procedures, raw materials and processing conditions other than "replacement in kind".

**Change in Equipment:** Temporary or permanent modifications made to operating equipment. Examples:

- Substitution of a material of construction with a different material.
- Replacement of a vessel with one of a different pressure rating.
- Piping changes.
- Replacing an existing field mounted, local pump control panel with a logic computer.
- Changing the elevation of a vessel nozzle or the discharge location of a vessel
- Installation of a bypass around a section of equipment.
- Installation of a parallel piece of equipment, such as a standby pump.
- Replacing a control valve with one of a different size.

**Changes in Company:** A change in facilities occurs whenever a change is made to plant services or utilities would not necessarily appear on a P & ID. Examples:

- Emergency back-up systems.
- Power supply system.
- Plant security.
- Fire detection and prevention system.
- Adjacent processes/equipment.
- New construction (offices, warehouses)

**Changes in Procedures:** Temporary or permanent modifications of written procedures. Examples (except minor changes for clarification):

- Standard Operating Procedures.
- Preventative maintenance procedures.
- Inspection and testing procedures.

- Emergency operating procedures.
- Training procedures and requirements.

**Changes in Process Technology:** A change in the process technology occurs when the process or mechanical design is altered. A change in process technology may occur as a result of changes in the operating parameters (e.g., pressure, temperature), design inventories, instrumentation and control systems, or materials of construction. Examples:

- An increase in the Hot Mix Asphalt inventory.
- Equipment unavailability.
- Installation of new equipment, such as a computer.
- Change in operating pressure (or temperature, or flow rate, etc.)

**Major Change:** A modification which has significant impact on process conditions or system parameters. Examples:

- Installation of an additional pumping system
- Increase in toxic chemical inventory
- Decommissioning major pieces of equipment
- Installation of a significant amount of temporary piping
- Installation of a distributed control system
- Change in process variables, such as a significant increase or decrease in flow, temperature, or pressure

**Minor Change:** A modification which does not have a major impact on process conditions or system parameters. Examples:

- Installation of process instrumentation
- Change in written Standard Operating Procedure
- Revision to document forms
- Replacement in Kind
- Any process or equipment change performed in accordance with established design specifications. A "replacement in kind" does not require enactment of the

### **Management of Change Procedure**

Examples:

- Replacement of parts or equipment that meet the same design requirements and specifications
- Replacement of parts or equipment that require no changes to PSI

**Temporary Change:** A change with a limited and clearly specified duration. The time limit for a temporary change is not to exceed seven days. If necessary, a seven day extension may be requested. No more than two extensions should be required. Any change with duration of greater than six weeks should follow procedures for a permanent change. Examples:

- Temporary piping, clamps, connections, utility connections, or hoses
- Temporary operation with specific safeguards bypassed or inoperative
- Temporary changes to operating procedures

### Emergency Procedures

A situation may be treated as an emergency in order to prevent an incident that could result in exposure of personnel, the environment, or the company to unreasonable risk. A situation only qualifies as an emergency if applying the normal MOC procedure would not mitigate the situation in time to avoid potential accidents. In emergency situations, the following procedure will be used:

1. Assemble an emergency task team composed of two or three trained and qualified operators Contact the Hot Mix Asphalt Supervisor for approval of changes.
2. Emergency team examines the safety and environmental aspects of the change.
3. If the change can be implemented safely, conduct the change.
4. Complete the MOC form as soon as possible after the emergency.

## **Maintenance, Tests & Inspections**

### *General*

The Planned Maintenance System is an important part of the Mechanical Integrity Program. It provides for:

- Identification and scheduling of tests and inspections
- Documentation of tests and inspections

- Development of maintenance procedures
- Scheduling of periodic maintenance procedures

The 3 sections of the Planned Maintenance System are:

1. Inspections
2. Testing
3. Maintenance

### *Inspections*

Daily Inspections are carried out every work day as operators tour the Company and record system parameters. They are trained to recognize deficiencies in material conditions and out of specification parameters. Inspections that are scheduled for daily accomplishment are listed and recorded on the daily logs.

Other Inspections range from simple monthly checks of air units to complex annual system inspection. These inspections are scheduled by the Hot Mix Asphalt Supervisor.

### *Testing*

Tests are more complex than inspections. They require either removal of a component from the system or abnormal manipulation of the system to ensure a component functions properly. All tests are scheduled and controlled by the Hot Mix Asphalt Supervisor.

### *Planned Maintenance*

Planned Maintenance items generally require a high level of system knowledge to properly align, isolate and prepare the system for maintenance. The opportunity for accidental release of Hot Mix Asphalt is greater during these times than during normal operation. The Hot Mix Asphalt Supervisor will:

1. Schedule all maintenance
2. Assign personnel who have the knowledge and experience
3. Oversee the conduct and completion of maintenance

## **Incident Investigations**

### *General*

Incident investigation is the process of identifying the underlying or basic causes of incidents and implementing steps to prevent similar events from occurring. The intent of an incident investigation is to learn from past experiences and avoid future events of the same nature.

As an aid to prevention all incidents that resulted in, or could reasonably have resulted in a catastrophic release of highly hazardous chemical in the workplace will be thoroughly investigated. An incident investigation will be initiated as promptly as possible, but no later than 48 hours following the incident.

### *Investigation Team*

An investigation team, consisting of the Plant Safety Coordinator, Hot Mix Asphalt Supervisor, one Hot Mix Asphalt Operator/Technician, and one contractor representative (if contractors are involved) will thoroughly investigate and analyze the incident. Other members may be added at the discretion of management

### *Incident Report*

A report will be prepared at the conclusion of the investigation that includes at a minimum:

- Date of incident
- Date investigation began
- Description of the incident
- Factors that contributed to the incident
- Recommendations resulting from the investigation
- Post Incident Actions

Corrective Actions detailed in the incident report will be promptly addressed and resolved along with other report findings and recommendations. Resolutions and corrective actions will be documented.

Report Review will be conducted with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable. Incident investigation reports will be retained for five years.

## Process Safety Management

### Asphalt Paving System

Geddis Paving & Excavating, Inc. at 1019 Wamba, Toledo, OH 43607 has implemented a Process Safety Management (PSM) Program in compliance with OSHA Standard 29 CFR 1910.119. The purpose of this program is to prevent or minimize the consequences of catastrophic releases of toxic, reactive, flammable or explosive chemicals and to ensure that employees are not exposed to undue risk.

Our PSM program details specific precautions and procedures affecting the safe operation and maintenance of our Hot Mix Asphalt process. This program has been developed with the participation of employees involved with the operation and maintenance of this process.

All employees have access to the PSM manuals and files, under the following conditions:

1. Approval is required to remove any documents from the file.
2. Original documents may not be removed from the file area.
3. Copies of original documents will be provided, upon request, within 10 working days.
4. No markings will be made on original documents.

**Training**

Those employees involved with the operation and maintenance of the refrigeration system, including any contractor employees, will complete specific training as detailed in the PSM program

I verify that I have read (or had read to me) and understand I have been informed of the existence of the Process Safety Management program for Hot Mix Asphalt. I acknowledge that I may contact the Safety Coordinator for answers to any questions I may have about this program.

Employee Name \_\_\_\_\_  
 Department \_\_\_\_\_  
 Date \_\_\_\_\_  
 Signature \_\_\_\_\_

**Process Safety Information**

List of Process Equipment

ITEM	CATEGORY	Description	MFG	MDL #	Type	Location	Qty


# Systems Entry Work Permit Hot Mix Asphalt

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*This permit is required for opening system, removal of fittings, piping repairs, etc.*

Equipment / System \_\_\_\_\_

Date Issued \_\_\_\_\_

Date Expires (Date-Time) \_\_\_\_\_

Equipment Location \_\_\_\_\_

Work being conducted by:     Employee             Contractor

Description of Work:

Precautions & Pre-Work Requirements:

Check all applicable requirements when completed

- Confined Space Permit Issued*
- Hot Work Permit Issued and posted*
- Water Hoses stationed and pressurized*
- Work & Safety Precautions reviewed with all workers*
- Escape Route planned and discussed*
- Safety Equipment identified and staged*
- Defrost Coil installed on system to be worked, when applicable.*
- System Isolated, voided and depressurized*
- All Valves out of Normal Position are tagged with Maintenance Position*
- Lockout - Tagout completed*

**CAUTION:** *When cutting into or opening an isolated system, some residual fluid may be released. Take steps to anticipate this event and provide protection for workers and the environment.*

Supervisor \_\_\_\_\_ Date \_\_\_\_\_

System Restoration Procedure *(All items listed below must be completed)*

1. Valve line up has been returned to normal
2. Leak check completed
3. All Operators notified of completed repairs
4. System is in safe normal operating condition
5. Written Machinery History & Log Entry detailing completed repairs

Supervisor \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_

Retain this permit on file for one year

System Valve Lineup for System Entry Permit

<b>Tag Number</b>	<b>Valve Isolation Device Number</b>	<b>Valve / Isolation Device Name</b>	<b>Normal Position (Open - Shut)</b>	<b>Maintenance Position (Open - Shut)</b>	<b>Returned to Normal Position</b>	<b>Locked (Yes/No)</b>

# Critical Safety Device Permit

Hot Mix Asphalt

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*This permit is required whenever a Critical Safety Device is to be taken Out of Service or is Not Functional*

Critical Safety Device / System \_\_\_\_\_

Date Issued \_\_\_\_\_

Expires (Date & Time) \_\_\_\_\_

Safety Device Location \_\_\_\_\_

Safety Device Function \_\_\_\_\_

Critical Safety Device Out of Service Potential Hazards/Problems (list)

Operation & System Limitations w/ Safety Device Out of Service

Operation of equipment/system allowed for \_\_\_\_\_ days

Permit must be reissued every 2 days for continued use

Additional safety precautions, listed below, are required for system operation

Other \_\_\_\_\_

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Requirements for removing Critical Safety Device from Service

*(Check Applicable Requirements)*

Monitor Affected Systems Hourly

Danger Tag affixed to Critical Safety Device

Written Log entry detailing Safety Device Out of Service with safety instructions

Critical Safety Device Permit Posted

All operators notified additional safety precautions implemented

Other \_\_\_\_\_

*All Precautions and Procedures have been implemented to provide additional Safeguards while Critical Safety Device is Out of Service*

Supervisor \_\_\_\_\_ Date \_\_\_\_\_

System Restoration Procedure (All items listed below must be completed)

- Critical Safety Device Returned to Normal Operation

- Satisfactory Systems Inspection Completed

- All operators notified of Safety Device Returned to Service

- Written Log Entry detailing Critical Safety Device Returned to Service

Supervisor \_\_\_\_\_ Date \_\_\_\_\_

*Retain this permit on file for one year*

# FALL PROTECTION PROGRAM & POLICIES



# Fall Protection

## Table of Contents

- I. Objective
  - II. Assignment of Responsibility
  - III. Training
  - IV. Fall Protection Systems
    - A. Covers
    - B. Guardrail Systems
    - C. Personal Fall Arrest Systems
    - D. Positioning Device Systems
    - E. Safety Monitoring Systems
  - V. Tasks and Work Areas Requiring Fall Protection
    - A. Hoist Areas
    - B. Holes
    - C. Leading Edges
    - D. Catwalks
  - VI. Protection from Falling Objects
  - VII. Accident Investigations
  - VIII. Changes to the Plan
- Appendix A – Certification of Training Fall Protection
- Appendix B – Fall Protection Training Record
- Appendix C – Self-Retracting Lanyard/Lifeline Annual Inspection Checklist
- Appendix D – Full Body Harness Annual Inspection Checklist
- Appendix E – Lanyards Annual Inspection Checklist
- Appendix F – Snap Hooks and Carabiners Annual Inspection Checklist

# Geddis Paving & Excavating, LLC

## Fall Protection

### I. OBJECTIVE

The objective of the Geddis Paving & Excavating LLC's Fall Protection Program is to ensure the safety of our employees by identifying and evaluating fall hazards to which employees will be exposed to and may cause injury. This program outlines the responsibilities for all Geddis Paving & Excavating LLC's employees and required training.

### II. ASSIGNMENT OF RESPONSIBILITY

It is the responsibility of Geddis Paving & Excavating, LLC to provide fall protection to affected employees and to ensure that all employees understand and adhere to the procedures of this plan and follow the instructions of the Supervisor.

**Jeremy Oliver, COSS:** Responsible for implementing the Fall Protection program.

**Richard Crace, Supervisor:** Responsible for enforcing the program and ensuring compliance with procedures by the following:

- Performing routine safety checks of work operations
- Enforcing Geddis Paving & Excavating, LLC's safety policy and procedures
- Correcting any unsafe practices or conditions immediately
- Training employees and foreman in recognizing fall hazards and the use of fall protection systems.
- Maintaining records of employee training, equipment issues and fall protection systems.
- Investigating and documenting all incidents that result in employee injury.

**Employees:** It is the responsibility of all employees to:

- Understand and adhere to the procedures outlined in this Fall Protection Program.
- Following the instructions of the Supervisor
- Bring to management's attention any unsafe or hazardous conditions or practices that may cause injury to either themselves or any other employees.
- Report any incident that causes injury to an employee, regardless of the nature of the injury.

### III. TRAINING

- All employees who may be exposed to fall hazards are required to receive training on how to recognize such hazards, and how to minimize their exposure to them. Employees shall receive training as soon after employment as possible, and before they are required to work in areas where fall hazards exist.
- A record of employees who have received training and training dates shall be maintained by the Supervisor. Training of employees shall include:
  1. Nature of the fall hazards employees may be exposed to.
  2. Correct procedures for erecting, maintaining, disassembling, and inspecting fall protection systems.
  3. Use and operation of controlled access zones, guardrails, personal fall arrest systems, safety nets, warning lines, and safety monitoring systems.
  4. Role of each employee in the Safety Monitoring System (if one is used).
  5. Correct procedures for equipment and materials handling, and storage and erection of overhead protection.
  6. Understanding the proper use of equipment - man baskets, bulldozers, skid steers, etc, and how they are not to be used for access to upper level areas. They are to be used for the designed intent only.
- Additional training shall be provided on an annual basis, or as needed when changes are made to this Fall Protection Program.

### IV. FALL PROTECTION SYSTEMS

#### A. Covers

1. All covers shall be secured to prevent accidental displacement.
2. Covers shall be color-coded or bear the markings "HOLE" or "COVER".
3. Covers located in roadways shall be able to support twice the axle load of the largest vehicle that might cross them.

4. Covers shall be able to support twice the weight of employees, equipment, and materials that might cross them.

## **B. Guardrail Systems**

Guardrail systems shall be erected at unprotected edges, ramps, runways, or holes where it is determined by the Supervisor that erecting such systems will not cause an increased hazard to employees. The following specifications will be followed in the erection of guardrail systems.

Top rails shall be:

1. at least ¾ inch in diameter (steel or plastic banding is unacceptable);
2. flagged every six (6) feet or less with a high visibility material if wire rope is used;
3. inspected by Supervisor as frequently as necessary to ensure strength and stability;
4. forty-two (42) inches (plus or minus three (3) inches) above the walking/working level;
5. adjusted to accommodate the height of stilts, if they are in use.

Midrails, screens, mesh, intermediate vertical members, and solid panels shall be erected in accordance with manufacturer's recommendations.

Gates or removable guardrail sections shall be placed across openings of hoisting areas or holes when they are not in use to prevent access.

## **C. Personal Fall Arrest Systems**

1. Personal fall arrest systems shall be issued to and used by employees as determined by the Supervisor and to comply with MSHA 30 C.F.R. §§ 56/57.15005 and may consist of anchorage, connectors, body harness, deceleration device, lifeline, or suitable combinations. Personal fall arrest systems shall:

- a. limit the maximum arresting force to 1800 pounds;
- b. be rigged so an employee cannot free fall more than six (6) feet or contact any lower level;
- c. bring an employee to a complete stop and limit the maximum deceleration distance traveled to three and a half (3 ½ ) feet;

- d. be strong enough to withstand twice the potential impact energy of an employee free falling six (6) feet (or the free fall distance permitted by the system, whichever is less);
- e. be inspected prior to each use for damage and deterioration; and
- f. be removed from service if any damaged components are detected.

2. All components of a fall arrest system shall be used in accordance with the manufacturer's instructions.

- a. The use of non-locking snaphooks is prohibited.
- b. Dee-rings and locking snaphooks shall:
  - i. have a minimum tensile strength of 5000 pounds; and
  - ii. be proof-tested to a minimum tensile load of 3600 pounds without cracking, breaking, or suffering permanent deformation.
- c. Lifelines shall be:
  - i. designed, installed, and used under the supervision of Richard Crace;
  - ii. protected against cuts and abrasions; and
  - iii. equipped with horizontal lifeline connection devices capable of locking in both directions on the lifeline when used on suspended scaffolds or similar work platforms that have horizontal lifelines that may become vertical lifelines.
- d. Self-retracting lifelines and lanyards must have ropes and straps (webbing) made of synthetic fibers, and shall:
  - i. sustain a minimum tensile load of 3600 pounds if they automatically limit free fall distance to two (2) feet; or
  - ii. sustain a minimum tensile load of 5000 pounds (includes ripstitch, tearing, and deforming lanyards).
- e. Anchorages must support at least 5000 pounds per person attached and shall be:
  - i. designed, installed, and used under the supervision of the Supervisor;
  - ii. capable of supporting twice the weight expected to be imposed on it; and
  - iii. independent of any anchorage used to support or suspend platforms.

#### **D. Positioning Device Systems**

Body belt or body harness systems shall be set up so that an employee can free fall no farther than two (2) feet, and shall be secured to an anchorage capable of supporting twice the potential impact load or 3000 pounds, whichever is greater. Requirements for snaphooks, dee-rings, and other connectors are the same as detailed in this Program under Personal Fall Arrest Systems.

#### **E. Safety Monitoring Systems**

In situations when no other fall protection has been implemented, the Supervisor shall monitor the safety of employees in these work areas. The Supervisor shall be:

1. Competent in the recognition of fall hazards
2. Capable of warning workers of fall hazard dangers
3. Operating on the same walking/working surfaces as the employees and able to see them
4. Close enough to work operations to communicate orally with employees
5. Free of other job duties that might distract them from the monitoring function.

No employees other than those engaged in the work being performed under the Safety Monitoring System shall be allowed in the area. All employees under a Safety Monitoring System are required to promptly comply with the fall hazard warnings of the Supervisor

### **Fall Protection Rescue Plan**

**1. Purpose:** The purpose of this Fall Protection Rescue Plan is to establish a framework for prompt and effective rescue procedures in the event of a fall or suspended worker during elevated work activities. The plan aims to minimize injury, reduce response time, and ensure the well-being of workers at all times.

**2. Scope:** This rescue plan applies to all employees and contractors engaged in elevated work activities where fall hazards exist within the company premises or job sites.

### **3. Responsibilities:**

#### **3.1. Management:**

- Provide adequate resources and training to ensure the successful implementation of the rescue plan.
- Appoint and designate competent persons responsible for coordinating rescue activities.
- Regularly review and update the rescue plan to accommodate changes in work procedures or equipment.

#### **3.2. Competent Persons:**

- Oversee and conduct rescue drills and training for authorized rescue personnel.
- Ensure all rescue equipment is properly inspected, maintained, and readily available for use.

#### **3.3. Authorized Rescue Personnel:**

- Trained and certified individuals responsible for executing rescue operations.
- Familiarize themselves with the rescue plan, equipment, and procedures.

### **4. Fall Protection Equipment:**

- Ensure that all personnel working at heights wear appropriate fall protection equipment (e.g., harnesses, lanyards, lifelines, and anchor points) as per OSHA standards and industry best practices.
- Regularly inspect and maintain fall protection equipment to ensure its reliability and compliance.

## **5. Emergency Procedures:**

### **5.1. Fall Incident Response:**

- In the event of a fall or suspended worker, nearby co-workers should immediately notify the supervisor or competent person.
- The competent person will initiate the rescue response and, if necessary, activate the emergency response team.

### **5.2. On-site First Aid:**

- If the fallen worker is conscious and can communicate, keep them calm and provide reassurance while avoiding unnecessary movement.
- Administer first aid and medical attention as required, but avoid trying to raise or move the injured person unless they are in immediate danger.

### **5.3. Suspension Trauma:**

- If a worker is suspended in a fall arrest system, assess the potential for suspension trauma and activate the rescue plan promptly.

## **6. Rescue Procedures:**

- The rescue team shall be trained and equipped to perform both assisted and unassisted rescues depending on the situation.
- If the rescue team cannot reach the fallen worker promptly, emergency services should be contacted immediately.

## **7. Training and Drills:**

- Conduct regular training sessions and drills to ensure authorized rescue personnel are familiar with the rescue plan, equipment, and procedures.
- Document all training and drills, and use the results to identify areas for improvement.

## **8. Post-Incident Review:**

- After each fall incident, perform a thorough review of the rescue response to identify any shortcomings and implement corrective actions.

## **9. Plan Review:**

- The Fall Protection Rescue Plan should be reviewed annually or whenever there are significant changes in work procedures, equipment, or personnel.

## **V. TASKS AND WORK AREAS REQUIRING FALL PROTECTION**

Unless otherwise specified, the Supervisor shall evaluate the worksite and determine the specific type of fall protection to be used in the following situations. Fall protection is required wherever the potential to fall 4 feet (6 feet for construction activities) or more exists.

1. All exterior and interior equipment platforms, catwalks, and antennas/towers.
2. All exterior and interior fixed ladders above 20 feet.
3. All mezzanine and balcony edges.
4. All open excavations or pits.
5. All tasks requiring use of the articulating man lifts or JLG's.
6. All tasks requiring employees to lean outside the vertical rails of ladders (e.g., painting, stairwell lightbulb replacement, etc.).
7. Scaffolding erection 10 feet or greater in height.
8. Cableways, bridge measurements.
9. Communications towers.

## **VI. PROTECTION FROM FALLING OBJECTS**

When guardrail systems are in use, the openings shall be small enough to prevent potential passage of falling objects. The following procedures must be followed by all employees to prevent hazards associated with falling objects.

- A. No materials shall be stored within four (4) feet of working edges.
- B. Excess debris shall be removed regularly to keep work areas clear.
- D. Stacked materials must be stable and self-supporting.
- E. Canopies shall be strong enough to prevent penetration by falling objects.
- F. Toe boards erected along the edges of overhead walking/working surfaces shall be:
  - i. capable of withstanding a force of at least 50 pounds; and

- ii. solid with a minimum of three and a half (3 ½ ) inches tall and no more than one quarter (1/4 ) inch clearance above the walking/working surface.
- iii. Equipment shall not be piled higher than the toe board unless sufficient paneling or screening has been erected above the toe board.

## **VII. ACCIDENT INVESTIGATIONS**

All incidents that result in injury to workers, as well as near misses, regardless of their nature, shall be reported and investigated. Investigations shall be conducted by the Supervisor as soon after an incident as possible to identify the cause and means of prevention to eliminate the risk of reoccurrence.

In the event of such an incident, the Fall Protection Program shall be reevaluated by the Supervisor to determine if additional practices, procedures, or training are necessary to prevent similar future incidents.

## **VIII. CHANGES TO THE PLAN**

Any changes to the Fall Protection Program (and alternative Fall Protection Plans, if in place) shall be approved by the Supervisor, and shall be reviewed by a qualified person as the job progresses to determine additional practices, procedures or training needs necessary to prevent fall injuries. Affected employees shall be notified of all procedure changes, and trained if necessary. A copy of this plan, and any additional alternative Fall Protection Plans, shall be maintained at the jobsite by Supervisor.

**Appendix A**

**Certification of Training  
Fall Protection**

I certify that I received training as an authorized employee under Geddis Paving & Excavating, LLC's Fall Protection program. I further certify that I understand the procedures and will abide by those procedures.

---

AUTHORIZED EMPLOYEE SIGNATURE

---

DATE



## Appendix C

### Self-Retracting Lanyard/Lifeline Annual Inspection Checklist

Self-retracting Lanyard/Lifeline Model/Name: \_\_\_\_\_

Serial Number: \_\_\_\_\_ Lot Number: \_\_\_\_\_

Date of Manufacture: \_\_\_\_\_ Date of Purchase: \_\_\_\_\_

Inspection Items	Accepted/Rejected	Comments
Impact Indicator: Inspect indicator for activation (rupture of red stitch, elongated indicator, etc.).	Accepted	
	Rejected	
Screws/Fasteners: Inspect for damage and make sure all screws and fasteners are tight.	Accepted	
	Rejected	
Housing: Inspect for distortion, cracks and other damage. Inspect anchoring loop for distortion or damage.	Accepted	
	Rejected	
Lanyard/Lifeline: Inspect for cuts, burns, tears, abrasion, frays, excessive soiling and discoloration.	Accepted	
	Rejected	
Locking Action: Inspect for proper breaking action.	Accepted	
	Rejected	
Retraction/Extension: Inspect spring tension by pulling lanyard out fully and allowing to retract fully (lifeline must be taut with no slack).	Accepted	
	Rejected	
Hooks/Carabiners: Inspect for physical damage, corrosion, proper orientation and markings.	Accepted	
	Rejected	
Labels: Inspect, making certain all labels are securely held in place and legible.	Accepted	
	Rejected	
Overall disposition:	Accepted	Inspected by:
	Rejected	Date Inspected

**Appendix D**

**Full Body Harness**  
**Annual Inspection Checklist**

Harness Model/Name: \_\_\_\_\_

Serial Number: \_\_\_\_\_ Lot Number: \_\_\_\_\_

Date of Manufacture: \_\_\_\_\_ Date of Purchase: \_\_\_\_\_

What to look for:	Accepted/Rejected	Comments
Hardware: Includes D rings, buckles, keepers, and back pads. Inspect for damage, distortion, sharp edges, burrs, cracks and corrosion	Accepted Rejected	
Webbing: Inspect for cuts, burns, tears, abrasions, frays, excessive soiling, and discoloration.	Accepted Rejected	
Stitching: Inspect for pulled or cut stitches	Accepted Rejected	
Labels: Inspect, making certain all labels are securely held in place and are legible.	Accepted Rejected	
Other:	Accepted Rejected	
Others:	Accepted Rejected	
Overall disposition:	Accepted Rejected	Inspected By: Date Inspected:

**Appendix E**

**Lanyards**  
**Annual Inspection Checklist**

Lanyard Model/Name: \_\_\_\_\_

Serial Number: \_\_\_\_\_ Lot Number: \_\_\_\_\_

Date of Manufacture: \_\_\_\_\_ Date of Purchase: \_\_\_\_\_

What to look for:	Accepted/Rejected	Comments
Hardware: Includes snap hooks, carabiners, adjusters, keepers, thimbles, and D rings. Inspect for damage, distortion, sharp edges, burrs, cracks, corrosion and proper operation.	Accepted  Rejected	
Webbing: Inspect for cuts, burns, tears, abrasions, frays, excessive soiling, and discoloration.	Accepted  Rejected	
Stitching: Inspect for pulled or cut stitches.	Accepted  Rejected	
Synthetic Rope: Inspect for pulled or cut yarns, burns, abrasions, knots, excessive soiling, and discoloration.	Accepted  Rejected	
Energy Absorbing Component: Inspect for elongation, tears and excessive soiling.	Accepted  Rejected	
Labels: Inspect, making certain all labels are securely held in place and are legible.	Accepted  Rejected	
Overall disposition:	Accepted  Rejected	Inspected By:  Date Inspected:

**Appendix F**

**Snap Hooks and Carabiners**  
**Annual Inspection Checklist**

Hook/Carabiner Model/Name: \_\_\_\_\_

Serial Number: \_\_\_\_\_ Lot Number: \_\_\_\_\_

Date of Manufacture: \_\_\_\_\_ Date of Purchase: \_\_\_\_\_

What to look for:	Accepted/Rejected	Comments
Physical Damage: Inspect for cracks, sharp edges, burrs, deformities and locking operations	Accepted Rejected	
Excessive Corrosion: Inspect for corrosion, which affects the operation and/or the strength.	Accepted Rejected	
Markings: Inspect and make certain marking(s) are legible.	Accepted Rejected	
Other:	Accepted Rejected	
Other:	Accepted Rejected	
Other:	Accepted Rejected	
Overall disposition:	Accepted Rejected	Inspected By: Date Inspected:

# **SAFETY HAZARD COMMUNICATION POLICY**



# Geddis Paving & Excavating, Inc.

## Safety Hazard Communication Policy

### SAFETY HAZARD COMMUNICATION POLICY

This program has been prepared to comply with the requirements of the Federal OSHA Standard 1926.59 and insure that information is necessary for safe use, handling, and storage of hazardous chemicals is provided to and made available to employees. This program includes guidelines on identification of chemical hazards and the preparation and proper use of containers, labels, and other types of devices.

### Hazard Identification and Determination

It is the intention of Geddis Paving & Excavating, Inc., further known herein as GPE, to make a safe environment for our workers. As such, we will ensure that the hazards of all chemicals utilized are evaluated, and that information concerning their hazards is communicated to all employees. The transmittal of information is to be accomplished by means of comprehensive hazard communication programs, which are to include container labeling and other forms of warning, safety data sheets and employee training.

**Chemical Inventory:** GPE maintains an inventory of all known chemicals in use on the work site. A chemical inventory list is available from the Safety Director. Each Supervisor/Foreman maintains a list as well. The SDS Sheets are maintained by the foreman of each job location.

**Container Labeling:** All chemicals brought to the job site will be stored in their original or approved containers with a proper label attached, except small quantities for immediate use. Any container not properly labeled should be given to the Safety Coordinator for labeling or proper disposal.

Workers may dispense chemicals from original containers only in small quantities intended for immediate use. Any chemical left after work is completed must be returned to the original container or the Safety Director for proper handling.

No unmarked containers of any size are to be left in the work area unattended.

GPE will rely on manufacturer applied labels whenever possible, and will ensure that these labels are maintained. Containers that are not labeled or on which the manufacturer's label has been removed will be relabeled.

GPE will ensure that each container is labeled with the identity of the hazardous chemical contained and any appropriate hazard warnings. No GPE employee shall remove or deface a label on any incoming container of hazardous material in accordance with OSHA standards.

**Safety Data Sheets – SDS:** GPE shall obtain, maintain, and coordinate all safety data sheets for any and all hazardous material incoming from suppliers as soon as possible for every chemical received without a safety data sheet. The employers will supply any and all employees with a copy of said sheet upon receipt and shall ensure that the safety data sheets are readily accessible during each working shift of employees when they are in their work environment.

GPE will, in accordance with OSHA specifications, provide access to any contractors or subcontractors on-site to safety data sheets for hazardous chemicals that their employees may be exposed to while working. GPE will also provide any precautionary measures that need to be taken to protect employees during the workplace's normal operating conditions and foreseeable emergencies. They will also inform other employees of all labeling systems used in the workplace.

In addition, all employees are to be provided with information and training in accordance with the above information to the extent necessary to protect them in the event of a spill or leak of a hazardous chemical from a sealed container or truck.

**Employee Training:** GPE will make the written hazard communication program available, upon request to employees, their designated representatives, the Assistant Secretary and the Director, in accordance with the requirements of 29 CFR 1910.1020 (e). Where employees must travel between jobsites during a work shift, i.e., their work is carried out at more than one geographical location; the written hazard communication program may be kept at the primary workplace facility.

GPE shall provide employees with effective information and training on hazardous chemicals in their work area at the time of their initial assignment, and whenever a new physical or health hazard the employees have not previously been trained about is introduced into their work area. Information and training may be designed to cover categories of hazards (e.g. flammability, carcinogenicity) or specific chemicals. Chemical-specific information must always be available through labels and safety data sheets.

Information that the employees are entitled to include any operations in their work area where hazardous chemicals are present; and the location and availability of written hazard communication program, including the required list(s) of hazardous chemicals, and safety data sheets required by this section. Methods and observations that may be 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, etc) will be communicated to all employees, contractors, and subcontractors.

Employees can take measures to protect themselves from these hazards, including specific procedures that GPE 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 details of the hazard communication program developed by GPE, including any labeling

and/or safety data sheets, and how employees can obtain and use the appropriate hazard information is present in this manual.

Geddis Paving and Excavating, Inc. will take the following measures to ensure the proper atmospheres are in place for the employee's safety concerning hazardous materials:

1. Assess the hazards of the chemicals to which employees will be exposed.
2. Conduct or assess sampling of the workplace or worksite atmosphere to determine employee exposure levels.
3. Conduct pre-assignment or periodic medical surveillance of exposed employees.
4. Provide medical treatment to exposed employees.
5. Select or assess appropriate personal protective equipment for exposed employees.
6. Design or assess engineering controls or other protective measures for exposed employees.
7. Conduct studies to determine the health effects of exposure.
8. Explain in detail why the disclosure of the specific chemical identity is essential and that, in lieu thereof, the disclosure of the following information to the health professional, employee, or designated representative, would not satisfy the purposes described above.
9. Provide a written example of the properties and effects of the chemical.
10. Measure for controlling workers' exposure to the chemical.
11. Monitor and analyze worker exposure to the chemical.
12. Diagnose and treat or train in the diagnosis and treatment of harmful exposures to the chemicals.
13. Maintain the confidentiality of the disclosed information regarding health professionals, employer or contractor of services of the health professional, employee, or designated representative. Agree in a written confidentiality agreement that the health professional, employee, or designated representative, will not use the trade secret information for any purpose other than the health needs asserted and agree not to release the information under any circumstances other than to OSHA, as provided in prior sections of this document, except as authorized by the terms of the agreement or by the chemical manufacturer, importer, or employer.
14. Conduct accident investigations as required by OSHA standards.
15. Determine if engineering or administrative controls or personnel protective equipment are to be used in the workplace or worksite.

**Personnel Protective Equipment (PPE):** Required PPE is available from the Safety Director. Any employee found in violation of PPE requirements may be subject to disciplinary actions up to and including discharge. Hard hats, eye protective wear, Safety vests and shoes and appropriate attire are among the items that are included in the required PPE for our employees' safety.

**Emergency Response:** Any incident of over exposure or spill of hazardous chemical/substance must be reported to the Safety Director. The foreman or the immediate supervisor will be responsible for insuring that proper emergency response actions are taken in leak/spill situations.

**Hazards of Non-Routine Tasks:** Supervisors will inform employees of any special tasks that may arise which would involve possible exposure to hazardous chemicals. Review of safe work procedures and use of required PPE will be conducted prior to the start of such tasks. Where necessary, areas will be posted to indicate the nature of the hazard involved.

**Informing other Employees:** Other on site employers is required to adhere to the provisions of the Hazard Communication Standard. Information on hazardous chemicals known to be present will be exchanged with other employers. Employers will be responsible for providing necessary information to their employees. Other on site employers will be provided with a copy of GPE Hazard Communication Program.

**Posting:** GPE has posted information for employees at the job site on the Hazard Communication Standard. This information can be acquired from the Safety Director.

# ASBESTOS SAFETY POLICIES



# **Geddis Paving & Excavating, Inc.**

## **Asbestos Safety Guidelines**

This safety guideline is intended to provide safety information to all Geddis Paving & Excavating, Inc. employees regarding asbestos that adequate measures can be taken to limit exposures through controls in the workplace. NOTE: If Geddis Paving & Excavating, Inc. employees are to work in areas where the contracting company has identified asbestos, these areas will be disclosed to us and rendered safe before work will begin. Geddis Paving & Excavating, Inc. does not knowingly allow employees to work in areas where they will have exposure to asbestos. Any employee who knowingly enters a restricted asbestos area will be disciplined for their unsafe behavior.

### **GENERAL INFORMATION**

Asbestos that may exist in refineries includes certain gaskets, brake linings, valve packing and old insulation.

Since non-asbestos insulation is being used in most refineries on new work installations, the highest probability for exposure will come during demolition or old insulation removal. However, Asbestos-containing material may be encountered in the following forms:

Valves, vessels, piping insulation, insulation cement, mastic, floor and roof tiling, transit wall siding, caulking, and automobile brake linings.

All asbestos removal within a refinery must be done by certified employees who are licensed to remove asbestos. No Geddis Paving & Excavating, Inc. employee is to work on any piping or vessel that has "asbestos containing materials" unless properly protected and trained and/or the material is encapsulated and will not fragmentize or peel off when working on it.

Asbestos is widely used, mineral-based material that is resistant to heat and corrosive chemicals. Depending of the chemical composition, fibers may range in texture from coarse to silky. The properties which make asbestos fibers so valuable to industry are its high tensile strength, flexibility, heat and chemical resistance, and good frictional properties.

### **WORK PRACTICES**

Geddis Paving & Excavating, Inc. employees are not to work on asbestos containing equipment or materials. If employees become aware of any potential exposure to asbestos, they are to immediately stop work and notify their supervisor/foreman. The supervisor/foreman is then responsible to inform the office for further information, but in no case allow work to proceed until the exposure to asbestos has been abated.

## **HEALTH HAZARDS**

Asbestos fibers are carried into the body as airborne particles. These fibers can become embedded in the tissues of the lung and digestive system. Once the fibers become trapped in the lung's alveoli (air sacs), they cannot be removed.

Years of exposure to asbestos can cause a number of disabling and fatal diseases. Among these is asbestosis, an emphysema-like condition, lung cancer; mesothelioma, a cancerous tumor that spreads rapidly in the cells of membranes covering the lungs and body organs; and gastrointestinal cancer which is caused by ingesting asbestos-contaminated food.

Recognizing the danger of asbestos levels in the workplace, the Occupational Safety and Health Administration developed a more protective regulation that reduces the permissible exposure limit and prescribes a separate standard for general industry and for construction.

### **Short term effects (acute)**

May cause irritation and itching to the skin, coughing may occur.

### **Long term effects**

Over exposure can result in lung cancer. Common symptoms include difficulty in breathing (if you climb a flight of steps and are out of breath) cough chest pains, clubbing of the fingers, (this common in advanced stages), risk for lung cancer is or multiplied if the worker exposed to asbestos also smokes.

## **WORK PRACTICES**

Geddis Paving & Excavating, Inc. employees should be aware of the following safe practices. To help reduce worker exposure to airborne fibers, asbestos must be handled, mixed, applied, removed, cut, scored or otherwise worked in a wet state. This "wet" method must also be used when products containing asbestos are removed from bags, cartons, or containers. If this not possible, removal must be done in an enclosed or well-ventilated area.

Asbestos containing materials must not be applied by spray methods. Compressed air can be used to remove asbestos containing materials only if the compressed air is used in conjunction with an enclosed ventilated system designed to capture the dust cloud created by the compressed air.

## **HOUSEKEEPING**

All surfaces must be maintained as free as practicable of accumulations of asbestos containing dust and waste. Floors and other surfaces contaminated with asbestos should only be cleaned by vacuuming and/or wet cleaning methods. Where vacuuming and/or wet cleaning is not feasible, shoveling, dry sweeping and dry clean-up of asbestos may be used. The use of compressed air for cleaning purpose is prohibited. Asbestos waste, scrap, debris, bags, containers, and equipment must be disposed of in sealed impermeable bags or containers.

## **METHODS OF COMPLIANCE**

OSHA requires that to the extent feasible, engineering and work practice controls must be used to reduce employee exposure to Asbestos to within the PEL. Respirators must be used where engineering controls have been instituted but are insufficient to reduce exposure to the required level. Employers must establish and implement a written program to reduce employee exposure to or below the PEL by means of engineering and work practice controls and by the use of respirators.

OSHA also requires that a written asbestos safety program be available upon request to the Assistant Secretary for the Occupational Safety and Health Administration (OSHA), the Director of the National Institute for Occupational Safety and Health (NIOSH), employees and employee representatives. These plans must be reviewed and updated as necessary to reflect significant changes in the compliance program. Employee rotation cannot be used as a means to compliance with the permissible exposure limit.

# BENZENE SAFETY POLICIES



# Geddis Paving & Excavating, Inc.

## Benzene Safety Guidelines

This safety guideline is intended to provide suitable information to all **Geddis Paving & Excavating, Inc.** employees regarding the potential toxic effects of Benzene so that adequate measures can be taken to limit exposures through controls in the workplace.

### GENERAL

Of all the hydrocarbons, Benzene poses the most serious long-term threat. Exposure over time, to even low levels of Benzene can cause leukemia, blood changes and aplastic anemia.

### CHARACTERISTICS

Benzene is a colorless to light-yellow liquid with a pleasant sweet odor.

- Formula (C<sub>6</sub>H<sub>6</sub>)
- CAS No.: 71-43-2

Benzene is a flammable liquid that can accumulate static electricity. Benzene vapors are heavier than air and may travel to a source of ignition and flash back. The vapors are readily dispersed by wind movement and/or air currents. Liquid benzene tends to float on water and may travel to a source of ignition and spread fire. Benzene is highly reactive with no oxidizing materials.

### USES:

Benzene is a component of gasoline, both in the manufacturing process and found naturally in crude oil; Benzene is also used as a feed stock for chemical manufacturing.

## HEALTH EFFECTS:

### WARNING

Benzene is a cancer-causing agent in humans. All contact should be reduced to the lowest possible level. The above exposure limits are for air levels only. Skin contact may also cause overexposure.

Benzene is one of the most hazardous of all petroleum products because of its adverse health hazards and high flammability.

The following adverse health effects are important to remember where there may be a potential exposure to Benzene:

- a) **Acute:** At high concentrations (1000 PPM) Benzene has an acute effect on the central nervous systems causing headaches, dizziness, drowsiness, unconsciousness, and possible death.

Acute exposure can also cause breathlessness, irritability, and giddiness.

- b) **Chronic:** Benzene has the chronic exposure effect on bone marrow (aplastic anemia leukemia).

Chronic exposure can also cause convulsions, liver damage, heart damage, blood diseases (aplastic anemia), and cancer (leukemia). These symptoms can take months or years to surface and can develop without physical or visible indications.

- c) Repeated skin contact leads to irritant contact dermatitis (rash); as with any petroleum solvent (which Benzene is also classified as), it will leach the natural oils out of the skin. Direct contact with the skin can cause erythema and/or blistering.
- d) Benzene is irritating to eyes and mucous membranes.
- e) Flammable/dangerous fire risk: benzene has a very low flash point making it dangerous to have any open flame, spark or source of ignition when vapors are present.
- f) Explosive limits in air 1.5 to 8% by volume: benzene is highly flammable at low levels of vapor quantity in air, keep away from sources of ignition.

## **PERSONAL PROTECTIVE MEASURES**

**Geddis Paving & Exc., Inc.** employees are not permitted to work in areas where there may be a potential for Benzene exposure. It is the responsibility of the Contracting Company's Project Manager and the on-site supervisor/foreman to see that any jobsite that may expose employees to Benzene is not manned with personnel until it is proven that it is safe to work within the acceptable OSHA limits without personal protective equipment. If this cannot be accomplished, then chemical safety goggles, a face shield, gloves and boots will be the required personal protective equipment.

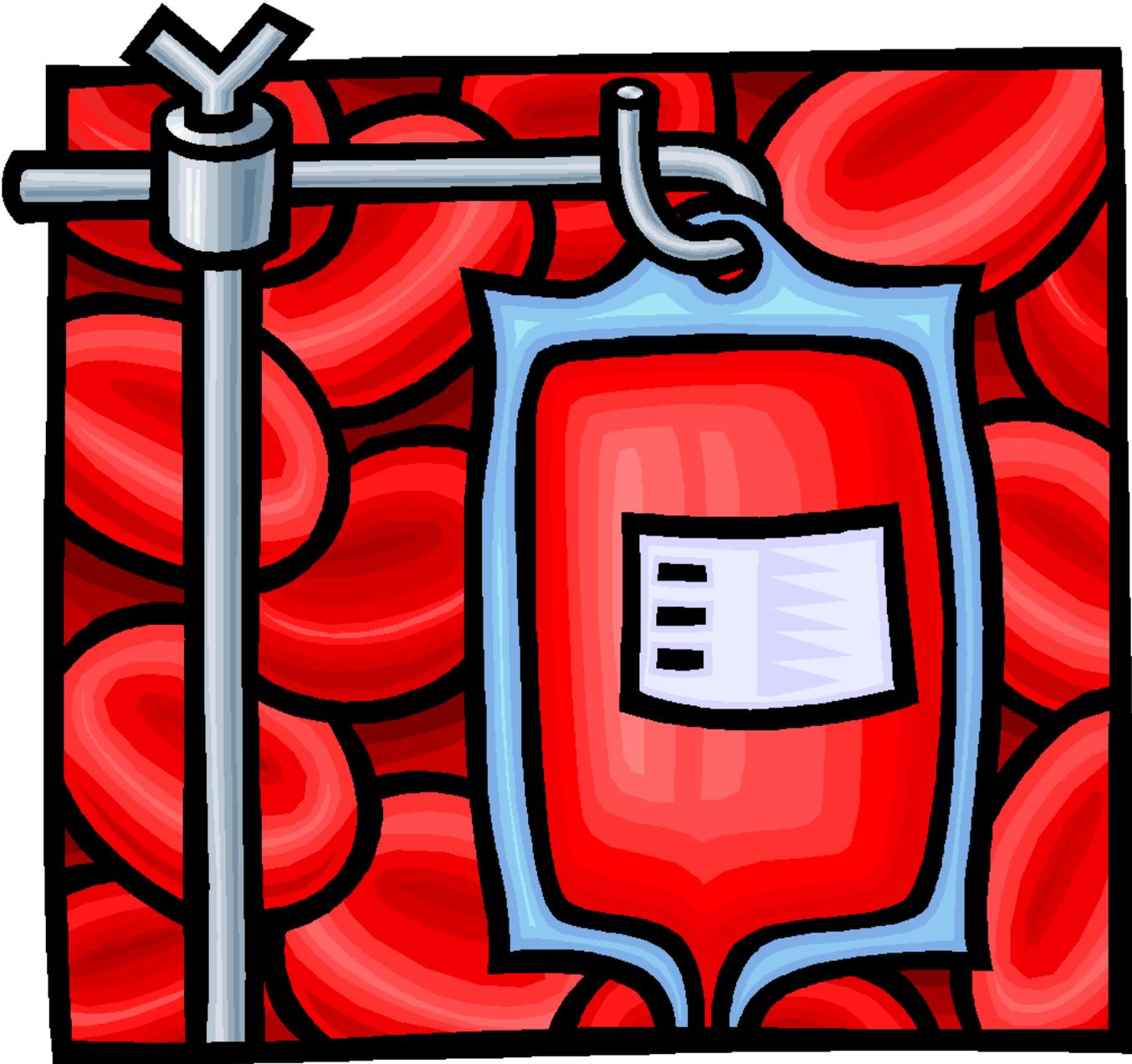
## **SPECIAL REQUIREMENTS**

If it is necessary to perform any work where the exposure to Benzene is about the OSHA acceptable limits, then **Geddis Paving & Excavating, Inc.** must implement a comprehensive OSHA mandated special safety policy and procedure that includes special elements of exposure monitoring, formal medical program, special personal protective equipment, and much more.

## **TRAINING**

All employees will be provided awareness training in this program in order to be familiar with the potential hazards and proper safe work procedures to follow if exposed to this health hazard.

# BLOODBORNE PATHOGENS POLICY



# Geddis Paving & Excavating, Inc.

## Bloodborne Pathogens Policy

### 1.0 Policy

Employees who have been identified as having a predetermined risk of occupational exposure to Bloodborne Pathogens shall be provided with appropriate procedural precautions and training.

*This policy covers minimum performance standards applicable to all Geddis Paving & Excavating, Inc. employees and locations. Local practices requiring more detailed or stringent rules, or local, state or other federal requirements regarding this subject can and should be added as an addendum to this procedure as applicable.*

### 2.0 Purpose

To protect employees from occupational exposure to Bloodborne Pathogens and certain other potentially infectious materials.

### 3.0 Scope

Applies to all Geddis Paving & Excavating, Inc. office and work sites. (Note that applicability is limited to those few individuals whose job duties require them to have potential exposure to blood or other potentially infectious materials.)

### 4.0 Definitions

**Approved Disinfectant** means a bleach/water solution in a ratio of 1:10 or any commercially available disinfectant such as Betacide or Madacide.

**Blood** means human blood, human blood components and products made from human blood.

**Bloodborne Pathogens** means pathogenic microorganisms that are present in human blood and can cause disease in humans. These Pathogens include, but are not limited to, Hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

**Contaminated** means the presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

**Decontamination** means the use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of

transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

**Engineering Controls** means any controls that isolate or remove the bloodborne pathogens hazard from the workplace.

**Exposure Incident** means a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that result from the performance of an employee's duties.

**First Responder (Mandatory or Voluntary)** means any employee who has received accredited training in first aid and/or cardiopulmonary resuscitation (CPR). A "Mandatory" First Responder is someone who, as part of their job duties, has been designated to render first aid/CPR assistance to persons who require emergency assistance while on company property or job sites. A "Voluntary" First Responder is someone who has been trained but whose job duties do not require them to render first aid/CPR. (Very few, if any, -----employees will have first aid/CPR included as a required job duty.)

**Hand-washing Facilities** means a facility providing an adequate supply of running potable water, soap, and single use towels or hot air drying machines.

**HBV** stands for Hepatitis B virus.

**HIV** stands for Human Immunodeficiency Virus.

**Licensed Healthcare Professional** means a person whose legally permitted scope of practice allows him or her to independently perform the activities required by Hepatitis B Vaccination and Post-exposure Evaluation and Follow-up.

**Occupational Exposure** means reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

**Other Potentially Infectious Materials (OPIM)** means:

The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and body fluids in situations where it is difficult or impossible to differentiate between body fluids;

Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and

HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

**Parenteral** means piercing mucous membranes or the skin barrier through such events as human

bites, cuts, and abrasions.

**Responsible Person (Personnel)** means any person or persons trained in the control of disinfection procedures and disposal procedures of equipment, product or materials suspected to be contaminated with Bloodborne Pathogens.

**Source Individual** means any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to the employee.

**Universal Precautions** means an approach to infection control. According to the concept of Universal Precautions, human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

**Work Practice Controls** means controls that reduce the likelihood of exposure by altering the manner in which a task is performed.

## 5.0 Requirements

### 5.1 Exposure Determination

Job classifications shall be reviewed by the Branch Safety Officer to determine activities that involve potential occupational exposure to bloodborne pathogens or OPIM. Very few (if any) jobs at Geddis Paving & Excavating will involve such exposure as part of a designated job duty. A list of these classifications as noted in 5.1.1 of this Policy section shall be compiled and retained. Exposure determination shall be based on the definition of occupational exposure without regard to personal protective clothing and equipment. (For those involved in wastewater services, note OSHA has issued an interpretation letter indicating that exposure to raw sewage does not constitute exposure to bloodborne pathogen hazards.)

#### 5.1.1 Job Classifications With Possible Occupational Exposure

The first group includes job classifications in which all employees have occupational exposure. These job classifications shall be listed, although it is not necessary to list the specific work tasks of the people contained in this group (reference Appendix 9-1 for Form 9-1.1).

The second group includes job classifications in which some of the employees have occupational exposure. For these job classifications, it shall be necessary to list the specific tasks and procedures causing occupational exposure (reference Appendix 9-1 for Form 9-1.2).

Employees who serve as First Responders shall sign a First Responder Information

Form. This form shall be maintained in the employee's personnel file (reference Appendix 9-1 for Form 9-1.3).

Any employee who has been identified as a Responsible Person shall be required to sign a Responsible Person Bloodborne Pathogen Exposure Control Statement. This form shall be maintained in the employee's personnel file (reference Appendix 9-1 for Form 9-1.4).

## **5.2 Training**

Bloodborne Pathogen Exposure Control training shall be held within ninety (90) days of the effective date of hire, initially upon work site assignment, and annually for applicable employees. This training shall include employees who serve as Voluntary First Responders.

A hard copy of this Bloodborne Pathogens Exposure Control Program shall be provided to every applicable employee trained.

## **5.3 Exposure Prevention**

### **5.3.1 Universal Precautions**

Employees shall adhere to the Universal Precautions method, that is, all human blood and OPIM shall be treated as if known to be infectious for HIV, HBV (Hepatitis B Virus), HCV (Hepatitis C Virus) or other bloodborne pathogens. Where differentiation of types of body fluids is difficult or impossible, all body fluids are to be considered potentially infectious and appropriate personal protective equipment shall be utilized. See 5.3.3 of this policy.

### **5.3.2 Engineering Controls and Work Practice Controls**

Engineering controls and work practice controls are to be the primary methods used to prevent occupational transmission of HBV and HIV. Engineering Controls reduce employee exposure at the work site by either removing or isolating the hazard or isolating the employee from exposure. Engineering controls shall be examined and maintained or replaced on a scheduled basis. Proper work practice controls change the manner in which a task is performed.

Employees who come in contact with the blood of another person or other potential infectious materials shall wash their hands and any other skin with soap and water; if contact with eyes, mouth or nose, flush area with water immediately or as soon as possible following such contact. When hand-washing facilities are unavailable, employees shall use antiseptic cleanser and paper towels or antiseptic towelettes. Employees must know where the hand-washing facilities and other hand-washing supplies are located.

### **5.3.3 Personal Protective Equipment**

If occupational exposures remain after instituting engineering and work practice controls, personal protective equipment (PPE) shall be used. PPE is considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach employees' work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of the time that the PPE shall be used.

Types of PPE include gloves, gowns, masks, mouthpieces and resuscitation bags. If the PPE is reusable, it shall be repaired, replaced and/or cleaned when necessary.

First Responders and Responsible Personnel shall have an Infection Protection Kit in their possession. Contents of an Infection Protection Kit should include the following items:

- Antiseptic Towelettes
- Rubber latex gloves
- Face mask
- Disposable body gown and shoe covers
- Protective eye wear
- Biohazard bag with secure tie
- Area Control Biohazard warning tape and signs

Disposable PPE shall not be reused. If circumstances require the use of this equipment, it shall be properly disposed of after its use in the designated leak-proof container.

First Responders certified in CPR shall be provided with plastic mouth shields to protect a first responders' mouth area while performing Artificial Respiration or Cardiopulmonary Resuscitation (CPR).

First Responders and Responsible Personnel shall be required to use PPE when performing first aid on another person or decontaminating suspected contaminated equipment, products, or materials. It shall be the responsibility of each person rendering first aid assistance to use the appropriate degree of discretion and judgment necessary when deciding what type of PPE should be utilized for the given circumstances. However, when rendering immediate first aid to a bleeding person, First Responders shall use all appropriate PPE in their assigned Infection Protection Kits that offer protection from blood. If the First Responder makes a judgment in a given circumstance, that the use of PPE shall impede the delivery of first aid treatment or pose an increased hazard to the safety of the injured person or other employees, this judgment shall be documented.

### **5.3.4 Housekeeping**

Any surface that has been exposed to potentially infectious materials shall be decontaminated.

#### **5.4 Vaccinations**

Hepatitis B vaccinations shall be made available to employees who have occupational exposure to blood within 10 working days of applicable work site assignment, at no cost, at a reasonable time and place, and under the supervision of a licensed physician/licensed healthcare professional, and according to the latest recommendations of the U.S. Public Health Service. Employees shall sign a declination form if they choose not to be vaccinated, but may later opt to receive the vaccine at no cost to the employee (reference Appendix 9-1, Form 9-1.5).

Employees identified as Mandatory First Responders or Responsible Persons, shall be immediately eligible to be prescreened for the presence of Hepatitis B virus antibodies and to receive a Hepatitis B Vaccine at no cost to the employee within ten (10) working days of their designation as a First Responder or Responsible Person. Employees who decline a Hepatitis B vaccination shall sign a Hepatitis B Vaccination Declination Form (reference Appendix 9-1, Form 9-1.6).

Employees shall be provided with a copy of the medical provider's written report within fifteen (15) working days of receipt.

If the U.S. Public Health Service recommends a routine dose(s) of Hepatitis B vaccine at a future date, such booster dose(s) shall be made available at no charge.

#### **5.5 Exposure Incidents**

An exposure incident may occur if an employee comes into contact with the blood of another person or some other potentially infectious material. If any exposure incident occurs, the senior Geddis Paving & Exc., Inc. employee shall ensure that the area and/or equipment that has been contaminated by blood or other potentially infectious materials is secured from inadvertent exposure to others by placing warning tape and signs around the contaminated area. Signs shall not be removed until the area is thoroughly cleaned and disinfected with disinfectant solution by a Responsible Person wearing appropriate Personal Protective Equipment.

The senior Geddis Paving & Exc., Inc. employee shall document the incident on the Blood and Body Fluid Exposure Report (reference Appendix 9-1 for Form 9-1.7).

When any employee is subject to an exposure incident, regardless of whether or not that employee is a designated First Responder, the senior Geddis Paving & Exc., Inc. employee shall:

- immediately refer that employee to the designated medical provider
  
- ensure that the employee subjected to the exposure incident receives a confidential

medical evaluation and follow up

- provide the designated medical provider with a copy of the completed Blood and Fluid Exposure Report as soon as possible following the investigation of the exposure incident
- request the source individual voluntarily submit to serological blood test to screen for the presence of Hepatitis B (HBV) and human immunodeficiency (HIV) virus antibodies (reference Appendix 9-1, Form 9-1.8). If the source individual agrees to be tested, the person shall be directed to the designated medical provider
- request the source individual provide the medical provider for the employee subjected to the exposure incident the results of blood tests conducted on the source individual

If the source individual refuses to voluntarily submit to blood testing, advise the medical provider that the source individual refused to be tested, and document with Form 9-1.8 in Appendix 9-1.

If the source individual declines a blood test to determine the presence of human immunodeficiency (HIV) virus antibodies, but does give consent for a blood test to determine the presence of Hepatitis B (HBV) antibodies, the medical provider shall be instructed to retain the source individual's blood sample for a period of ninety (90) days following the date the source individual's blood was drawn. The source individual may elect to have a blood test to detect HIV antibodies at a later date, in which case the medical provider can use the original sample provided by the source individual.

Request that the medical provider send a written report to the company documenting that the employee subjected to the exposure incident was informed of the medical evaluation results and the need for any further follow up. A copy of the medical providers report is given to the employee subjected to the exposure incident shall be provided a copy of the medical provider's report within fifteen (15) days after receipt.

Post-exposure evaluation and follow-up plus laboratory tests conducted shall be available, in confidence, to each employee who has had an exposure incident. The evaluations and test shall be conducted by an accredited laboratory and provided at no cost to the employee. Follow-up shall include a confidential medical evaluation documenting the following information:

- Circumstances of the exposure
- Identifying and testing the source individual, if feasible
- Testing the exposed employee's blood if he/she consents
- Post-exposure prophylaxis

- Counseling and evaluation of reported illnesses

## 5.6 Contaminated Materials and Labeling

Any disposable contaminated materials shall be discarded by sealing within a plastic bag, which is then to be sealed in a red bag or one that is marked with a bio-hazard symbol.

Proper disposal of these items shall occur by coordinating with a local waste disposal company. Disposal of these items without such coordination is prohibited.

Work areas that contain processes where occupational exposure is known shall be marked with the biohazard symbol and include: Warning Biohazard Area.

The senior Geddis Paving & Exc., Inc. employee for the applicable work area, or designee, shall ensure proper disposal.

## 5.7 Recordkeeping

The Branch Safety Officer or his/her designee will be responsible for maintaining all documentation and records related to the Bloodborne Pathogen Program. Exposure and medical records shall remain confidential and be maintained for thirty (30) years past the exposed employee's last date of employment, as follows:

- The name and social security number of the employee
- A copy of the employees HBV vaccination status, including the dates of vaccination
- A copy of the results of examinations, medical testing, and follow-up procedures
- A copy of the information provided to the healthcare professional, including a description of the employee's duties as they relate to the exposure incident, and documentation of the routes of exposure and circumstances of the exposure

Training records shall be maintained (reference Appendix 9-1 for Form 9-1.9) and kept for three years from the date of training. Other documentation of this training is acceptable when multiple topics are covered. The following information shall be included with the documentation:

- The dates of the training sessions
- An outline describing the material presented
- The names and qualifications of persons conducting the training
- The names and job titles of persons attending the training sessions

- Training records shall be available to employees or employee representatives upon request

The Branch Safety Officer shall provide to any employee, Assistant Secretary and/or OSHA Director who so requests, a copy of the Bloodborne Pathogen Exposure Control Program and/or related applicable information / records no later than fifteen (15) working days from the date of a written request. A release of employee medical records must include the specific written consent of the employee.

## **6.0 References**

OSHA 29 CFR 1910.1030

# LEAD SAFETY POLICIES



# Geddis Paving & Excavating, Inc.

## Lead Safety Guidelines

This safety guideline is intended to provide suitable information to all Geddis Paving & Excavating, Inc. employees regarding the potential effects of Lead and where lead may be found so that adequate measures can be taken to limit exposures through controls in the workplace.

### I. GENERAL

The objective of this guideline is to prevent absorption of harmful quantities of lead. The guideline is intended to protect employees from the immediate toxic effects of lead and from the serious toxic effects that may not become apparent until years of exposure have passed.

### II. CHARACTERISTICS & WHERE IT CAN BE FOUND

To understand why lead is so hazardous, it is important to know what it is, the hazardous effects on people, and which materials do or may contain lead. Once this is understood, employees will gain a respect for the safety guidelines set forth in this policy.

#### ***What Is It?***

Pure lead (Pb) is a heavy metal and is a basic chemical element. It can combine with various other substances to form numerous lead compounds.

#### ***Where Can It Be Found?***

Lead can be found in:

- ☒ Old glossy paints used on walls and pipe.
- ☒ Building and roof metal support frames.

Report to the Contracting Company's Project Manager anytime you suspect lead-containing materials that may not have been disclosed:

- ☒ Cracked or peeling paint,
- ☒ Visible paint dust, grindings, or shavings.

### III. HEALTH EFFECTS:

#### I. Ways in which lead enters your body.

Lead can be absorbed into your body by inhalation (breathing) and ingestion (eating). When lead is scattered in the air it can be inhaled and absorbed through your lungs and upper respiratory tract. Inhalation of airborne lead is generally the most important source of occupational lead absorption. You can also absorb lead through your digestive system if lead gets into your mouth and is swallowed.

*Hazards encountered with lead occur when:*

- ◆ Inhaling lead as a dust, fume or mist.
- ◆ Ingesting lead through food, cigarettes, and chewing tobacco when handled with contaminated hands.

Lead (except for certain organic lead compounds not covered by the standard, such as tetraethyl lead) is not absorbed through your skin. When lead is scattered in the air as a dust, fume or mist it can be inhaled and absorbed through your lungs and upper respiratory tract. Inhalation of airborne lead is generally the most important source of occupational lead absorption. You can also absorb lead through your digestive system if lead gets into your mouth and is swallowed. If you handle food, cigarettes, chewing tobacco, or make-up, which have lead on them or handle them with hands contaminated with lead, this will contribute to ingestion.

A significant portion of the lead that you inhale or ingest gets into your blood stream. Once in your blood system, lead is circulated throughout your body and stored in various organs and body tissues. Some of this lead is quickly filtered out of your body and excreted, but some remains in the blood and other tissues. As exposure to lead continues, the amount stored in your body will increase if you are absorbing more lead than your body is excreting. Even though you may not be aware of any immediate symptoms of disease, this lead stored in your tissues can be slowly causing irreversible damage, first to individual cells, then to your organs and whole body systems.

#### II. Effects of overexposure to lead -(1) Short-term (acute) overexposure.

Lead is a potent, systemic poison that serves no known useful function once absorbed by your body. Taken in large enough doses, lead can kill you in a matter of days. A condition affecting the brain called acute encephalopathy may arise which develops quickly to seizures, coma, and death from cardiorespiratory arrest. A short-term dose of lead can lead to acute encephalopathy. Short-term occupational exposures of this magnitude are highly unusual, but not impossible. Similar forms of encephalopathy may, however, arise from extended, chronic exposure to lower doses of lead. There is no sharp dividing line between rapidly developing acute effects of lead and chronic effects, which take longer to acquire. Lead adversely affects numerous body systems and causes forms of health impairment and disease which arise after periods of exposure as short as days or as long as several years.

#### (2) Long-term (chronic) overexposure.

Chronic overexposure to lead may result in severe damage to your blood-forming, nervous, urinary and reproductive systems. Some common symptoms of chronic overexposure include loss

of appetite, metallic taste in the mouth, anxiety, constipation, nausea, pallor, excessive tiredness, weakness, insomnia, headache, nervous irritability, muscle and joint pain or soreness, fine tremors, numbness, dizziness, hyperactivity and colic. In lead colic there may be severe abdominal pain.

Damage to the central nervous system in general and the brain (encephalopathy) in particular is one of the most severe forms of lead poisoning. The most severe, often fatal, form of encephalopathy may be preceded by vomiting, a feeling of dullness progressing to drowsiness and stupor, poor memory, restlessness, irritability, tremor, and convulsions. It may arise suddenly with the onset of seizures, followed by coma, and death. There is a tendency for muscular weakness to develop at the same time. This weakness may progress to paralysis often observed as a characteristic "wrist drop" or "foot drop" and is a manifestation of a disease to the nervous system called peripheral neuropathy.

Chronic overexposure to lead also results in kidney disease with few, if any, symptoms appearing until extensive and most likely permanent kidney damage has occurred. Routine laboratory tests reveal the presence of this kidney disease only after about two-thirds of kidney function is lost. When overt symptoms of urinary dysfunction arise, it is often too late to correct or prevent worsening conditions, and progression to kidney dialysis or death is possible.

Chronic overexposure to lead impairs the reproductive systems of both men and women. Overexposure to lead may result in decreased sex drive, impotence and sterility in men. Lead can alter the structure of sperm cells raising the risk of birth defects. There is evidence of miscarriage and stillbirth in women whose husbands were exposed to lead or who were exposed to lead themselves. Lead exposure also may result in decreased fertility and abnormal menstrual cycles in women. The course of pregnancy may be adversely affected by exposure to lead since lead crosses the placental barrier and poses risks to developing fetuses. Children born of parents either one of whom were exposed to excess lead levels are more likely to have birth defects, mental retardation, or behavioral disorders or to die during the first year of childhood.

Overexposure to lead also disrupts the blood-forming system resulting in decreased hemoglobin (the substance in the blood that carries oxygen to the cells) and ultimately anemia. Anemia is characterized by weakness, pallor and fatigue as a result of decreased oxygen-carrying capacity in the blood.

#### IV. PROCEDURES:

##### 1.1. Permissible Exposure Limit (PEL)

The current Cal/OSHA lead standard is 50 µg/m<sup>3</sup> as an 8-hour Time Weighted Average (TWA). The standard as it applies to construction is unique in that it groups tasks *presumed* to create employee exposures above the PEL of 50 µg/m<sup>3</sup> as an 8-hour TWA, as follows:

##### LEAD-RELATED CONSTRUCTION TASKS AND THEIR 8-HOUR TWA EXPOSURE LEVELS

> 50 to 500 µg/m <sup>3</sup>	> 500 µg/m <sup>3</sup> to 2,500 µg/m <sup>3</sup>	> 2,500 µg/m <sup>3</sup>
Manual demolition	Using lead-containing mortar	Abrasive blasting
Dry manual scraping	Lead burning	Welding
Dry manual sanding	Rivet busting	Torch cutting
Heat gun use	Power tool cleaning without dust detection systems	Torch burning
Power tool cleaning with dust collection systems	Cleanup of dry expendable abrasive blasting jobs	
Spray painting with lead paint	Abrasive blasting enclosure movement and removal	

##### 1.2. Action Level

The standard also establishes an action level of 30 micrograms per cubic meter of air (30 µg/m<sup>3</sup>), time-weighted average, based on an 8-hour workday. The action level initiates several requirements of the standard, such as exposure monitoring, medical surveillance, and training and education.

##### 1.3. Evaluation Process

The Contracting Company's Project Manager will provide Geddis Paving & Exc., Inc. employees with results of any evaluation processes and a listing of lead containing material. The Contracting Company will provide all precautions and render the area safe for IPM employees before work begins.

##### 1.4. Medical Surveillance

If it is found that Geddis Paving & Exc., Inc. employees have been exposed to lead levels above the Cal/OSHA PEL, they will be placed into a medical surveillance program. The medical surveillance program is part of the Cal/OSHA standard's comprehensive approach to the prevention of lead-related disease. Its purpose is to supplement the main thrust of the standard, which is aimed at minimizing airborne concentrations of lead and sources of ingestion. Only medical surveillance can determine if the other provisions of the standard have effectively protected you as an individual. Compliance with the standard's provisions will protect most workers from the adverse effects of lead exposure, but may not be satisfactory to protect individual workers:

- Who have high body burdens of lead acquired over past years,
- Who have additional uncontrolled sources of non-occupational lead exposure,

- Who exhibit unusual variations in lead absorption rates, or
- Who have specific non-work related medical conditions that could be aggravated by lead exposure (e.g., renal disease, anemia).

In addition, control systems may fail, or hygiene and respirator programs may be inadequate. Periodic medical surveillance of individual workers will help detect those failures. Medical surveillance will also be important to protect your reproductive ability regardless of whether you are a man or woman.

## V. SAFETY MEASURES:

**Geddis Paving & Exc., Inc.** employees are not permitted to work in areas where there may be a potential for Lead exposure. If it is necessary to perform any work where the exposure to Lead is about the Cal/OSHA acceptable limits, then **Geddis Paving & Exc., Inc.** must implement a comprehensive mandated safety policy and procedure that includes special elements of exposure monitoring, formal medical program, special personal protective equipment, and much more.

Below are listed possible work controls and practices:

### 1. WELDING, BURNING, AND TORCH CUTTING.

Welding and cutting activities that potentially involve exposure to lead can occur as part of a number of construction projects such as highway/railroad bridge rehabilitation (including elevated mass-transit lines), demolition, and indoor and outdoor industrial facility maintenance and renovation. Lead exposures are generated when a piece of lead-based painted steel is heated to its melting point either by an oxyacetylene torch or an arc welder. In this situation, lead becomes airborne as a volatilized component of the coating.

The amount of time a worker may spend actually welding or cutting can vary from only a few minutes up to a full shift. In addition, the coating being worked on may consist of several layers of lead-based paint, each of which could contain as much as 50% lead. Taken together, these factors suggest that a worker's exposure to airborne lead during welding or cutting activities can vary widely and may be exceedingly high. Lead burning, a process by which virgin or alloyed lead is melted with a torch or otherwise fused to another lead object, is typically performed in maintenance operations on electrostatic precipitators or during the installation of lead shot, bricks, or sheets in the walls or floors of health-care x-ray units or industrial sites. Lead health hazards in this operation, as in welding and torch cutting, are from lead that is superheated and released into the worker's breathing zone in the form of a fume.

- Engineering Controls. The engineering controls that can be used, depending on feasibility, are:
  - ⇒ Local exhaust ventilation (LEV) that has a flanged hood and is equipped with HEPA filtration may be appropriate where the use of LEV does not create safety hazards. Use of a flexible duct system requires that the welder be instructed to keep the duct close to the emission source and to ensure the duct is not twisted or bent.
  - ⇒ A fume-extractor gun that removes fumes from the point of generation is an alternative to an exhaust hood for gas-shielded arc-welding processes. Such extraction systems can

reduce breathing zone concentrations by 70% or more. These systems require that the gun and shielding gas flow rates be carefully balanced to maintain weld quality and still provide good exhaust flow.

- ⇒ A longer cutting torch can be used in some situations to increase the distance from the lead source to the worker's breathing zone.
- ⇒ Hydraulic shears can sometimes be used to mechanically cut steel that is coated with lead based-paint. The use of this method is limited by the ability of the shears to reach the cutting area.
- ⇒ Whenever possible, pneumatic air tools should be used to remove rivets in lieu of burning and torch cutting.

- Work Practice Controls. The following work practice controls will help to reduce worker exposures to lead during welding, burning, and torch cutting:

- ⇒ Strip back all lead-based paint for a distance of at least 4 inches in all directions from the area of heat application. Chemical stripping, vacuum-shrouded hand tools, vacuum blasting, or other suitable method may be used. However, in enclosed spaces, strip back or protect the workers with air-line respirators.
- ⇒ Ensure that workers avoid the smoke plume by standing to the side or upwind of the cutting torch whenever the configuration of the job permits.
- ⇒ Prohibit burning to remove lead-based paint. Paint should be removed using other methods, such as chemical stripping, power tools (e.g. needle guns) with vacuum attachments, etc.

## 2. MANUAL SCRAPING AND SANDING OF LEAD-BASED PAINTS.

Hand scraping of lead-based paints involves the use of a hand-held scraping tool to remove paint from coated surfaces. The health hazards in this activity are caused by the lead dust and paint chips produced in the scraping process. Hand sanding can also produce excessive dust. These activities are typically performed during residential and commercial/institutional lead abatement projects.

- Engineering and Work Practice Controls. Controls that employers can implement to protect workers performing scraping and sanding of lead-based paints are:

- ⇒ Use of wet-sanding and wet-scraping methods in conjunction with HEPA vacuuming or HEPA mechanical ventilation. Wet methods include misting of peeling paint with water before scraping, and sanding and misting of debris prior to sweeping or vacuuming.
- ⇒ Use of shrouded power tools with HEPA vacuum attachments. The shroud must be kept flush with the surface.
- ⇒ Use of techniques with known low exposure potential, such as encapsulation and removal or replacement instead of hand scraping and hand sanding.

## VI. REGULATED AREAS:

The Contracting Company will ensure a work plan is designed and implemented that will:

- ✓ Eliminate lead dust or fumes from exposing both work personnel and building occupants.

- ✓ Ensure that unauthorized persons cannot access the area.
- ✓ Use of signage - warning signs shall be provided and displayed at each regulated area, and is posted at all approaches to regulated areas.

## VII. TRAINING:

All employees will be provided awareness training in this program in order to be familiar with the potential hazards and proper safe work procedures to follow if exposed to this health hazard.

Training and information will be provided for all employees exposed to lead at or above the action level, or who may suffer skin or eye irritation from lead. The training will inform exposed employees of:

- Specific hazards associated with their work environment,
- Protective measures which can be taken,
- Danger of lead to their bodies (including their reproductive systems), and
- Their rights under the standard.

# Hearing Conservation Program

## Geddis Paving & Excavating, Inc. Hearing Conservation Safety Program

**REGULATORY STANDARD:** OSHA - 29 CFR 1910.95

**BASIS:** Approximately 16 million workers are exposed to excessive on-the-job noise levels on an annual basis. In addition to causing hearing loss by destroying the inner ear, noise can put stress on other parts of the body causing fatigue and unnecessary psychological stress. This preventable added burden to the body can result in increased injury rates. This poses a serious problem for exposed workers and their employer. The OSHA Occupational Noise Exposure Standard establishes uniform requirements to make sure that the noise hazards associated with all U.S. workplaces are evaluated, and that the hazards associated with high noise are transmitted to all affected workers so that mitigation measures can be instituted.

**GENERAL:** Geddis Paving & Exc., Inc. employees are not normally exposed to high levels of sound. However we **will** ensure that the noise hazards within our facility and work areas are evaluated, and that information concerning the hazards of noise exposure is transmitted to all employees. This standard practice instruction is intended to address comprehensively the issues of; evaluating the potential hazards of noise, communicating information concerning these hazards, and establishing appropriate protective measures for all employees.

**RESPONSIBILITY:** The company Safety Director, Jeremy Oliver is solely responsible for all facets of this program and has full authority to make necessary decisions to ensure success of the program. The Safety Director will develop written detailed instructions covering each of the basic elements in this program, and is the sole person authorized to amend these instructions. This company has expressly authorized the Safety Director to halt any operation of the company where there is danger of serious personal injury.

**Occupational Noise Exposure Program**

**Written program.** Development and maintenance of a written noise exposure program. This standard practice instruction will be reviewed on annual basis and updated as changes in company occur, or as changes are noted to 29 CFR 1910.95 which require revision of this document. Effective implementation of this program requires support from all levels of management within this company. This written program will be communicated to all personnel that are affected by it. It encompasses the total workplace, regardless of the number of workers employed or the number of work shifts. It is designed to establish clear goals, and objectives.

**Audiometric testing program.** This company will maintain an audiometric testing program in accordance with the following guidelines.

Geddis Paving & Excavating will establish and maintain an audiometric testing program free of charge for employees whose exposures equal or exceed an 8-hour time-weighted average of 85 decibels.

Geddis Paving & Excavating will provide an audiogram with the first 6 months of exposure.

Employees will be notified in writing within 21 days of any Standard Threshold Shift.

Audio metric tests will be performed by a licensed or certified audiologist, otolaryngologist, or other physician, or by a technician who is certified by the Council of Accreditation in Occupational Hearing Conservation. A technician who performs audiometric tests must be responsible to an audiologist, otolaryngologist or physician.

All audiograms obtained pursuant to this standard practice instruction will meet the requirements of 29 CFR 1910.95, Appendix C: Audiometric Measuring Instruments.

Geddis Paving & Excavating will provide protection against the effects of noise exposure when the sound levels within our facility exceed those shown in Table, when measured on the A scale of a standard sound level meter at slow response.

**PERMISSIBLE NOISE EXPOSURES**

<b>Duration Per Day, Hours</b>	<b>Sound Level DBA Slow Response</b>
8	90
6	92
4	95
3	97
2	100
1.5	102
1	105

.5	110
.25 or less	115

**Hearing conservation program.** Geddis Paving & Exc., Inc.s dedicated to providing a safe and healthful working environment. We believe that safety in all operations and activities is of primary importance. Ultimately however, it is the employee's responsibility to seek assistance when required, and to carry out the job in a safe manner. Geddis Paving & Exc., Inc. will administer a continuing, effective hearing conservation program, as described in the following paragraphs, whenever employee noise exposures equal or exceed an 8 hour time weighted average sound level (TWA) of 85 decibels measured on the A scale (slow response) or, equivalently, a dose of fifty percent. Geddis Paving and Excavating will provide noise monitoring on jobsites and must performed regularly. For purposes of the hearing conservation program, employee noise exposures will be computed without regard to any attenuation provided by the use of personal protective equipment.

Hearing protectors. This employer will make 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. Hearing protectors will be replaced at no cost as necessary. Evaluation of noise hazard will determine what hearing protection is required. If a Standard Threshold Shift occurs then hearing protection will be re evaluated.

This employer will ensure that hearing protectors are worn:

Employees will be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors provided.

This employer will provide training in the use and care of all hearing protectors provided to employees.

This employer will ensure proper initial fitting and supervise the correct use of all hearing protectors.

**Training program.** This employer will institute a training program for all employees who are exposed to noise at or above an 8 hour time weighted average of 85 decibels, and will ensure employee participation in such program.

The training program will be repeated annually for each employee included in the hearing conservation program. Information provided in the training program will be updated to be consistent with changes in protective equipment and work processes. Each employee will be informed of the following:

The effects of noise on hearing.

The purpose of hearing protectors, the advantages, disadvantages, and attenuation of various types, and instructions on selection, fitting, use, and care.

The purpose of audiometric testing, and an explanation of the test procedures.

Access to information and training materials. This employer will make available to affected employees or their representatives copies of this standard practice instruction and 29 CFR 1910.95, and will also post a copy in the workplace.

This employer will provide to affected employees any informational materials pertaining to 29 CFR 1910.95 that are supplied by OSHA.

**Recordkeeping.** Exposure measurements. This employer will maintain an accurate record of all employee exposure measurements.

Audiometric tests. This employer will retain all employee audiometric test records. This record will include as a minimum:

Name and job classification of the employee.

Date of the audiogram.

The examiner's name.

Date of the last acoustic or exhaustive calibration of the audiometer.

Employee's most recent noise exposure assessment.

his employer will maintain accurate records of the measurements of the background sound pressure levels in audiometric test rooms.

Record retention. This employer will retain audiometric and related records for at least 4 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.

Access to records. All records cited in this standard practice instruction will be provided upon request to employees, former employees, representatives designated by the individual employee, and representatives of OSHA. The provisions of 29 CFR 1910.20 apply to access to records under this section.

Transfer of records. If this employer ceases to do business, the records will be transferred to the successor employer and maintained by the successor employer. Should the company

cease to function entirely the records will be provided to the respective employees, or as required by current law.

**Audiometric Testing.** Audiometric testing is a crucial component of our hearing conservation program. To safeguard the hearing health of our employees, we conduct annual audiometric testing for employees exposed to noise levels equal to or exceeding 85 dBA on an 8-hour time-weighted average. This ensures early detection of any potential hearing impairment and enables timely intervention.

### **Evaluating Hearing Protection for Specific Noise Environments:**

**Noise Assessment:** Before selecting hearing protection, a thorough noise assessment of the workplace must be conducted. This assessment involves measuring noise levels using calibrated sound measuring instruments to determine the intensity and duration of exposure.

**Exposure Limits:** OSHA sets permissible exposure limits (PELs) for noise exposure in the workplace. These limits define the maximum allowable noise levels over an 8-hour work shift. If noise levels exceed the PEL, employers are required to implement a hearing conservation program, which includes providing hearing protection.

**Hierarchy of Controls:** OSHA's hierarchy of controls mandates that noise hazards should be mitigated through engineering controls (e.g., noise barriers, silencers), administrative controls (e.g., limiting exposure time), and finally, personal protective equipment (PPE) like hearing protectors.

**Hearing Protector Selection:** Based on the noise assessment and hierarchy of controls, suitable hearing protectors can be chosen. These protectors should be appropriate for the specific noise environment, job tasks, and worker comfort.

### **Noise Reduction Rating (NRR) of Hearing Protectors:**

**Understanding NRR:** The NRR is a numerical rating that indicates the amount of noise reduction a hearing protector can provide in decibels (dB). It's a standardized measure that helps users compare the effectiveness of different hearing protection devices.

**Calculation of NRR:** The NRR is determined through laboratory testing, simulating real-world conditions. The protector is worn by a group of subjects in a controlled environment, and their noise exposure is measured with and without the protector. The difference in noise exposure levels is used to calculate the NRR.

**Real-World Application:** While the NRR provides valuable information, it's important to note that real-world effectiveness may be lower than the rated NRR due to factors such as improper fit, incorrect usage, or variation in noise frequencies.

**Usage Instructions:** OSHA mandates that hearing protector manufacturers provide clear usage instructions and guidance on achieving the intended protection level. Employers should ensure that workers are properly trained in how to correctly insert, wear, and maintain their hearing protectors.

**Fit Testing:** To enhance protection, fit testing can be conducted to ensure that the selected protectors fit each individual properly. This involves verifying the seal and effectiveness of the protection.

**Definitions.** Definitions commonly found in the OSHA Occupational Noise Exposure Standard or that relate to the contents of the standard practice instruction.

**Action level**--An 8 hour time weighted average of 85 decibels measured on the A-scale, slow response, or equivalently, a dose of fifty percent.

**Audiogram**--A chart, graph, or table resulting from an audiometric test showing an individual's hearing threshold levels as a function of frequency.

**Audiologist**--A professional, specializing in the study and rehabilitation of hearing, who is certified by the American Speech-Language-Hearing Association or licensed by a state board of examiners.

**Baseline audiogram**--The audiogram against which future audiograms are compared.

**Criterion sound level**--A sound level of 90 decibels.

**Decibel (dB)**--Unit of measurement of sound level.

**Hertz (Hz)**--Unit of measurement of frequency, numerically equal to cycles per second.

**Medical pathology**--A disorder or disease. For purposes of this instruction, a condition or disease affecting the ear, which should be treated by a physician specialist.

**Noise dose**--The ratio, expressed as a percentage, of (1) the time integral, over a stated time or event, of the 0.6 power of the measured SLOW exponential time-averaged, squared A-weighted sound pressure and (2) the product of the criterion duration (8 hours) and the 0.6 power of the squared sound pressure corresponding to the criterion sound level (90 dB).

**Noise dosimeter**--An instrument that integrates a function of sound pressure over a period of time in such a manner that it directly indicates a noise dose.

**Otolaryngologist**--A physician specializing in diagnosis and treatment of disorders of the ear, nose and throat.

**Representative exposure**--Measurements of an employee's noise dose or 8 hour time weighted average sound level that the employers deem to be representative of the exposures of other employees in the workplace.

**Sound level**--Ten times the common logarithm of the ratio of the square of the measured A-weighted sound pressure to the square of the standard reference pressure of 20 micropascals. Unit: decibels (dB). For use with this instruction, SLOW time response, in accordance with ANSI S1.4-1971 (R1976), is required.

**Sound level meter**--An instrument for the measurement of sound level.

**Time weighted average sound level**--That sound level, which if constant over an 8 hour exposure, would result in the same noise dose as is measured.

# SILICA WRITTEN EXPOSURE PLAN

## CRYSTALLINE SILICA

### Information, Safety Policy, Program and Procedures

#### INFORMATION

##### ***What is crystalline silica?***

Crystalline silica is a basic component of soil, sand, granite, and many other minerals. Quartz is the most common form of crystalline silica. Cristobalite and tridymite are two other forms of crystalline silica. All three forms may become respirable (breathable) size particles when workers chip, cut, drill, or grind objects that contain crystalline silica, such as concrete block or pipe.

##### ***What are the hazards of crystalline silica?***

Silica exposure remain a serious threat to nearly 2 million U.S. workers. The health hazards associated with silica exposures are demonstrated by the fatalities and disabling illnesses that continue to occur within the construction industry. Crystalline silica has been classified as a human lung carcinogen. Breathing crystalline silica dust can cause silicosis, which is disabling, or fatal. The effects of silica are **cumulative**, affecting the ability of the lungs to take in oxygen. Respirable (breathable) silica dust enters the lungs and forms scar tissue, thus reducing the lungs ability to process oxygen.

##### ***Where are construction workers exposed to crystalline silica?***

Exposure occurs during many different construction activities. Most exposures generally occur during sand blasting, jack hammering, concrete mixing, concrete drilling, brick and **concrete block/pipe cutting and sawing**, tuck pointing and tunneling operations.

This Respirable Crystalline Silica Program was developed to prevent employee exposure to hazardous levels of Respirable Crystalline Silica that could result through construction activities or nearby construction activities occurring on worksites. Respirable Crystalline Silica exposure at hazardous levels can lead to lung cancer, silicosis, chronic obstructive pulmonary disease, and kidney disease. It

is intended to meet the requirements of the Respirable Crystalline Silica Construction Standard (29 CFR 1926.1153) established by the Occupational Safety and Health Administration (OSHA).

All work involving chipping, cutting, drilling, grinding, or similar activities on materials containing Crystalline Silica can lead to the release of respirable-sized particles of Crystalline Silica (i.e. Respirable Crystalline Silica). Crystalline Silica is a basic component of soil, sand, granite and many other minerals. Quartz is the most common form of Crystalline Silica. Many materials found on construction sites include Crystalline Silica; including but not limited to – cement, concrete, asphalt, pre-formed structures (inlets, pipe, etc.) and others. Consequently, this program has been developed to address and control these potential exposures to prevent our employees from experiencing the effects of occupational illnesses related to Respirable Crystalline Silica exposure.

### **POLICY**

Geddis Paving & Excavating firmly believes protecting the health and safety of our employees is everyone's responsibility. This responsibility begins with upper management providing the necessary support to properly implement this program. However, all levels of the organization assume some level of responsibility for this program including the following positions.

### **PROGRAM**

This Respirable Crystalline Silica Program applies to all employees who have the potential to be exposed to Respirable Crystalline Silica when covered by the OSHA Standard. The OSHA Respirable Crystalline Silica Construction Standard applies to all occupational exposures to Respirable Crystalline Silica in construction work, except where employee exposure will remain below 25 micrograms of Respirable Crystalline Silica per cubic meter of air ( $25 \mu\text{g}/\text{m}^3$ ) as an 8-hour time-weighted average (TWA) under any foreseeable conditions.

### **PROCEDURES**

#### **Safety Director and Project Manager Responsibilities**

- Conduct job site assessments for Silica containing materials and perform employee Respirable Crystalline Silica hazard assessments in order to determine if an employee's exposure will be above  $25 \mu\text{g}/\text{m}^3$  as an 8-hour TWA under any foreseeable conditions
- Select and implement into the project's ECP the appropriate control measures in accordance with the Construction Tasks identified in OSHA's Construction Standard Table 1; and potentially including (but not limited to) - a written Exposure Control Plan (ECP), exposure monitoring, Hazard Communication training, medical surveillance, housekeeping and others.  
NOTE: OSHA's Construction Standard Table 1 is a list of 18 common construction tasks along with acceptable exposure control methods and work practices that limit exposure for those tasks.
- Ensure that the materials, tools, equipment, personal protective equipment (PPE), and other resources (such as worker training) required to fully implement and maintain this Respirable Crystalline Silica Program are in place and readily available if needed.
- Ensure that Project Managers, Site Managers, Competent Persons, and employees are educated in the hazards of Silica exposure and trained to work safely with Silica in accordance with OSHA's Respirable Crystalline Silica Construction Standard and OSHA's Hazard

Communication Standard. Managers and Competent Persons may receive more advanced training than other employees.

- Maintain written records of training (for example, proper use of respirators), ECPs, inspections (for equipment, PPE, and work methods/practices), medical surveillance (under lock and key), respirator medical clearances (under lock and key) and fit-test results.
- Conduct an annual review (or more often if conditions change) of the effectiveness of this program and any active project ECP's that extend beyond a year. This includes a review of available dust control technologies to ensure these are selected and used when practical.
- Coordinate work with other employers and contractors to ensure a safe work environment relative to Silica exposure.
- Ensure all applicable elements of this Respirable Crystalline Silica Program are implemented on the project including the selection of a Competent Person.
- Assist the Safety Director in conducting job site assessments for Silica containing materials and perform employee Respirable Crystalline Silica hazard assessments in order to determine if an ECP, exposure monitoring, and medical surveillance is necessary.
- Assist in the selection and implementation of the appropriate control measures in accordance with the Construction Tasks identified in OSHA's Construction Standard Table 1; and potentially including (but not limited to) - a written Exposure Control Plan (ECP), exposure monitoring, Hazard Communication training, medical surveillance, housekeeping and others.
- Ensure that employees using respirators have been properly trained, medically cleared, and fit-tested in accordance with the company's Respiratory Protection Program. This process will be documented.
- Ensure that work is conducted in a manner that minimizes and adequately controls the risk to workers and others. This includes ensuring that workers use appropriate engineering controls, work practices, and wear the necessary PPE.
- Where there is risk of exposure to Silica dust, verify employees are properly trained on the applicable contents of this program, the project-specific ECP, and the applicable OSHA Standards (such as Hazard Communication). Ensure employees are provided appropriate PPE when conducting such work.

### **Competent Person/Job-Site Supervisor/Foreman Responsibilities**

- Make frequent and regular inspections of job sites, materials, and equipment to implement the written ECP.
- Identify existing and foreseeable Respirable Crystalline Silica hazards in the workplace and take prompt corrective measures to eliminate or minimize them.
- Notify the Project Manager and/or Safety Director of any deficiencies identified during inspections in order to coordinate and facilitate prompt corrective action.
- Assist the Project Manager and Safety Director in conducting job site assessments for Silica containing materials and perform employee Respirable Crystalline Silica hazard assessments in order to determine if an ECP, exposure monitoring, and medical surveillance is necessary.

## **REQUIREMENTS**

### Specified Exposure Control Methods

When possible and applicable, Geddis Paving & Excavating will conduct activities with potential Silica exposure to be consistent with OSHA’s Construction Standard Table 1. Supervisors will ensure each employee under their supervision and engaged in a task identified on OSHA’s Construction Standard Table 1 have fully and properly implemented the engineering controls, work practices, and respiratory protection specified for the task on Table 1 (unless Geddis Paving & Excavating has assessed and limited the exposure of the employee to Respirable Crystalline Silica in accordance with the Alternative Exposure Control Methods Section of this program).

The task(s) being performed by Geddis Paving & Excavating identified on OSHA’s Construction Standard Table 1 is/are:

Table 1: Specified Exposure Control Methods When Working With Materials Containing Crystalline Silica

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
1	Stationary masonry saws	<ul style="list-style-type: none"> <li>Use saw equipped with integrated water delivery system that continuously feeds water to the blade.</li> <li>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</li> </ul>	None	None
2a	Handheld power saws (any blade diameter) when used outdoors	<ul style="list-style-type: none"> <li>Use saw equipped with integrated water delivery system that continuously feeds water to the blade.</li> <li>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</li> </ul>	None	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
2b	Handheld power saws (any blade diameter) when used indoors or in an enclosed area	<ul style="list-style-type: none"> <li>Use saw equipped with integrated water delivery system that continuously feeds water to the blade.</li> <li>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</li> </ul>	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
3	Handheld power saws for cutting fiber-cement	<ul style="list-style-type: none"> <li>Use saw equipped with commercially available dust collection system.</li> </ul>	None	None

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
	board (with blade diameter of 8 inches or less) for tasks performed outdoors only	<ul style="list-style-type: none"> <li>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</li> <li>Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency.</li> </ul>		
4a	Walk-behind saws when used outdoors	<ul style="list-style-type: none"> <li>Use saw equipped with integrated water delivery system that continuously feeds water to the blade.</li> <li>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</li> </ul>	None	None
4b	Walk-behind saws when used indoors or in an enclosed area	<ul style="list-style-type: none"> <li>Use saw equipped with integrated water delivery system that continuously feeds water to the blade.</li> <li>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</li> </ul>	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
5	Drivable saws for tasks performed outdoors only	<ul style="list-style-type: none"> <li>Use saw equipped with integrated water delivery system that continuously feeds water to the blade.</li> <li>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</li> </ul>	None	None
6	Rig-mounted core saws or drills	<ul style="list-style-type: none"> <li>Use tool equipped with integrated water delivery system that supplies water to cutting surface.</li> <li>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</li> </ul>	None	None

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
7	Handheld and stand-mounted drills (including impact and rotary hammer drills)	<ul style="list-style-type: none"> <li>Use drill equipped with commercially available shroud or cowling with dust collection system.</li> <li>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</li> <li>Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism.</li> <li>Use a HEPA-filtered vacuum when cleaning holes.</li> </ul>	None	None
8	Dowel drilling rigs for concrete for tasks performed outdoors only	<ul style="list-style-type: none"> <li>Use shroud around drill bit with a dust collection system.</li> <li>Dust collector must have a filter with 99% or greater efficiency and a filter cleaning mechanism.</li> <li>Use a HEPA-filtered vacuum when cleaning holes.</li> </ul>	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
9a	Vehicle-mounted drilling rigs for rock and concrete	<ul style="list-style-type: none"> <li>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.</li> </ul>	None	None
9b	Vehicle-mounted drilling rigs for rock and concrete	<ul style="list-style-type: none"> <li>Operate from within an enclosed cab and use water for dust suppression on drill bit.</li> </ul>	None	None
10a	Jackhammers and handheld powered chipping tools when used outdoors	<ul style="list-style-type: none"> <li>Use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact.</li> </ul>	None	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
10b	Jackhammers and handheld	<ul style="list-style-type: none"> <li>Use tool with water delivery system that supplies a continuous stream</li> </ul>	N95 (or Greater	

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
	powered chipping tools when used indoors or in an enclosed area	or spray of water at the point of impact.	Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
<b>10c</b>	Jackhammers and handheld powered chipping tools when used outdoors	<ul style="list-style-type: none"> <li>Use tool equipped with commercially available shroud and dust collection system.</li> <li>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</li> <li>Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism.</li> </ul>	None	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
<b>10d</b>	Jackhammers and handheld powered chipping tools when used indoors or in an enclosed area	<ul style="list-style-type: none"> <li>Use tool equipped with commercially available shroud and dust collection system.</li> <li>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</li> <li>Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism.</li> </ul>	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
<b>11</b>	Handheld grinders for mortar removal (i.e., tuckpointing)	<ul style="list-style-type: none"> <li>Use grinder equipped with commercially available shroud and dust collection system.</li> <li>Operate and maintain tool in accordance with manufacturer's</li> </ul>	N95 (or Greater Efficiency) Filtering Facepiece	Powered Air-Purifying Respirator

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
		<p>instructions to minimize dust emissions.</p> <ul style="list-style-type: none"> <li>Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism.</li> </ul>	or Half Mask	(PAPR) with P100 Filters
<b>12a</b>	Handheld grinders for uses other than mortar removal for tasks performed outdoors only	<ul style="list-style-type: none"> <li>Use grinder equipped with integrated water delivery system that continuously feeds water to the grinding surface.</li> <li>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</li> </ul>	None	None
<b>12b</b>	Handheld grinders for uses other than mortar removal when used outdoors	<ul style="list-style-type: none"> <li>Use grinder equipped with commercially available shroud and dust collection system.</li> <li>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</li> <li>Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism.</li> </ul>	None	None
<b>12c</b>	Handheld grinders for uses other than mortar removal when used	<ul style="list-style-type: none"> <li>Use grinder equipped with commercially available shroud and dust collection system.</li> <li>Operate and maintain tool in accordance with manufacturer's</li> </ul>	None	N95 (or Greater Efficiency) Filtering Facepiece

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
	indoors or in an enclosed area	<p>instructions to minimize dust emissions.</p> <ul style="list-style-type: none"> <li>Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism.</li> </ul>		or Half Mask
<b>13a</b>	Walk-behind milling machines and floor grinders	<ul style="list-style-type: none"> <li>Use machine equipped with integrated water delivery system that continuously feeds water to the cutting surface.</li> <li>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</li> </ul>	None	None
<b>13b</b>	Walk-behind milling machines and floor grinders	<ul style="list-style-type: none"> <li>Use machine equipped with dust collection system recommended by the manufacturer.</li> <li>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.</li> <li>Dust collector must provide the air flow recommended by the manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism.</li> <li>When used indoors or in an enclosed area, use a HEPA-filtered vacuum to remove loose dust in between passes.</li> </ul>	None	None
<b>14</b>	Small drivable milling machines (less than half-lane)	<ul style="list-style-type: none"> <li>Use a machine equipped with supplemental water sprays designed to suppress dust.</li> <li>Water must be combined with a surfactant.</li> <li>Operate and maintain machine to minimize dust emissions.</li> </ul>	None	None

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
15a	Large drivable milling machines (half-lane and larger) for cuts of any depth on asphalt only	<ul style="list-style-type: none"> <li>Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust.</li> <li>Operate and maintain machine to minimize dust emissions.</li> </ul>	None	None
15b	Large drivable milling machines (half-lane and larger) for cuts of four inches in depth or less on any substrate	<ul style="list-style-type: none"> <li>Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust.</li> <li>Operate and maintain machine to minimize dust emissions.</li> </ul>	None	None
15c	Large drivable milling machines (half-lane and larger) for cuts of four inches in depth or less on any substrate	<ul style="list-style-type: none"> <li>Use a machine equipped with supplemental water spray designed to suppress dust.</li> <li>Water must be combined with a surfactant.</li> <li>Operate and maintain machine to minimize dust emissions.</li> </ul>	None	None
16	Crushing machines	<ul style="list-style-type: none"> <li>Use equipment designed to deliver water spray or mist for dust suppression at crusher and other points where dust is generated (e.g., hoppers, conveyers, sieves/sizing or vibrating components, and discharge points).</li> <li>Operate and maintain machine in accordance with manufacturer's instructions to minimize dust emissions.</li> <li>Use a ventilated booth that provides fresh, climate-controlled air to the operator, or a remote control station.</li> </ul>	None	None
17a	Heavy equipment and utility vehicles used to abrade or fracture	<ul style="list-style-type: none"> <li>Operate equipment from within an enclosed cab.</li> </ul>	None	None

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
	silica-containing materials (e.g., hoe-ramming, rock ripping) or used during demolition activities involving silica-containing materials			
<b>17b</b>	Heavy equipment and utility vehicles used to abrade or fracture silica-containing materials (e.g., hoe-ramming, rock ripping) or used during demolition activities involving silica-containing materials	<ul style="list-style-type: none"> <li>When employees outside of the cab are engaged in the task, apply water and/or dust suppressants as necessary to minimize dust emissions.</li> </ul>	None	None
<b>18a</b>	Heavy equipment and utility vehicles for tasks such as grading and excavating but not including demolishing, abrading, or fracturing silica-containing materials	<ul style="list-style-type: none"> <li>Apply water and/or dust suppressants as necessary to minimize dust emissions.</li> </ul>	None	None

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
<b>18b</b>	Heavy equipment and utility vehicles for tasks such as grading and excavating but not including demolishing, abrading, or fracturing silica-containing materials	<ul style="list-style-type: none"> <li>When the equipment operator is the only employee engaged in the task, operate equipment from within an enclosed cab.</li> </ul>	None	None

When implementing the control measures specified in Table 1, Geddis Paving & Excavating shall:

- For tasks performed indoors or in enclosed areas, provide a means of exhaust as needed to minimize the accumulation of visible airborne dust;
- For tasks performed using wet methods, apply water at flow rates sufficient to minimize release of visible dust;
- For measures implemented that include an enclosed cab or booth, ensure that the enclosed cab or booth:
  - o Is maintained as free as practicable from settled dust;
  - o Has door seals and closing mechanisms that work properly;
  - o Has gaskets and seals that are in good condition and working properly;
  - o Is under positive pressure maintained through continuous delivery of fresh air;
  - o Has intake air that is filtered through a filter that is 95% efficient in the 0.3-10.0 µm range (e.g., MERV-16 or better); and
  - o Has heating and cooling capabilities.
- Where an employee performs more than one task included on OSHA’s Construction Standard Table 1 during the course of a shift, and the total duration of all tasks combined is more than four hours, the required respiratory protection for each task is the respiratory protection specified for more than four hours per shift. If the total duration of all tasks on Table 1 combined is less than four hours, the required respiratory protection for each task is the respiratory protection specified for less than four hours per shift.

## Alternative Exposure Control Methods

Alternative Exposure Control Methods apply for tasks not listed in OSHA's Construction Standard Table 1, or where Geddis Paving & Excavating cannot fully and properly implement the engineering controls, work practices, and respiratory protection described in Table 1.

First, Geddis Paving & Excavating will assess the exposure of each employee who is or may reasonably be expected to be exposed to Respirable Crystalline Silica at or above the Action Level in accordance with either the Performance Option or the Scheduled Monitoring Option.

- **Performance Option** – Geddis Paving & Excavating will assess the 8-hour TWA exposure for each employee on the basis of any combination of air monitoring data or objective data sufficient to accurately characterize employee exposures to Respirable Crystalline Silica.
  
- **Scheduled Monitoring Option:**
  - Geddis Paving & Excavating will perform initial monitoring to assess the 8-hour TWA exposure for each employee on the basis of one or more personal breathing zone air samples that reflect the exposures of employees on each shift, for each job classification, and in each work area. Where several employees perform the same tasks on the same shift and in the same work area, Geddis Paving & Excavating will plan to monitor a representative fraction of these employees. When using representative monitoring, Geddis Paving & Excavating will sample the employee(s) who are expected to have the highest exposure to Respirable Crystalline Silica.
  - If initial monitoring indicates that employee exposures are below the Action Level, Geddis Paving & Excavating will probably discontinue monitoring for those employees whose exposures are represented by such monitoring.
  - Where the most recent exposure monitoring indicates that employee exposures are at or above the Action Level but at or below the PEL, Geddis Paving & Excavating will repeat such monitoring within six months of the most recent monitoring.
  - Where the most recent exposure monitoring indicates that employee exposures are above the PEL, Geddis Paving & Excavating will repeat such monitoring within three months of the most recent monitoring.
  - Where the most recent (non-initial) exposure monitoring indicates that employee exposures are below the Action Level, Geddis Paving & Excavating will repeat such monitoring within six months of the most recent monitoring until two consecutive measurements, taken seven or more days apart, are below the Action Level, at which time Geddis Paving & Excavating will probably discontinue monitoring for those employees whose exposures are represented by such monitoring, except when a reassessment is required. Geddis Paving & Excavating will reassess exposures whenever a change in the production, process, control equipment, personnel, or work practices may reasonably be expected to result in new or additional exposures at or above the Action Level, or when

Geddis Paving & Excavating has any reason to believe that new or additional exposures at or above the Action Level have occurred.

Geddis Paving & Excavating will ensure that all Respirable Crystalline Silica samples taken to satisfy the monitoring requirements of this program and OSHA are collected by a qualified individual (i.e. a Certified Industrial Hygienist) and the samples are evaluated by a qualified laboratory (i.e. accredited to ANS/ISO/IEC Standard 17025:2005 with respect to Crystalline Silica analyses by a body that is compliant with ISO/IEC Standard 17011:2004 for implementation of quality assessment programs).

Within five working days after completing an exposure assessment, Geddis Paving & Excavating will individually notify each affected employee in writing of the results of that assessment or post the results in an appropriate location accessible to all affected employees.

Whenever an exposure assessment indicates that employee exposure is above the PEL, Geddis Paving & Excavating will describe in the written notification the corrective action being taken to reduce employee exposure to or below the PEL.

Where air monitoring is performed, Geddis Paving & Excavating will provide affected employees or their designated representatives an opportunity to observe any monitoring of employee exposure to Respirable Crystalline Silica. When observation of monitoring requires entry into an area where the use of protective clothing or equipment is required for any workplace hazard, Geddis Paving & Excavating will provide the observer with protective clothing and equipment at no cost and shall ensure that the observer uses such clothing and equipment.

Once air monitoring has been performed, Geddis Paving & Excavating will determine its method of compliance based on the monitoring data and the hierarchy of controls. Geddis Paving & Excavating will use engineering and work practice controls to reduce and maintain employee exposure to Respirable Crystalline Silica to or below the PEL, unless Geddis Paving & Excavating can demonstrate that such controls are not feasible. Wherever such feasible engineering and work practice controls are not sufficient to reduce employee exposure to or below the PEL, Geddis Paving & Excavating will nonetheless use them to reduce employee exposure to the lowest feasible level and shall supplement them with the use of respiratory protection.

In addition to the requirements of this program, Geddis Paving & Excavating will comply with other programs and OSHA standards (such as 29 CFR 1926.57 [Ventilation]), when applicable where abrasive blasting is conducted using Crystalline Silica-containing blasting agents, or where abrasive blasting is conducted on substrates that contain Crystalline Silica.

## **Control Methods**

Geddis Paving & Excavating will provide control methods that are either consistent with Table 1 or otherwise minimize worker exposures to Silica. These exposure control methods can include engineering controls, work practices, and respiratory protection. Listed below are control methods to be used when Table 1 is not followed:

## **Respiratory Protection**

Where respiratory protection is required by this program, Geddis Paving & Excavating will provide each employee an appropriate respirator that complies with the requirements of the company's Respiratory Protection Program and the OSHA Respiratory Protection Standard (29 CFR 1910.134). Respiratory protection is required where specified by the OSHA Construction Standard Table 1, for tasks not listed in Table 1, or where the company has not fully and properly implemented the engineering controls, work practices, and respiratory protection described in Table 1. Situations requiring respiratory protection include:

- Where exposures exceed the PEL during periods necessary to install or implement feasible engineering and work practice controls;
- Where exposures exceed the PEL during tasks, such as certain maintenance and repair tasks, for which engineering and work practice controls are not feasible; and
- During tasks for which an employer has implemented all feasible engineering and work practice controls and such controls are not sufficient to reduce exposures to or below the PEL.

## **Housekeeping**

Geddis Paving & Excavating does not allow dry sweeping or dry brushing where such activity could contribute to employee exposure to Respirable Crystalline Silica unless wet sweeping, HEPA-filtered vacuuming, or other methods that minimize the likelihood of exposure are not feasible.

Geddis Paving & Excavating does not allow compressed air to be used to clean clothing or surfaces where such activity could contribute to employee exposure to Respirable Crystalline Silica unless:

- The compressed air is used in conjunction with a ventilation system that effectively captures the dust cloud created by the compressed air; or
- No alternative method is feasible.

## **Written Exposure Control Plan**

When employee exposure on a construction project is expected to be at or above the Action Level, a Written Exposure Control Plan (ECP) will be established and implemented. This ECP will contain at least the following elements:

- A description of the tasks in the workplace that involve exposure to Respirable Crystalline Silica;
- A description of the engineering controls, work practices, and respiratory protection used to limit employee exposure to Respirable Crystalline Silica for each task;
- A description of the housekeeping measures used to limit employee exposure to Respirable Crystalline Silica; and
- A description of the procedures used to restrict access to work areas, when necessary, to minimize the number of employees exposed to Respirable Crystalline Silica and their level of exposure, including exposures generated by other employers or sole proprietors.

The written ECP will designate a Competent Person to make frequent and regular inspections of job sites, materials, and equipment to ensure the ECP is implemented.

The written ECP will be reviewed at least annually to evaluate the effectiveness of it and update it as necessary. Having said this, ECP's are project specific and most project durations do not exceed a year. The written ECP will be readily available for examination and copying, upon request, to each employee covered by this program and/or ECP, their designated representatives, and OSHA.

## **Medical Surveillance**

Medical surveillance will be made available for each employee who will be required to use a respirator for 30 or more days per year due to their Respirable Crystalline Silica exposure. Medical surveillance (i.e. medical examinations and procedures) will be performed by a PLHCP and provided at no cost to the employee at a reasonable time and place.

Geddis Paving & Excavating will make available an initial (baseline) medical examination within 30 days after initial assignment, unless the employee has received a medical examination that meets the requirements of the OSHA Respirable Crystalline Silica Construction Standard within the last three years. The examination shall consist of:

- A medical and work history, with emphasis on past, present, and anticipated exposure to Respirable Crystalline Silica, dust, and other agents affecting the respiratory system in addition to any history of respiratory system dysfunction, including signs and symptoms of respiratory disease (e.g., shortness of breath, cough, wheezing), history of tuberculosis, and smoking status and history;
- A physical examination with special emphasis on the respiratory system;
- A chest X-ray (a single postero-anterior radiographic projection or radiograph of the chest at full inspiration recorded on either film [no less than 14 x 17 inches and no more than 16 x 17 inches] or digital radiography systems) interpreted and classified according to the International Labor Office (ILO) International Classification of Radiographs of Pneumoconiosis by a NIOSH-certified B Reader;
- A pulmonary function test to include forced vital capacity (FVC) and forced expiratory volume in one second (FEV1) and FEV1/FVC ratio, administered by a spirometry technician with a current certificate from a NIOSH-approved spirometry course;
- Testing for latent tuberculosis infection; and
- Any other tests deemed appropriate by the PLHCP.

Geddis Paving & Excavating will make available medical examinations that include the aforementioned procedures (except testing for latent tuberculosis infection) at least every three years. If recommended by the PLHCP, periodic examinations can be more frequently than every three years. Geddis Paving & Excavating will ensure that the examining PLHCP has a copy of the OSHA Respirable Crystalline Silica Construction Standard, this program, and the following information:

- A description of the employee's former, current, and anticipated duties as they relate to the employee's occupational exposure to Respirable Crystalline Silica;
- The employee's former, current, and anticipated levels of occupational exposure to Respirable Crystalline Silica;
- A description of any personal protective equipment (PPE) used or to be used by the employee, including when and for how long the employee has used or will use that equipment; and
- Information from records of employment-related medical examinations previously provided to the employee and currently within the control of Geddis Paving & Excavating.

Geddis Paving & Excavating will ensure that the PLHCP explains to the employee the results of the medical examination and provides each employee with a written medical report within 30 days of each medical examination performed. The written report shall contain:

- A statement indicating the results of the medical examination, including any medical condition(s) that would place the employee at increased risk of material impairment to health from exposure to Respirable Crystalline Silica and any medical conditions that require further evaluation or treatment;
- Any recommended limitations on the employee's use of respirators;
- Any recommended limitations on the employee's exposure to Respirable Crystalline Silica; and;
- A statement that the employee should be examined by a Specialist if the chest X-ray is classified as 1/0 or higher by the B Reader, or if referral to a Specialist is otherwise deemed appropriate by the PLHCP.

Geddis Paving & Excavating will also obtain a written medical opinion from the PLHCP within 30 days of the medical examination. The written opinion shall contain only the following in order to protect the employee's privacy:

- The date of the examination;
- A statement that the examination has met the requirements of the OSHA Respirable Crystalline Silica Construction Standard; and
- Any recommended limitations on the employee's use of respirators.

If the employee provides written authorization, the written opinion shall also contain either or both of the following:

- Any recommended limitations on the employee's exposure to Respirable Crystalline Silica; and/or
- A statement that the employee should be examined by a Specialist if the chest X-ray is classified as 1/0 or higher by the B Reader, or if referral to a Specialist is otherwise deemed appropriate by the PLHCP.

If the PLHCP's written medical opinion indicates that an employee should be examined by a Specialist, Geddis Paving & Excavating will make available a medical examination by a Specialist within 30 days after receiving the PLHCP's written opinion. Geddis Paving & Excavating will ensure that the examining Specialist is provided with all of the information that the employer is obligated to provide to the PLHCP.

Geddis Paving & Excavating will ensure that the Specialist explains to the employee the results of the medical examination and provides each employee with a written medical report within 30 days of the examination. The written report will contain:

- A statement indicating the results of the medical examination, including any medical condition(s) that would place the employee at increased risk of material impairment to health from exposure to Respirable Crystalline Silica and any medical conditions that require further evaluation or treatment;
- Any recommended limitations on the employee's use of respirators; and

- Any recommended limitations on the employee's exposure to respirable crystalline Silica.

In addition, Geddis Paving & Excavating will obtain a written opinion from the Specialist within 30 days of the medical examination. The written opinion shall contain the following:

- The date of the examination;
- Any recommended limitations on the employee's use of respirators; and
- If the employee provides written authorization, the written opinion shall also contain any recommended limitations on the employee's exposure to Respirable Crystalline Silica.

## **Hazard Communication**

Geddis Paving & Excavating will include Respirable Crystalline Silica in the company's Hazard Communication Program established to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Geddis Paving & Excavating will ensure that each employee has access to labels on containers of Crystalline Silica and those containers respective Safety Data Sheets (SDS's).

All employees will be trained in accordance with the provisions of the OSHA Hazard Communication Standard and the Training Section of this program. This training will cover concerns relating to cancer, lung effects, immune system effects, and kidney effects.

Geddis Paving & Excavating will ensure that each employee with the potential to be exposed at or above the Action Level for Respirable Crystalline Silica can demonstrate knowledge and understanding of at least the following:

- The health hazards associated with exposure to Respirable Crystalline Silica;
- Specific tasks in the workplace that could result in exposure to Respirable Crystalline Silica;
- Specific measures Geddis Paving & Excavating has implemented to protect employees from exposure to Respirable Crystalline Silica, including engineering controls, work practices, and respirators to be used;
- The contents of the OSHA Respirable Crystalline Silica Construction Standard;
- The identity of the Competent Person designated by Geddis Paving & Excavating; and
- The purpose and a description of the company's Medical Surveillance Program.

Geddis Paving & Excavating will make a copy of the OSHA Respirable Crystalline Silica Construction Standard readily available without cost to any employee who requests it.

## **Recordkeeping**

Geddis Paving & Excavating will make and maintain an accurate record of all exposure measurements taken to assess employee exposure to Respirable Crystalline Silica. This record will include at least the following information:

- The date of measurement for each sample taken;
- The task monitored;
- Sampling and analytical methods used;
- Number, duration, and results of samples taken;
- Identity of the laboratory that performed the analysis;

- Type of personal protective equipment (PPE), such as respirators, worn by the employees monitored; and
- Name, social security number, and job classification of all employees represented by the monitoring, indicating which employees were actually monitored.

Geddis Paving & Excavating will ensure that exposure records are maintained and made available in accordance with 29 CFR 1910.1020. Exposure records will be kept for at least 30 years.

The employer shall make and maintain an accurate record of all objective data relied upon to comply with the requirements of the OSHA Respirable Crystalline Silica Construction Standard. This record shall include at least the following information:

- The Crystalline Silica-containing material in question;
- The source of the objective data;
- The testing protocol and results of testing;
- A description of the process, task, or activity on which the objective data were based; and
- Other data relevant to the process, task, activity, material, or exposures on which the objective data were based.

Geddis Paving & Excavating will ensure that objective data are maintained and made available in accordance with 29 CFR 1910.1020. Objective data records will be kept for at least 30 years.

Geddis Paving & Excavating will make and maintain an accurate record for each employee enrolled in the Medical Surveillance portion of this program. The record shall include the following information about the employee:

- Name and social security number;
- A copy of the PLHCPs' and/or Specialists' written medical opinions; and
- A copy of the information provided to the PLHCPs and Specialists.

Geddis Paving & Excavating will ensure that medical records are maintained and made available in accordance with 29 CFR 1910.1020. Medical records will be kept under lock and key for at least the duration of employment plus 30 years. It is necessary to keep these records for extended periods because Silica-related diseases such as cancer often cannot be detected until several decades after exposure. However, if an employee works for an employer for less than one year, the employer does not have to keep the medical records after employment ends, as long as the employer gives those records to the employee.

## **PROGRAM EVALUATION**

This program will be reviewed and evaluated on an annual basis by the Safety Director unless changes to operations, the OSHA Respirable Crystalline Silica Construction Standard (29 CFR 1926.1153), or another applicable OSHA Standard require an immediate re-validation of this program.



# RESPIRATORY WRITTEN PROGRAM

## OBJECTIVE

The Geddis Paving & Excavating Respiratory Protection Program is designed to protect employees by establishing accepted practices for respirator use, providing guidelines for training and respirator selection, and explaining proper storage, use and care of respirators. This program also serves to help the employer and its employees comply with Occupational Safety and Health Administration (OSHA) respiratory protection requirements as found in 29 CFR 1910.134.

## I. ASSIGNMENT OF RESPONSIBILITY

### A. Employer

Geddis Paving & Excavating is responsible for providing respirators to employees when they are necessary for protection against airborne contaminants. Geddis Paving & Excavating will provide respirators that are applicable and suitable for the intended purpose at no charge to affected employees. Any expense associated with training, medical evaluations and respiratory protection equipment will be borne by the company.

### B. Safety Director

The Safety Director for Geddis Paving & Excavating is Jeremy Oliver. The Safety Director is responsible for administering the respiratory protection program. Duties of the Safety Director include:

1. Identifying work areas, process or tasks that require workers to wear respirators.
2. Evaluating hazards.
3. Selecting respiratory protection options.
4. Monitoring respirator use to ensure that respirators are used in accordance with their specifications.
5. Arranging for and/or conducting training.
6. Ensuring proper storage and maintenance of respiratory protection equipment.
7. Conducting qualitative fit testing.
8. Administering the medical surveillance program.
9. Maintaining records required by the program.
10. Evaluating the program.
11. Updating written program, as needed.

### C. Supervisors

Supervisors are responsible for ensuring that the respiratory protection program is implemented in their particular areas. In addition to being knowledgeable about the program requirements for their own protection, supervisors must also ensure that the program is understood and followed by the employees under their charge. Duties of the supervisor include:

1. Ensuring that employees under their supervision (including new hires) receive appropriate training, fit testing, and annual medical evaluation.
2. Ensuring the availability of appropriate respirators and accessories.
3. Being aware of tasks requiring the use of respiratory protection.
4. Enforcing the proper use of respiratory protection when necessary.
5. Ensuring that respirators are properly cleaned, maintained, and stored according to this program.
6. Ensuring that respirators fit well and do not cause discomfort.
7. Continually monitoring work areas and operations to identify respiratory hazards.
8. Coordinating with the Safety Director on how to address respiratory hazards or other concerns regarding this program.

#### D. Employees

Each employee is responsible for wearing his or her respirator when and where required and in the manner in which they are trained. Employees must also:

1. Care for and maintain their respirators as instructed, guard them against damage, and store them in a clean, sanitary location.
2. Inform their supervisor if their respirator no longer fits well, and request a new one that fits properly.
3. Inform their supervisor or the Safety Director of any respiratory hazards that they feel are not adequately addressed in the workplace and of any other concerns that they have regarding this program.
4. Use the respiratory protection in accordance with the manufacturer's instructions and the training received.

## II. **APPLICABILITY**

This program applies to all employees who are required to wear respirators during normal work operations, as well as during some non-routine operations.

In addition, any employee who voluntarily wears a half mask air purifying respirator (APR) 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. Since our company does not work in Immediately Dangerous to Life and Health, (IDLH), we do not provide any procedures in our respiratory program to account for this.

## III. **PROGRAM**

### A. **Hazard Assessment and Respirator Selection**

The Safety Director 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 Safety Director will

conduct a hazard evaluation for each operation, process, or work area to determine which tasks may expose staff to airborne infectious agents.

The following tasks may expose staff to airborne infectious agents:

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Employees with the following job titles may be required to wear N95 respirators when doing these tasks.

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A list of employees included in the respirator program and the specific respiratory protection selected will be maintained by the Safety Director.

(Note: This hazard assessment can be expanded by the Safety Director to include other hazardous materials or other respirator types)

**B. Updating the Hazard Assessment**

The Safety Director 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 supervisor or the Safety Director. The Safety Director will evaluate the potential hazard, and arrange for outside assistance as necessary. The Safety Director 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.

**C. Training**

The Safety Director will provide training to respirator users and their supervisors on the contents of the Geddis Paving & Excavating Respiratory Protection Program and their responsibilities under it, and on the OSHA Respiratory Protection Standard. All affected employees and their supervisors will be trained prior to using a respirator in the workplace. Supervisors will also be trained prior to supervising employees that must wear respirators.

The training course will cover the following topics:

1. the Geddis Paving & Excavating Respiratory Protection Program;
2. the OSHA Respiratory Protection Standard (29 CFR 1910.134);
3. respiratory hazards encountered at Geddis Paving & Excavating and their health affects;
4. proper selection and use of respirators;

5. limitations of respirators;
6. respirator donning and user seal (fit) checks;
7. fit testing;
8. maintenance and storage; and
9. medical signs and symptoms limiting the effective use of respirators.
10. How to properly clean and store respirators.
11. All respirators must be inspected before each use, training will cover how to inspect.

Employees will be retrained annually or as needed. Respirator training will be documented by the Safety Director and the documentation will include the type, model, and size of respirator for which each employee has been trained and fit tested.

#### D. NIOSH Certification

All respirators must be certified by the National Institute for Occupational Safety and Health (NIOSH) and shall 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.

#### E. Voluntary Respirator Use

The Safety Director shall authorize voluntary use of respiratory protective equipment as requested by all other workers on a case-by-case basis, depending on specific workplace conditions and the results of medical evaluations.

The Safety Director will provide all employees who voluntarily choose to wear the above respirators with a copy of Appendix D of the OSHA Respiratory Protection Standard. (Appendix D details the requirements for voluntary use of respirators by employees.) Employees who choose to wear a half face piece APR must comply with the procedures for Medical Evaluation, Respirator Use, Cleaning, Maintenance and Storage portions of this program.

#### F. Medical Evaluation

Employees who are either required to wear respirators, or who choose to wear a half face piece APR voluntarily, must pass a medical exam provided by a Physician or other Licensed Health Care Professional (PLHCP) 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.

US Healthworks will provide the medical evaluations. Medical evaluation procedures are as follows:

1. The medical evaluation will be conducted using the questionnaire provided in Appendix C of the OSHA Respiratory Protection Standard. The Safety Director will provide a copy of this questionnaire to all employees requiring medical evaluations.

2. To the extent feasible, the employer 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.
3. 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 PLHCP. Employees will be permitted to complete the questionnaire on company time.
4. Follow-up medical exams will be granted to employees as required by the Standard, and/or as deemed necessary by the evaluating PLHCP.
5. All employees will be granted the opportunity to speak with the PLHCP about their medical evaluation, if they so request.
6. The Safety Director shall provide the evaluating PLHCP 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:
  - a. his or her work area or job title;
  - b. proposed respirator type and weight;
  - c. length of time required to wear respirator;
  - d. expected physical work load (light, moderate or heavy);
  - e. potential temperature and humidity extremes; and
  - f. any additional protective clothing required.
7. Positive pressure air purifying respirators will be provided to employees as required by medical necessity.
8. After an employee has received clearance to wear his or her respirator, additional medical evaluations will be provided under the following circumstances:
  - a. 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.
  - b. The evaluating PLHCP or supervisor informs the Safety Director that the employee needs to be reevaluated.
  - c. Information found during the implementation of this program, including observations made during the fit testing and program evaluation, indicates a need for reevaluation.
  - d. 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 Safety Director will only retain the physician's written recommendations regarding each employee's ability to wear a respirator.

#### G. Fit Testing

Employees who are required to wear tight fitting air purifying respirators will be fit tested:

1. prior to being allowed to wear any respirator with a tight-fitting face piece;

2. annually; or
3. 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. Facial hair is not allowed.

US Healthworks will conduct fit tests in accordance with the OSHA Respiratory Protection Standard. N95 respirators will be fit tested with a qualitative fit test protocol using an aerosol solution or either saccharin or Bitrex®. Other tight fitting face pieces will be fitted with one of the protocols outlined in Appendix A of 1910.134.

#### H. General Respirator Use Procedures

1. 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 shall not be used in a manner for which it is not certified by NIOSH or by its manufacturer.
2. All employees shall conduct user seal checks each time they wear their respirators. Employees shall use either the positive or negative pressure check (depending on which test works best for them) as specified in the OSHA Respiratory Protection Standard.
  - a. 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.
  - b. 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.
3. Employees are not permitted to wear tight-fitting respirators if they have any condition, such as facial scars, facial hair, or missing dentures, that would prevent a proper seal. Employees are not permitted to wear headphones, jewelry, or other items that may interfere with the seal between the face and the face piece.
4. Before and after each use of a respirator, an employee or immediate supervisor 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 supervisor and/or Safety Director.

#### I. Change Schedules

Respirator cartridges shall be replaced as determined by the Safety Director, supervisor(s), and manufacturers' recommendations.

#### J. Cleaning

N95 Respirators will be disposed of after use if worn in the presence of an individual who has a disease that could be transmitted person to person via an airborne route of exposure.

Non-disposable respirators (such as PAPRs) are to be regularly cleaned and disinfected. Respirators issued for the exclusive use of an employee shall be cleaned as often as necessary.

The following procedure is to be used when cleaning and disinfecting reusable respirators:

1. Disassemble respirator, removing any filters, canisters, or cartridges.
2. Wash the face piece and all associated parts (except cartridges and elastic headbands) in an approved cleaner-disinfectant solution in warm water (about 120 degrees Fahrenheit). Do not use organic solvents. Use a hand brush to remove dirt.
3. Rinse completely in clean, warm water.
4. Disinfect all facial contact areas by spraying the respirator with an approved disinfectant.
5. Air dry in a clean area.
6. Reassemble the respirator and replace any defective parts. Insert new filters or cartridges and make sure the seal is tight.
7. Place respirator in a clean, dry plastic bag or other airtight container.

The Safety Director will ensure an adequate supply of appropriate cleaning and disinfection materials at the workplace. If supplies are low, employees should notify their supervisor, who will inform the Safety Director.

#### K. Maintenance

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. All respirators shall be inspected routinely before and after each use.

#### L. Storage

After inspection, cleaning, and necessary repairs, respirators shall be stored appropriately to protect against dust, sunlight, heat, extreme cold, excessive moisture, or damaging chemicals. The Safety Director will store Geddis Paving & Excavating supply of respirators and respirator components in their original manufacturer's packaging. Respirators will be stored in Location.

#### M. Respirator Malfunctions and Defects

Respirators that are defective or have defective parts shall be taken out of service immediately.

#### N. Program Evaluation

The Safety Director will conduct periodic evaluations of the workplace to ensure that the provisions of this program are being implemented. The evaluations will include regular consultations with employees who use respirators and their supervisors, site inspections, air monitoring and a review of records. Items to be considered will include:

1. comfort;
2. ability to breathe without objectionable effort;
3. adequate visibility under all conditions
4. provisions for wearing prescription glasses;
5. ability to perform all tasks without undue interference; and
6. confidence in the face piece fit.

#### O. Documentation and Recordkeeping

1. A written copy of this program and the OSHA Respiratory Protection Standard shall be kept in the Safety Director's office and made available to all employees who wish to review it.
2. Copies of training and fit test records shall be maintained by the Safety Director. These records will be updated as new employees are trained, as existing employees receive refresher training, and as new fit tests are conducted
3. For employees covered under the Respiratory Protection Program, the Safety Director shall 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.




## Geddis Paving & Excavating Scaffold Policy

### General requirements for scaffolds

- Each scaffold and scaffold component shall be capable of supporting, without failure, its own weight and at least four times the maximum intended load applied or transmitted to it.
- Scaffolds shall be designed by a qualified person and shall be constructed and loaded in accordance the Occupational Safety and Health Administration (OSHA) 29 CFR 1926.451 and 29 CFR 1910.28.
- Stationary scaffolds over 125 feet in height and rolling scaffolds over 60 feet in height shall be designed by a professional engineer.

- Prior to erection, all job sites shall be inspected to determine the site's ability to support the structure and for the location of electrical power lines, overhead obstructions, wind conditions, and the need for overhead protection or weather protection coverings.
- Scaffolds shall be erected, moved, or disassembled only under the supervision of competent persons.

## Use requirements

- The use of shore scaffolds and lean-to-scaffolds is strictly prohibited;
- All employees are prohibited from working on scaffolds covered with snow, ice or other slippery materials;
- Work on or from scaffolds is prohibited during storms or high winds unless a competent person has determined that it is safe for employees to be on the scaffold and those employees are protected by a personal fall arrest system or a wind screen;
- Scaffold and scaffold components shall be inspected for visible defects by a competent person before each work shift and after any occurrence with could affect a scaffold's structural integrity. Any part of a scaffold damaged or weakened such that its strength is less than that required in the section 29 CFR 1926.451(a) shall be immediately repaired or replaced, braced to meet those provisions, or removed from service until repaired and tagged as unsafe at any access point.
- Scaffolds shall not be moved horizontally while employees are on them, unless they have been designed by a registered professional engineer specifically for such movement, or for mobile scaffolds; and
- Clearance Distances between Scaffolds and Power lines:
  - [Appendix B](#) provides the clearance distances between scaffolds and power lines, or any other conductive material, while being erected, used, dismantled, altered or moved.

## Erecting and dismantling scaffolding

Erectors and dismantlers of scaffolding are those whose principal activity involves assembling and disassembling scaffolding. Scaffolding is required to be designed by qualified persons. Employees who erect and dismantle scaffolding must be trained by a competent person.

### Qualified persons

Scaffolds must be designed by a qualified person and be constructed and loaded in accordance with that design. The qualified person is responsible for:

- Designing and loading scaffolds in accordance with design specifications;
- Training employees who will serve as competent persons working on the scaffolds to recognize the associated hazards and understand procedures to control or minimize those hazards.

### Competent person

A competent person is one who is capable of identifying existing and predictable hazards and has the authority to take prompt corrective measures to eliminate the hazards. Each department that owns or uses scaffolding must designate a competent person. The competent person is responsible for:

- Directing employees, who erect, dismantle, move or alter scaffolding;
- Determining if it is safe for employees to work from a scaffold during storms or high winds, and ensure that a personal fall arrest system is in place;
- Training employees involved in erecting, disassembling, moving, operating, repairing, maintaining, or inspecting scaffolding to recognize associated work hazards;
- Inspecting scaffolds and scaffold components for visible defects before each work shift, and after any occurrence which could affect the structural integrity, and to authorize prompt corrective action;
- For erectors and dismantler's determining the feasibility and safety of providing fall protection and access;
- For scaffold components:
  - Determining if a scaffold will be structurally sound when intermixing components from different manufacturer's; and
  - Determining if galvanic action has affected the load capacity when using components of dissimilar metals.

## Platforms

Each platform on all working levels of scaffolds shall be fully planked or decked between the front uprights and the guardrail supports as follows:

- Platforms shall be entirely planked and decked with space not more than one inch wide between the platforms and uprights;
- The platform shall not deflect more than 1/60 of the span when loaded;
- All platforms shall be kept clear of debris or other obstructions that may hinder the working clearance on the platform;
- Wood planks shall be inspected to see that there are graded for scaffold use, are sound and in good condition, straight grained, free from saw cuts, splits and holes;
- Platforms and walkways shall be at least 18 inches in width. When the work area is less than 18 inches wide, guardrails and/or personal fall arrest systems shall be used;
- Where platforms are overlapped to create a long platform, the overlap shall occur only over supports, and shall not be less than 12 inches unless the platforms are nailed together;
- The front edge of all platforms shall not be more than 14 inches from the face of the work, unless guardrail systems are erected along the front edge and/or personal fall arrest systems are used;
- Each end of a platform 10 feet or less in length shall not extend over its support more than 12 inches unless the platform is designed and installed so that the cantilevered portion of the platform is able to support employees without tipping, or has guardrails which block employee access to the cantilevered end;

- A platform greater than 10 feet in length shall not extend over its support more than 18 inches, unless it is designed and installed so that the cantilevered portion of the platform is able to support employees without tipping, or has guardrails which block employee access to the cantilevered end;
- Wood surface shall not be covered with opaque finishes, other than the edges for making identification;
- Platforms may be coated periodically with wood preservatives, fire-retardant finishes, and slip-resistant finishes; however, the coating shall not obscure the top or bottom wood surfaces;
- Each end of the platform, unless cleated or otherwise restrained by hooks or equivalent means, shall extend over the centerline of its support at least 6 inches; and
- Scaffold components manufactured by different manufacturers shall not be intermixed unless the components fit together without force and the scaffold's structural integrity is maintained. Scaffold components made of dissimilar metals shall not be used together unless a competent person has determined that galvanic action will not reduce the strength of any component.

## Criteria for support scaffolds

Supported scaffolds are platforms supported by legs, outriggers beams, brackets, poles, uprights, posts, frames, or similar rigid support. The structural members, poles, legs, posts, frames, and uprights, must be plumb and braced to prevent swaying and displacement.

- Supported scaffolds with a height to base width ratio of more than 4:1 must be restrained by guying, tying, bracing or an equivalent means:
- The following placements must be used for guys, ties, and braces;
  - Install guys, ties, or braces at the closest horizontal member to the 4:1 height and repeat vertically with the top restraint no further than 4:1 height from the top;
  - Vertically – every 20 feet or less for scaffolds less than three feet wide and every 26 feet or less for scaffolds more than three feet wide;
  - Horizontally – at each end; at intervals not to exceed 30 feet from one end.
  - Supported scaffold poles, legs, posts, frames, and uprights shall bear on base plates and mud sills or other adequate firm foundation and shall include the following;
  - Footings shall be level, sound, rigid, and capable of supporting the loaded scaffold without settling or displacement;
  - Unstable objects shall not be used to support working platforms;
  - Front-end loaders and similar pieces of equipment shall not be used to support scaffold platforms unless they have been specifically designed by the manufacturer for such use; and
  - Fork-lifts shall not be used to support scaffold platforms unless the entire platform is attached to the fork and the fork-lift is not moved horizontally while the platform is occupied.

## Access requirements

Access shall be provided when scaffold platforms are more than 24 inches above or below the point of access. Direct access is acceptable when the scaffold is not more than 14 inches horizontally and not more than 24 inches vertically from the other surfaces. Cross braces shall not be used as a means of access.

- Type of accesses which are permitted:
  - Portable ladders tied off to the structure
  - Hook-on ladders
  - Attachable ladders
  - Stairways
  - Stair towers
  - Ramps and walkways
  - Integral prefabricated frames
- When erecting or dismantling supported scaffolds, a safe means of access shall be provided when a competent person has determined the feasibility and analyzed the site conditions

## Fall protection and guardrails

### Fall protection

Personal fall arrest systems include harnesses, components of the harness/belt such as Dee-rings, snap hooks, lifelines, and anchorage point. Employees working on scaffolds ten (10) feet or more above ground/floor level shall use fall protection in accordance with IU's Fall Protection Program. See Appendix C for types of fall protection for specific scaffolds.

### Guardrails

- All scaffolds more than six feet above the lower level shall protect employees with guardrails on each open side of the scaffold. Guardrails shall be installed along the open sides and ends before releasing the scaffold for use by the employees, other than erection or dismantling crews; and
- Materials such as steel or plastic banding shall not be used for top rails or mid rails.

Guardrails are not required when:

- The front end of all platforms are less than 14 inches from the face of the work.
- When employees are plastering and lathing 18 inches or less from the front edge.

### Falling objects

To protect employees from falling hand tools, debris, and other small objects, install toe boards, screens, guardrail systems, debris nets, catch platforms, canopy structures, or barricades. If there is a risk of falling objects or over-head hazard, a hard hat must be worn.

## Training and Recordkeeping

## Employees performing work on scaffolding

All employees who perform work on a scaffold shall be trained by a person qualified to recognize the hazards associated with the type of scaffold being used and the procedures to control or minimize those hazards. The training shall include the following areas, as applicable:

- The nature of electrical hazards, fall hazards, and falling object hazards in the work area;
- The correct procedures for dealing with electrical hazards and for erecting, maintaining, and disassembling the fall protection system and falling object protection system being used;
- The proper use of the scaffold;
- The proper handling of materials on the scaffold; and
- The maximum intended load and the load-carrying capacities of the scaffolds used.

Employees who are involved in erecting, disassembling, moving, operating, repairing, maintaining, or inspecting a scaffold shall be trained by a competent person to recognize any hazards associated with the work in question. The training shall include the following topics, as applicable;

- The nature of scaffold hazards;
- The correct procedures for erecting, disassembling, moving, operating, repairing, inspecting, and maintaining the type of scaffold in question; and
- The design criteria, maximum intended load-carrying capacity and intended use of the scaffold.

## Retraining

Retraining is required in at least the following situations:

- Where changes at the worksite present a hazard about which an employee has not been previously trained; or
- Where changes in the types of scaffolds, fall protection, falling object protection, or other equipment present a hazard about which an employee has not been previously trained; or
- Where inadequacies in an affected employee's work involving scaffolds indicate that the employee has not retained the requisite proficiency

# HOT WORK PROGRAM

# Hot Work Policy and Procedure

## POLICY

This policy was developed to ensure that the Hot Work will be managed and proper actions are taken to prevent loss due to fire caused by Hot Work (cutting, soldering & welding, explosion or any other activity that involves an open flame). All affected employees and contractors will receive instruction as to the expectations of them to ensure compliance with this policy.

## SCOPE

The provisions set out in this policy apply to any work done on site using a welder or torch and is to be strictly adhered to. The use of a Hot Work Permit when that hot work takes place away from the designated hot work areas is mandatory.

## RESPONSIBILITIES

### Management

- To ensure that all employees involved in the Hot Work Process are trained (including Permit Authorizing Individual, Hot Work Operator and Fire Watch).
- Conduct periodic audits to ensure compliance with this policy.
- Ensure that all Hot Work equipment is in proper working order. Any defective Hot Work equipment must be removed from service.
- EHS are to communicate any changes to this policy with respect to regulation and interpretation.
- Ensure that the policy is reviewed annually and is current with all applicable regulations.

### PAI (Permit Authorizing Individual)

- Assess the work area and sign the Hot Work Permit PRIOR to work commencing.
- Post one part of permit at job site and place top copy of permit at the site designated area. (i.e. permit board).
- Have a designated Fire Watch during Hot Work. This could be anyone who has been trained as Fire Watch.
- Have a fire extinguisher readily available while hot work is performed.
- Ensure sprinkler systems are in working order monitoring once per hour for minimum of 6 hours or longer as determined.
- After completion of Hot Work ensure continuous monitoring for minimum of 30 minutes or longer as determined by the PAI. As well continue by the PAI. This function may be performed by a designated Fire Watch, Plant Security Guard, Machine Operator or maintenance person.

### Person Performing Hot Work

- The person doing the Hot Work must verify that a hot work permit is in place before starting Hot Work. The permit is issued for one location only and is valid for no longer than 24 hours. It may become invalid if conditions change (i.e. adverse environmental condition).
- The person doing the Hot Work is responsible for complying with all rules and regulations concerning safe work practices and all requirements stated on the permit.
- The person doing the Hot Work must ensure that all combustible materials are moved out of the area before Hot Work is performed. If the combustible materials cannot be removed guards and shields are required before any Hot Work activities can begin.
- The person doing the Hot Work must ensure that proper ventilation and/or respiratory equipment is used when hazardous fumes, gases, or dust may be present.

#### The Fire Watch

- Assist Hot Work Operator in preparation and clean up of Hot Work area.
- Wet down surrounding areas including lower floors and beams if applicable.
- Assess 35' radius for potential fire hazards.
- Be alert to any changes and identify changes or concerns to Hot Work Operator.

#### Outside Contractors

- Will be trained and held to the same Hot Work Standards as the company employees. The supervisor who hires the contractor will ensure that this training has taken place prior to starting Hot Work and audits the process.

# FIRE PREVENTION AND FIRE EXTINGUISHER WRITTEN POLICY

**Purpose** To protect our employees and facilities from the dangers of fire, Geddis Paving & Excavating has developed a fire prevention plan to reduce the risk of potential injuries, death, and property damage. This plan's purpose is to identify and control fire hazards.

## Responsibilities

- **Management:** Ensures fire-prevention procedures are established and enforced, fire suppression systems are inspected regularly and maintained, supervisors and employees are trained to use fire extinguishers for incipient fires, and employees are trained to use evacuation routes and procedures.
- **Supervisors:** Monitor the use of flammable materials, train employees in the safe storage, use, and handling of flammables, and ensure that storage areas for flammables are maintained properly.
- **Employees:** Follow company procedures for the safe storage, use, and handling of flammable materials, and report violations of the Geddis Paving & Excavating fire prevention plan.

**Definitions** Fires are classified according to the type of fuel or material:

- **Class A:** Wood, paper, and cloth.
- **Class B:** Flammable gases, liquids, and greases.
- **Class C:** Fires in live electrical equipment or involving materials near electrically powered equipment.
- **Class D:** Combustible metals such as magnesium, zirconium, potassium, and sodium.

**Ignition Sources** Eliminate all non-essential ignition sources where flammable materials are used or stored. For example:

- Keep sources of open flame (such as welding and cutting torches, furnaces, matches, and heaters) away from operations involving flammables.
- Do not cut or weld equipment containing flammable liquids unless the equipment has been emptied and purged with a neutral gas such as nitrogen.
- Prohibit chemical ignition sources (such as DC motors, switches, and circuit breakers) in areas where flammable materials are stored or handled.
- Use only non-sparking tools in areas where flammables are stored or handled.
- Eliminate the possibility of static sparks—caused by electron transfer between two contacting surfaces—in flammable storage or handling areas.

**Incompatible Materials** Store materials such as oxidizers and organic peroxides, which produce large amounts of oxygen when they decompose, in an area separate from flammable materials.

**Fire Extinguishers** Portable fire extinguishers can be very effective for fighting fires in their incipient stages. A person who is well-trained in fire-extinguisher use can save both lives and property. Training must occur annually on fire extinguishers. Portable fire extinguishers must be available even when other firefighting measures are available. Monthly inspections are required for fire extinguishers. Annual maintenance checks are required for all fire extinguishers. For extinguishers to be effective in a fire situation, proper selection, inspection, and maintenance are essential. Make sure all fire extinguishers are placed in conspicuous locations,

clearly visible, and easily accessible. Keep all fire extinguishers fully charged and operable, and in their proper locations at all times.

- **Class A:** For ordinary combustibles (wood, paper, cloth). Minimum size: 2.5 gallons water or equivalent.
- **Class B:** For flammable liquids (grease, gasoline). Minimum size: 10 pounds dry chemical or equivalent.
- **Class C:** For electrical fires. Minimum size: 10 pounds dry chemical or equivalent.
- **Class D:** For combustible metals. Size and type as specified by the manufacturer based on the specific metal hazards present.
- **Class K:** For kitchen fires involving cooking oils and fats. Minimum size: 1.5 gallons wet chemical or equivalent.

**Fire Safety Inspections and Housekeeping** Supervisors and safety committees are responsible for work site inspections to ensure compliance with the company Fire Safety Program. These inspections should address housekeeping issues, proper storage of chemicals, access to fire extinguishers, and emergency evacuation routes.

**Emergency Exits** Every exit must be clearly visible, or the path to it conspicuously identified in such a manner that every occupant of the building will know the best way to get out of the building in a fire or other emergency. Exits must never be obstructed. Any door or passageway that is not an exit or path to an exit must be identified with a sign that reads "Not An Exit" or a sign that indicates its actual use, such as storage. All exit signs must either be self-illuminating or illuminated by a reliable external light source.

**Emergency Plan for Persons with Disabilities** First-line supervisors are responsible for assisting persons with disabilities under their supervision and must choose an alternate to assume responsibility in the supervisor's absence. The supervisor, alternate, and worker with the disability will be trained on available escape routes. A list of persons with disabilities must be kept on file in the personnel or safety director's office. Company visitors with disabilities will be assisted in the same manner as employees.

**Fire Emergency Procedures** The person who discovers a fire should activate the nearest alarm and notify their supervisor and other building occupants. You should only fight a fire if the fire department has been notified, if the fire is small and confined to its point of origin, if you have an escape route available, and can fight the fire with your back to the exit. Be sure you have a proper, fully functioning fire extinguisher, and are trained to use it. Leave your work area if you hear a fire alarm. Close all windows and doors, and turn off any gas jets when you leave; evacuate the building and move away from exits, and assemble in an area designated in the company evacuation plan. Remain outside until a competent authority says it is safe to re-enter the building.

# Heavy Mobile Equipment Operation Policy

## Policy Statement

Geddis Paving Inc. is committed to ensuring the safe operation of heavy mobile equipment (HME) through comprehensive training, hazard identification and control, regular inspections, and adherence to safety protocols, particularly when operating near electrical facilities. This policy outlines the procedures and responsibilities for maintaining a safe working environment for all personnel involved in the operation of heavy mobile equipment.

## Scope

This policy applies to all employees, contractors, and subcontractors involved in the operation or management of heavy mobile equipment at any Geddis Paving Inc. project site.

## Procedures

### Training and Competency

- **Training Requirements:** All operators must complete a formal training program that meets jurisdictional requirements and covers safe operation practices, equipment-specific procedures, and emergency protocols.
- **Certification:** Operators must be certified as competent through a combination of theoretical and practical assessments.
- **Refresher Training:** Conduct annual refresher training and additional training when introducing new equipment or when operators exhibit unsafe practices.
- **Documentation:** Maintain records of all training and certifications for each operator.

### Hazard Identification and Analysis

- **Pre-Operation Risk Assessment:** Conduct a Job Safety Analysis (JSA) or Job Hazard Analysis (JHA) before starting any task involving heavy mobile equipment. Identify potential hazards specific to heavy mobile equipment, such as:
  - Struck-by Incidents: Risks of being hit by moving equipment or objects falling from equipment.
  - Caught-in/between Situations: Dangers of being trapped between equipment parts or between equipment and other objects.
  - Equipment Overturning: Risks of equipment tipping over due to unstable terrain, improper loading, or operator error.
  - Contact with Adjacent Structures: Risks of equipment coming into contact with buildings, utilities, or other structures.
- **Daily Inspections:** Operators must perform a daily walk-around inspection of their equipment to identify any immediate hazards or issues, such as mechanical failures, leaks, or worn parts.
- **Hazard Reporting:** Implement a system for operators and personnel to report hazards immediately to supervisors or the Safety Manager.

### Hazard Control Measures

- **Administrative Controls:**
  - Establish clear operational procedures, including speed limits, designated operating zones, and the use of spotters in high-risk areas.
  - Schedule work to minimize the need for heavy mobile equipment to operate in high-traffic or high-risk areas during peak times.
- **Engineering Controls:**
  - Equip heavy mobile equipment with safety features such as rollover protective structures (ROPS), seat belts, and proximity alarms.
  - Install backup alarms and cameras to enhance visibility and alert others to the equipment's movements.
  - Implement stability control systems to reduce the risk of overturning.
- **Personal Protective Equipment (PPE):**
  - Ensure all personnel wear appropriate PPE, such as high-visibility clothing, hard hats, safety boots, and hearing protection.
  - Provide additional PPE, such as gloves and eye protection, when necessary.

### Inspections, Preventative Maintenance, and Repairs

- **Documented Inspections:** Conduct and document pre-use and monthly inspections of all heavy mobile equipment to ensure it is in safe working condition. Use a standardized inspection checklist.
- **Preventative Maintenance:** Implement a preventative maintenance program in accordance with manufacturer guidelines and industry standards. Schedule regular maintenance activities to prevent equipment failures.
- **Repairs:** Address any identified issues immediately. Only qualified personnel should perform repairs, and equipment must be tested and verified safe before returning to operation.
- **Record Keeping:** Maintain detailed records of all inspections, maintenance activities, and repairs.

### Operating Near Electrical Facilities

- **Risk Assessment:** Conduct a specific risk assessment for operating heavy mobile equipment near electrical facilities, including overhead utilities.
- **Safety Distances:** Establish and enforce safe operating distances from electrical hazards as per OSHA and jurisdictional regulations.
- **Spotters and Barricades:** Use trained spotters to guide equipment operators and install physical barriers to prevent encroachment into hazardous zones.
- **Communication:** Ensure clear and effective communication between operators, spotters, and ground personnel when working near electrical facilities.
- **Emergency Procedures:** Develop and train personnel on emergency procedures for electrical contact incidents, including shutdown procedures and first aid.

### Equipment Left Unattended

- **Identification and Visibility:**
  - **Lighting and Reflectors:** All heavy mobile equipment left unattended at night, adjacent to highways in normal use, or adjacent to construction areas where work is in progress, must be equipped with functional and visible lighting systems. This includes headlights, taillights, and

hazard lights as necessary to ensure the equipment is easily identifiable and does not pose a hazard to other workers or passing vehicles.

- **Reflectors:** Equip equipment with reflective materials or reflectors strategically placed to enhance visibility in low light conditions.
- **Barricades and Marking:**
  - **Adjacent to Highways or Construction Areas:** When equipment is left unattended adjacent to highways in normal use or near construction areas, it must be barricaded or marked with appropriate signage to alert and direct traffic away from the equipment.
  - **Reflective Barricades:** Use barricades equipped with reflective materials or lights to clearly delineate the perimeter of the equipment's location and ensure its visibility from a distance.
- **Parking and Braking:**
  - Ensure that the parking brake is engaged whenever heavy mobile equipment is parked. This prevents unintended movement and enhances overall safety.
  - If the equipment is parked on an incline, wheels must be chocked to prevent rolling or movement.
- **Monitoring and Supervision:**
  - Regularly monitor and inspect the condition of equipment left unattended to ensure compliance with safety standards and to address any potential hazards promptly.
  - Maintain records of inspections and monitoring activities related to equipment left unattended to demonstrate compliance with safety protocols.
- **Emergency Procedures:**
  - Ensure clear emergency contact information and protocols are readily available to all personnel for reporting hazards or incidents involving unattended equipment.
  - Develop and communicate clear protocols for responding to emergencies or incidents involving unattended equipment, including procedures for securing the area and notifying appropriate personnel.

# Hand and Power Tool Safety Policy

It is the policy of Geddis Paving and Excavating to take precautions to eliminate hazards associated with the use of hand and portable power tools; and to ensure employees are properly trained to utilize these tools in a safe manner to minimize injuries related to their use. This Hand & Portable Power Tool Safety Program prescribes the duty to maintain tools and equipment; use hand and portable power tools in a safe manner; and to minimize injury and/or accidents associated with their use

The purpose of this program is to outline the requirements to minimize/eliminate hand and portable power tool related injuries. This program is developed in accordance with the following Occupational Safety and Health Administration (OSHA) regulations:

- 29 CFR 1910 Subpart P, “Hand and Portable Powered Tools and Other Hand-Held Equipment”
- 29 CFR 1910.241 – Definitions
- 29 CFR 1910.242 – Hand and portable powered tools and equipment,
- 29 CFR 1910.243 – Guarding of portable powered tools
- 29 CFR 1910.244 – Other portable powered tools

This Hand & Portable Power Tools Safety Program establishes and outlines the supervisor and employee responsibilities, identification of safety hazards, control measures and training, inspection and recordkeeping for GEDDIS PAVING & EXCAVATING owned hand and portable power tools. The program applies to all GEDDIS PAVING & EXCAVATING employees whose work duties require them to utilize hand and portable power tools. All hand and portable powered tools and other hand-held equipment utilized at GEDDIS PAVING & EXCAVATING for construction, alteration, repair, demolition, electrical, plumbing, vehicle maintenance, and general purposes are covered by this policy.

Geddis Paving and Excavating employees who supervise personnel with responsibilities to work with hand and portable power tools must be informed of the contents of this program; identify authorized personnel to utilize equipment; address safety hazards in a timely manner; and ensure appropriate training is provided to all employees.

Authorized Person - Employees working with hand and portable power tools must be fully trained to ensure all applicable elements of the Geddis Paving and Excavating Hand and Portable Power Tool Safety Program are followed. In addition, employees are responsible for completing adequate training, reporting equipment deficiencies; and safe use of hand and portable power tools at all times.

## General Safety Requirements

All hand and portable power tools must be maintained in a useable condition. The following applies to all hand and portable power tool maintenance and use to minimize hazards associated with their use:

- Maintain all tools in useable condition through following manufacturer recommendations for service; storing tools in the appropriate manner to minimize exposure to excessive temperature, humidity and corrosive materials; and reporting defects or deficiencies associated with tools to departmental supervisors upon discovery.

- Use the appropriate tool for the job. Hand and portable power tools are designed and manufactured for specific uses. Employees must use tools and equipment in the manner intended by the manufacturer. To prevent mis-use of existing equipment and to prevent injuries, the supervisor shall ensure the proper tools are available to complete a job; if a task is required to be completed by an employee where an appropriate tool is not present, the supervisor shall ensure the job is not completed until the appropriate tool is available.
- Prior to use, tools and equipment should be inspected by the user to ensure they are in proper working order with no defects or deficiencies, which may result in unsafe use or injury to the user. Damaged tools and equipment must be removed from service and tagged to ensure unauthorized use does not take place.
- Always operate tools and portable power equipment according to the manufacturer's specifications. Failure to do so may result in injury to the user

## **Machine Guards & Safety Switches**

Many tools and equipment protect exposed moving parts through various machine guarding techniques. Belts, gears, shafts, pulleys, sprockets, spindles, drums, flywheels, chains, or other reciprocating, rotating, or moving parts are typically guarded with safety shields or switches.

- Machine guards must be provided to protect the user from the following:
  - Point of operation hazards
  - In-running nip points
  - Rotating parts
  - Flying particles and sparks.
- Machine guards directly cover a hazardous area of a tool or piece of equipment to prevent contact by the user. An example of a machine guard is the retractable cover on a circular saw, which exposes only the area of the blade performing the cutting action.
- Safety switches are incorporated into many portable power tools to prevent unintended activation of the equipment. An example of a safety switch is a constant pressure switch, which requires the user to place pressure on the activation switch and releasing of the switch results in the tool shutting off or stopping.
- Machine guards, safety switches, and any other safety elements of a tool or power tool, must not be removed, manipulated or tampered with in any way.

## **Personal Protective Equipment (PPE)**

Employees who use hand and portable power tools and are exposed hazards, such as noise, vibration, particulate, sparks/chips, abrasive, splashing objects, harmful dusts, fumes, mists, vapors and/or gases must be provided with the appropriate personal protective equipment

The following considerations should be evaluated, at a minimum, in the selection and use of PPE when utilizing hand and portable power tools.

- Eye protection - Safety glasses or goggles must be worn at all times when using hand and portable power tools.
- A face shield may be used in addition to safety glasses or goggles to protect the face and neck. Foot protection – Appropriate foot protection, which may include closed toed shoes or steel-toed boots, must be worn when working with hand and portable power tools.
- Hearing protection – If the tool or equipment being utilized generates excessive noise, the use of hearing protection may be necessary. personal noise dosimetry to determine if employees should be enrolled in the hearing conservation program.
- Hearing protection is recommended during the use of certain hand tools and all portable power tools.
- Respiratory protection – Tools and equipment, which generate excessive dust, may require the use of a particulate filtering respirator.

- Hand protection – Whenever there are sharp objects or elevated temperatures associated with the work being conducted, adequate hand protection must be provided to the employee performing the work.
- Body protection – Depending on the hazard present, appropriate clothing must be worn during the use of hand/portable power tools.
- Hair Protection – Long hair must be tied back and secured during the use of power tools to prevent hair being caught in moving parts.

## Hand Tool Safety

- Hand tools are tools that are powered manually and do not require additional power sources such as electric, hydraulic, compressed air, etc. Examples of hand tools include anvils, axes, hammers, planers, pliers, punches, saws, screw drivers, tin snips, and wrenches.
- Hazards associated with hand tools are typically associated with misuse of the equipment and/or improper maintenance of the tools. To prevent injury when utilizing hand tools, the following precautions should be taken.
- Use hand tools only for their intended purposes. For example, using a screwdriver as a chisel may result in the tip of the screw driver breaking and becoming a flying particle hazard.
- Inspect hand tools for damage prior to use
- Maintain hand tools in good working condition and free from damage. Handles of tools should be maintained free from grease and oil to prevent slipping and deterioration of the materials of construction. Damaged hand tools must be removed from service and repaired or replaced.
- When using tools, such as knives, saws, or other cutting devices, always direct the tool away from the worker and any other personnel in the area.
- Maintain cutting tools so that the cutting edges are sharp. Dull cutting edges may present additional hazards.
- Cracked cutting blades must be removed from service and replaced.
- Wrenches must be used to prevent slippage, to prevent injury to the user.
- Impact tools, such as chisels, drift pins, and wedges must be kept free from mushroomed heads
- Iron or steel hand tools may produce sparks when struck. Ensure the use of iron and steel tools does not occur near flammable or combustible materials. If flammable or combustible materials are present, ensure the use of non sparking hand tools.
- Maintain both the work area and tools in a clean and organized manner. This will help prevent potential injuries.
- Store hand tools in a clean and dry location.
- Wear the appropriate PPE.

## Portable Power Tool Safety

Portable power tools must be equipped with safety mechanisms as described in this program. Portable power tools, when used improperly, can result in serious injury or death.

- Types of portable power tools are determined by their power source, each of which will be addressed in this program, and include electric, pneumatic, liquid fuel, hydraulic, and powder actuated portable power tools.
- To reduce hazards associated with the use of portable power tools, employees should observe the following general safety practices.
- Read and understand the owner's/user manual for each portable power tool expected to be used by the employee. The manual should address the tool's Page 9 proper use, limitations, proper operation, hazards, PPE, storage and maintenance practices applicable to the equipment.
- Tools should not be carried or lowered from an elevated position by the power cord.
- Never pull a power cord or hose as a means to disconnect it from a power source.
- Ensure cords and hoses are kept clear from heat, oil and sharp edges during use.
- Ensure tools are properly grounded during use. Use a ground fault circuit interrupter (GFCI) for corded tools.
- When not in use, before service, cleaning and during blade/bit replacement procedures; power tools should be disconnected from their power source.

- When portable power tools are in use, unauthorized personnel must be kept clear of the work area. Utilize appropriate signage to indicate when portable power tools are in use and clearly define restricted areas.
- It may be necessary to secure the work area with a vice or clamps to allow for proper use of equipment when two hands are required to be on the power tool during use.
- To avoid accidental start-up of power tools, do not hold fingers on the triggers during transportation of equipment.
- Maintain tools in a clean manner free from oil and grease.
- Maintain cutting surfaces in a sharp manner. Dull cutting edges present additional hazards.
- When operating power tools, ensure adequate footing and maintain good balance while in use.
- Wear appropriate PPE during the use of power tools including hand, head, eye, foot, hearing, respiratory and body protection. Loose clothing, long hair, ties, or jewelry can become caught in moving parts; therefore ensure employees are appropriately dressed to perform the necessary work with portable power tools.
- Inspect portable power tools prior to use. Any defects or deterioration of the equipment should result in the tool being removed from service. Portable power tools removed from service due to defects must be tagged with “DO NOT USE” or the equivalent to prevent unauthorized use.

### **Electric Power Tools**

Employees utilizing electric powered portable tools must be aware of many hazards associated with their use. One common hazard with all electric power tools is the possibility of burns, shock or electrocution. Even a slight shock or small burn can cause a worker to fall from a ladder or result in serious injury depending on the work conditions. To protect users from shock hazards, electrical power tools must have a three wire cord with a ground prong and be properly grounded during use. Three-wire cords contain two current carrying conductors and a grounding conductor. One end of the grounding conductor connects to the tool’s metal housing; the other end is grounded through a prong on the plug. The use of an adapter to fit a two-hole receptacle is not recommended, but if necessary, the equipment must be properly grounded to a known ground,. The third prong on the electrical cord of power tools must never be tampered with or removed for any reason. Some tools are equipped with double-insulated electrical cords, which contain an internal layer of insulation to isolate the external housing of the tool, and do not have a ground prong. Only double-insulated cords are permitted to be used without a ground wire. The following general practices should be followed when utilizing electric power tools.

- Electric power tools must be operated as intended and specified by the manufacturer.
- Utilize the appropriate PPE when utilizing electrical power tools.
- Store power tools properly when not in use to prevent unnecessary damage.
- Never use electric power tools in wet or damp locations, unless they are approved for use in these locations.
- Work areas should be well lighted.
- Ensure cords associated with the use of power tools do not present excessive trip hazards. Electrical power tools should be inspected prior to use.
- Any defects in the tool or wiring must result in the tool being taken out of service and marked “DO NOT USE” or similar to prevent unauthorized use
- Electric Saws – portable or semi-portable electric power saws can include circular, table, saber, radial arm, miter, and band saws.

The following outlines the safety precautions to take when working with these types of saws.

- Circular Saw – A portable saw using a toothed metal cutting disc/blade used for cutting wood, metal and concrete depending on the blade being used.

- Portable circular saws with blades greater than 2 inches in diameter must be equipped at all times with guards. An upper guard must cover the entire blade of the saw. A retractable lower guard must cover the teeth of the saw, except where it makes contact with the work material.
- The lower guard must automatically return to the covering position when the tool is withdrawn from the material being cut.
- Table Saw – portable/semi-portable cutting tables with a fixed, toothed blade used for cutting longer lengths of wood and ensuring flush cuts.
- The blade on a table saw must be adjustable in height to allow the user to adjust the blade no more than 1/8 inch above the material to be cut.
- Ensure the material set to be cut does not contact the blade when starting or stopping the saw. Keep the body away from the saw.
- Use a push stick to keep hands and fingers away from the cutting blade.
- Guards covering the blade at all times should operate freely when the material to be cut is introduced to the saw blade. When not in use, lower the blade fully below the tabletop to prevent inadvertent contact.
- Saber Saw – a portable reciprocating saw used to make custom cuts in wood or metal.
- Always select the blade appropriate for the material being cut.
- Ensure the blade is sharp. Dull blades can present additional hazards.
- Do not turn on the saw when the blade is in contact with the material to be cut. This may cause the tool to “jump” or chip the material to be cut.
- Ensure the material to be cut is secure to prevent movement during cutting.
- Keep hands and other objects free from the cutting area at all times.
- Radial Arm Saw – a semi portable saw equipped with a cutting table where the saw blade is above the table and moved along a rod to allow for flush cutting.
- The material to be cut should be placed firmly against the saw’s back guide.
- The blade should rotate downward.
- Pull the saw with one hand and hold the wood with the other, ensuring it is clear from the cutting area.
- Never reach across the line of a cut.
- Return the saw to the rear position after completing a cut.
- Radial arm saws should be equipped with blade guards, which operate freely when contacting materials being cut.
- Miter Saw – portable/semi-portable saw used to cut flush angles on materials with a pull down blade.
- Miter saws use a downward cutting motion; therefore, keep hands and fingers well outside the cutting area.
- Miter saws must be equipped with a blade guard, which must operate freely when the blade contacts the material to be cut.
- Only use the manufacturer specified blade sizes and rpm ratings.
- When changing saw blades ensure all bolts are adequately tightened and secured to the saw.
- Band Saw – a portable/semi-portable saw used for precision cuts on wood and metal with a rotating belt blade.
- Set the blade evenly and with the correct tension before cutting.
- Push the cutting item through the blade with both hands on either side of the blade ensuring hands and fingers are clear of the cutting area.
- Ensure guards are in place.
- Drills – electric power drills are typically used to put holes in various materials including wood, metal, concrete and brick; and can be equipped with a hammer function.
- When operating a drill, use the proper size and type of bit for the job. Ensure the bit is sharp and not damaged.
- Ensure the chuck is secured to the spindle. Tighten the bit securely as outlined in the owner’s manual. Remove the chuck key prior to starting the drill.
- Ensure the handles are securely attached.
- When drilling, brace the drill to prevent torque on the hands/wrists.
- Never force a drill. Forcing a drill can cause the motor to overheat and damage the bit. Apply the appropriate pressure for the job. If the drill slows, relieve the pressure.

- Portable Abrasive Wheel Tools – portable tools used to grind, cut, polish, buff, etc. through a rotating wheel attached to the tool body, which typically generate large amounts of dust and particulates during cutting operations.
- Abrasive wheel tools must be equipped with guards that cover the spindle end, nut and flange projections; maintain proper alignment with the wheel; and do not exceed the strength of the fastenings.
- Inspect wheels before use. Any damage or defects must be addressed prior to use. To ensure cutting wheels are not cracked, tap with a non-metallic instrument. If the wheel sounds cracked or “dead” it could disintegrate during use and must not be used. A stable and undamaged wheel, when tapped, will give a clear metallic tone or “ring”.
- Abrasive wheels must fit freely on the spindle. If a wheel is installed too tightly it may crack during use. Always follow the manufacturer’s instructions on wheel replacement.
- Allow the wheel to reach optimal operating speed before conducting cutting, grinding, buffing, etc. operations.
- Stand clear of flying particles coming from the tool during use if possible.
- Always utilize the appropriate PPE when using powered abrasive cutting tools including, but not limited to, eye/face, hand and body protection.
- Turn off and unplug abrasive grinding tools when not in use.
- Never clamp a grinding tool in a vise or to a surface to perform a function.

### **Pneumatic Power Tools**

Pneumatic tools are powered by compressed air and include chippers, drills, hammers, sanders, nailers, etc. Hazards associated with pneumatic power tools include noise, vibration, fatigue, and struck by.

- ANSI approved eye protection is required anytime employees are working with pneumatic tools. A significant hazard of using pneumatic power tools is being struck by one of the tool’s attachments or by a fastener used with the tool.
- Ensure the air hose is securely attached to the tool being used prior to activating the tool to minimize the potential for the hose disconnecting during use.
- Air hoses greater than 1/2 inch in diameter must be equipped with a safety excess flow valve to shut off the air automatically in case the hose breaks.
- All pneumatic tools should be equipped with safety clips or other safety elements to prevent the release of tool parts during use. Safety features of pneumatic tools must not be tampered with or altered in any way.
- Pneumatic tools, which shoot nails, rivets, staples, or similar fasteners and operate at pressures above 100 psi, must be equipped with a muzzle safety feature to prevent fasteners from firing unless the muzzle is pressed against the materials to be fastened.
- Never pull the muzzle safety switch back manually to fire fasteners for any reason.
- Pneumatic paint spray equipment must be equipped with safety switches to prevent accidental discharge of paint.
- When using pneumatic power tools, ensure the work area is isolated to prevent unauthorized access.
- Compressed air should not be used for cleaning purposes at pressures greater than 30 psi.

### **Liquid Fuel Powered Tools**

- Fuel powered tools are typically powered by gasoline or gasoline/oil mixtures. Common hazards associated with gas powered equipment are handling flammable liquids/vapors and exposure to exhaust fumes
- Fuel (fuel/oil mixtures) must be handled, stored and transported only in approved containers for flammable liquids.
- When a fuel powered tool is used in an enclosed area, effective ventilation and/or appropriate respiratory protection must be provided to avoid exposure to carbon monoxide.
- Additional safety precautions for using liquid fuel powered tools include:
- Utilize only the manufacturer specified fuel when powering the equipment.
- When refueling a tool or piece of equipment, ensure the motor is shut down and the engine is cool before refueling.
- Fire extinguishers should be available wherever fuel powered tools are in use.

- Cutting tools, such as chain saws or concrete saws, must be equipped with guards and/or safety switches to ensure safe use. Do not tamper with, or modify, safety features of fuel powered tools.

### Hydraulic Power Tools

- Hydraulic power tools utilize pressurized lines filled with hydraulic fluid to provide the pressure. The fluid within hydraulic power tools must be an approved fire-resistant fluid and must retain its operating characteristics at the most extreme temperatures to which it will be exposed.
- Follow the manufacturer's recommendations for safe operating pressures for hoses, valves, pipes, filters, and other fittings at all times.
- Hand-held power tools, powered by hydraulic lines must be equipped with a constant pressure switch, or a control that shuts off the power when pressure is released.
- This includes drills, tappers, fastener drivers, angle grinders (with wheels greater than 2 inches in diameter), disc sanders (with discs greater than 2 inches in diameter), belt sanders, reciprocating saws, saber saws, scroll saws, jig saws and other similar tools.
- Hydraulic jacks, including lever, ratchet, and screw jacks, must have a stop indicator, and the stop limit must not be exceeded.
- Load limits must be determined by the manufacturer and be marked on the jack. Load limits must not be exceeded.
- A jack should be used to raise a load, but not fully support a lifted load. Once raised, blocking should be placed firmly under the base of the load.
- To set up a jack: 1 Place the base of the jack on a firm, level surface. 2 Center the jack correctly on the load. 3 Place the jack head against a level surface. 4 Apply the lifting force evenly.
- Jacks should be lubricated regularly.
- Jack inspection – All jacks must be inspected regularly according to the following:
- Jacks used regularly: inspect at least once every 6 months
- Jacks sent out for special work: inspect when sent out and returned
- Jacks subjected to abnormal loads/shock: Inspect before and after use.

### Training Requirements

Employees expected to utilize hand and portable power tools as part of their job duties must be adequately trained prior to using such tools. Employees should be trained in the following areas:

- Be able to recognize hazards associated with different types of tools and equipment; and the safety precautions necessary for use.
- The PPE required to be worn during the use of tools.
- The proper use of hand and power tools and other hand-held equipment
- Be able to recognize defects in tools, which may render them out of service.
- When applicable, provide access to the manufacturer specifications and manual's for specific equipment to be used.
- Department-developed standard operating procedures (SOPs) outlining specific safety precautions for certain tools or activities.
- Retraining may be necessary to maintain employee knowledge of working with tools or if a near-miss or injury has occurred

### Recordkeeping

- Departments must maintain the following records as part of the hand and portable power tool safety program.
- Employee training records
- Specialized SOPs
- Manufacturer specifications/manuals

- Maintenance/service records

### **Body Positioning and Ergonomics:**

- Maintain proper body mechanics while using tools to avoid strain and injury.
- Adjust workstations and tool setups to each employee's needs to ensure neutral body positions.
- Conduct regular ergonomic assessments to optimize tool use conditions.

### **Repetitive Motion Hazards:**

- Rotate tasks involving repetitive tool use to reduce the risk of repetitive strain injuries.
- Encourage regular breaks and stretching exercises to alleviate muscle tension.

### **Personal Lifting Techniques:**

- Use proper lifting techniques, such as bending at the knees and keeping the back straight, when handling heavy tools.
- Utilize team lifting for heavy or awkward tools and mechanical aids whenever possible.

### **Line of Fire:**

- Be aware of surroundings and avoid standing in the path of moving tools or equipment.
- Use barricades and warning signs to delineate hazardous areas.

### **Fatigue Management:**

- Schedule adequate rest periods to prevent fatigue-related tool usage incidents.
- Encourage employees to report fatigue and seek adjustments to work schedules as needed.

### **Material Handling:**

- Use proper handling techniques and the correct tools and equipment for the job.
- Provide training on safe tool and material handling practices.

### **Walking/Working Surfaces:**

- Keep walking and working surfaces clean, dry, and free of obstructions to prevent slips, trips, and falls.
- Conduct regular inspections to identify and address potential hazards.

### **Soft Tissue Injury Prevention:**

- Warm up before engaging in tool-intensive tasks.
- Report any signs of discomfort or soft tissue injuries immediately for assessment and appropriate action.

### **Tool-Specific Safety Measures:**

- **Selection and Inspection:**
- Only use tools appropriate for the task.
- Inspect all tools before use to ensure they are in good working condition. Report and remove damaged tools from service immediately.

**Proper Use:**

- Use tools only for their intended purpose and follow all manufacturer guidelines and safety instructions.
- Never modify tools or use them in a manner not specified by the manufacturer.

**Training and Competency:**

- Employees must receive training on the proper use of tools before operating them.
- Only authorized and trained personnel are permitted to use certain power tools.

**Power Tool Safety:**

- Ensure power tools are properly grounded and use appropriate circuit protection.
- Keep power cords away from heat, oil, and sharp edges. Inspect cords for damage regularly.

**Hand Tool Safety:**

- Keep hand tools clean and in good condition. Sharpen cutting tools regularly.
- Use the right size and type of hand tool for the job to avoid slips and injuries.

# **Geddis Paving and Excavating Written Program**

**for**

## **Control of Hazardous Energy (Lockout/Tagout)**

**The Control of Hazardous Energy (Lockout/Tagout)**

## The Control of Hazardous Energy (Lockout/Tagout) Procedure Table of Contents

- IX. Objective
- X. Assignment of Responsibility
- XI. Procedures
  - A. Preparation for Lockout or Tagout
  - B. Electrical
  - C. Hydraulic/Pneumatic
  - D. Fluids and Gases
  - E. Mechanical Energy
  - F. Release from Lockout/Tagout
  - G. Service or Maintenance Involving More than One Person
  - H. Removal of an Authorized Employee's Lockout/Tagout by the Company
  - I. Shift or Personnel Changes
  - J. Procedures for Outside Personnel/Contractors
  - K. Training and Communication
  - L. Periodic Inspection
- XII. Attachments
  - A. List of Authorized Personnel for Lockout/Tagout Procedures Form**
  - B. Certification of Training of Authorized Personnel Form**
  - C. Certification of Training of Affected Personnel Form**
  - D. Lockout/Tagout Inspection Certification Form**
  - E. Outside Personnel/Contractor Certification Form**
  - F. Equipment Specific Procedure Form**

# Geddis Paving and Excavating

## Lockout/Tagout Procedure

**PURPOSE:** This program outlines the requirements for machines and equipment capable of causing injury due to unexpected energization, startup or the release of stored energy. All machines and equipment that fall within the scope of this program must be locked/tagged out by authorized employees, in accordance with written energy control procedures and all other requirements of this program. A lockout system is always preferred. Use of a tagout system alone is only allowed when a machine/equipment cannot be physically altered to accept a lockout device. An annual inspection of the procedures related to Lock Out/Tag Out will be performed.

**SCOPE:** This program applies to the control of energy during servicing or maintenance of machines and equipment, which is solely under the jurisdiction of the Safety Director at Geddis Paving & Excavating.

Normal production operations are not covered unless an employee is required to:

- Remove or bypass a guard or other safety device
- Place any part of their body into a point of operation or where an associated danger zone exists during a machine operating cycle

Exceptions: Minor tool changes and adjustments, and other minor servicing activities, which take place during normal production operations are not covered 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.

This program does NOT apply to the following:

- Work on cord and plug connected electric equipment for which exposure to the hazards of unexpected energization or startup of the equipment is controlled by unplugging the equipment from the energy source and the plug remains under the exclusive control of the employee performing the servicing/maintenance.
- Hot tap operations involving transmission and distribution systems for substances such as gas, steam, water, or petroleum products when they are performed on pressurized pipelines that the employer demonstrates that continuity of service is essential; shutdown of the system is impractical; and documented procedures are followed, and special equipment is used which will provide proven effective protection for employees.

**RESPONSIBILITIES** The Safety Director is responsible for evaluating areas under its administrative control to determine the machines and equipment to which this program applies, developing written energy control procedures and inspecting them in use annually as well as providing the equipment needed to control hazardous energy.

**SUPERVISORS & MANAGERS:** Managers and Supervisors are responsible for the designation of authorized and affected employees, ensuring that they receive proper training and maintaining training and annual inspection records.

**Authorized & Affected Employees:** These employees are responsible for observing all practices and procedures described in this program, attending required training and reporting any unsafe conditions to their supervisors.

**TRAINING** There are 2 types of employees under this program: Authorized and affected, for which training requirements differ.

**TYPE OF EMPLOYEE** Authorized employee

**DESCRIPTION** Designated by Managers/Supervisors to perform energy control procedures

**TRAINING REQUIREMENTS**

- Knowledge and skills necessary for the safe application, usage and removal of energy controls.
- Ability to recognize applicable hazardous energy sources.
- Information on the type and magnitude of energy available in the workplace.  
Methods and means necessary for energy isolation and control.

**TYPE OF EMPLOYEE**

- Affected employee

**DESCRIPTION**

- Work in an area where energy control procedures are used.
- Work on machines/equipment that are subject to lockout requirements
- If duties are expanded to include servicing/maintenance on machines/equipment that are locked out, an affected employee is also an authorized employee

**TRAINING**

- The purpose and use of energy control procedures.
- The knowledge that machines/equipment which are locked out may not be started or energized.

**RETRAINING:**

Retraining must be provided for all authorized and affected employees whenever there is a change that affects energy control procedures (e.g., job assignments, machines, equipment, processes, etc.). Retraining must also be conducted whenever an annual inspection reveals, or a manager or supervisor has reason to believe there are variations from or inadequacies in an employee's knowledge or use of energy control procedures. The re-training must introduce new or revised methods necessary to re-establish employee proficiency.

**GENERAL ENERGY CONTROL PROCEDURE**

The following elements and actions must be included in written energy control procedures for all machines/equipment that require them, although the specifics will vary. They must be performed in the following sequence by an authorized employee.

1. **Preparation** - The authorized employee must have knowledge of the type, magnitude and hazards of the energy to be controlled and the method/means of control before shutdown.
2. **Notification** - Notify affected employees of the application of lockout/tagout (LOTO) devices prior to applying them.
3. **Shutdown** - The machine/equipment must be shut down by the normal stopping procedure and in a manner that avoids creating any increased or additional hazards.

4. **Isolation** - Apply all energy isolating devices needed to control the energy to the machine/equipment in such a manner as to isolate the machine/equipment from all energy sources.

5. **Device Application** - Affix LOTO devices (conforming to Appendix B requirements) to each energy isolating device. Locks or tags MUST identify the individual applying the lock as well as the date.

6. **Release stored energy** - Disconnect and drain all stored electrical, gravitational, mechanical and/or thermal energy to a zero-energy state or otherwise made safe by blocking or repositioning of equipment. This can be accomplished by:

- Releasing pressured lines such as hydraulic, air, steam, gas and water
- Releasing spring-loaded equipment
- Blocking mechanical equipment with moving, rotating or elevated parts

7. **Verification** - Verify that the system is isolated. This is generally accomplished by first establishing that no personnel are exposed and then turning the switch to the ON position using normal operating controls. If there is a possibility of re-accumulation of stored energy to a hazardous level, verification of isolation must be continued until the servicing/maintenance is completed, or until the possibility of such accumulation no longer exists.

8. **Servicing/Maintenance** - Perform the servicing/maintenance.

9. **Release from Lockout/Tagout** - Once servicing/maintenance is completed, the authorized employee who attached each LOTO device is responsible for promptly removing it (see exception below for instances where this is not feasible) after completing the following actions:

1. Inspect the work area: Ensure that the machine/equipment is fully assembled and operational, all tools and nonessential items are removed and all safety guards are back in place.
2. Ensure that all employees are clear of the machine/equipment.
3. Remove LOTO devices.
4. Notify affected employees that LOTO devices have been removed and the machine/equipment will be reenergized.
5. Reenergize the machine/equipment.

Exception: If the following steps are taken by the supervisor in charge, a device may be removed by someone else.

- Verify that the person who attached the device is not at the facility.
- Make all reasonable efforts to notify the person that their device has been removed.
- Ensure the person is aware of their device's removal before resuming work at the facility.

**Temporary Release for Testing or Positioning** If a machine/equipment must be temporarily energized during servicing/maintenance for testing or positioning, the temporary removal of LOTO devices and subsequent re-energization must follow this sequence:

1. Clear machine/equipment of tools and other miscellaneous materials.
2. Remove all employees from the area.
3. Remove LOTO devices.
4. Energize and proceed with testing or positioning.
5. De-energize and reapply LOTO devices.

**Shift or Personnel Changes** When servicing/maintenance extends beyond one work shift, a procedure must be in place to transfer control of the machine/equipment to the arriving shift. This transfer is the responsibility of all departing and arriving shift supervisors involved with the project. Responsibilities include:

- Overseeing the transfer of control from existing LOTO devices to separate devices.
- Ensuring continuity of the energy control procedure is maintained until the arriving supervisor has taken full control of the project.

**ANNUAL INSPECTIONS:** Each energy control procedure in place must be inspected in use at least annually by an authorized employee to correct any deviations or inadequacies identified.

The inspection must include a review, between the inspector and each authorized employee, of that authorized employee's responsibilities under the energy control procedure being inspected.

**CONTRACTORS:** When a contractor is hired to perform work covered by this program, the contractor must inform each other of their respective energy control procedures. The Supervisor in charge must ensure that their employees understand and comply with the restrictions and prohibitions of the contractor's energy control program.

**DOCUMENTATION** Records must be kept of all training and annual inspections required by this program.

- Training records must contain employees' names, dates of training and the content. Copies of training records must be sent to EHS in a timely manner.
- Annual inspection records must identify the machine/equipment on which the energy control procedure was utilized, the date, names of the inspector and employees involved in the inspection.

## II. ASSIGNMENT OF RESPONSIBILITY

- A. **Jeremy Oliver, COSS** will be responsible for implementing the lockout/tagout program.
- B. **Richard Crace** are responsible for enforcing the program and insuring compliance with the procedures in their departments.
- C. **Richard Crace** is responsible for monitoring the compliance of this procedure and will conduct the annual inspection and certification of the authorized employees.
- D. **Authorized employees** (those listed in Attachment A) are responsible for following established lockout/tagout procedures. An authorized employee is defined as a person who locks out or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment. An affected employee becomes an authorized employee when that employee's duties include performing servicing or maintenance covered under 1910.147, The Control of Hazardous Energy (lockout/tagout).
- E. **Affected employees** (all other employees in the facility) are responsible for insuring they do not attempt to restart or re-energize machines or equipment that are locked out or tagged out. An affected employee is defined as a person whose job requires him/her to operate or use a machine or equipment on which servicing or maintenance is being performed under lockout or tagout, or whose job requires him/her to work in an area in which such servicing or maintenance is being performed.

### B. Shift or Personnel Changes

Each facility must develop written procedures based on specific needs and capabilities. Each procedure must specify how the continuity of lockout or tagout protection will be ensured at all times. See 1910.147(f)(4).

### C. Procedures for Outside Personnel/Contractors

Outside personnel/contractors shall be advised that the company has and enforces the use of lockout/tagout procedures. They will be informed of the use of locks and tags and notified about the prohibition of attempts to restart or re-energize machines or equipment that are locked out or tagged out.

The company will obtain information from the outside personnel/contractor about their lockout/tagout procedures and advise affected employees of this information.

The outside personnel/contractor will be required to sign a certification form (see Attachment E). If outside personnel/contractor has previously signed a certification that is on file, additional signed certification is not necessary.

### K. Training and Communication

Each authorized employee who will be utilizing the lockout/tagout procedure will be trained in the recognition of applicable hazardous energy sources, type and magnitude of energy available in the work place, and the methods and means necessary for energy isolation and control.

Each affected employee (all employees other than authorized employees utilizing the lockout/tagout procedure) shall be instructed in the purpose and use of the lockout/tagout procedure, and the prohibition of attempts to restart or re-energize machines or equipment that are locked out or tagged out.

Training will be certified using Attachment B (Authorized Personnel) or Attachment C (Affected Personnel). The certifications will be retained in the employee personnel files.

### L. Periodic Inspection

A periodic inspection (at least annually) will be conducted of each authorized employee under the lockout/tagout procedure. This inspection shall be performed by **Richard Crace**. If **Richard Crace** is also using the energy control procedure being inspected, then the inspection shall be performed by another party.

The inspection will include a review between the inspector and each authorized employee of that employee's responsibilities under the energy control (lockout/tagout) procedure. The inspection will also consist of a physical inspection of the authorized employee while performing work under the procedures.

The **Supervisor** shall certify in writing that the inspection has been performed. The written certification (Attachment D) shall be retained in the individual's personnel file.

# Aerial and Scissor Lift Safety Program

**INTRODUCTION:** Aerial/scissor lifts pose a serious safety hazard if not used properly. It is the policy of the Geddis Paving & Excavating to train employees on the hazards of operating aerial lifts and to ensure such equipment is safety maintained.

**PURPOSE** This program has been established to:

- Reduce risk by ensuring the safe operation of aerial lifts.
- Ensure departments understand and comply with safety standards related to aerial lifts.
- Ensure regulatory compliance and reduce liability. **SCOPE** This program applies to all employees operating aerial/scissor lifts on any Geddis Paving & Excavating's job sites or property.

## **RESPONSIBILITIES Management**

- Ensure that responsibilities assigned within this program are carried out within their administrative departments.
- Designate employees responsible for the implementation of this program within their department.
- Actively support this program to demonstrate overall safety culture development.
- Ensure adequate funding is available to support this program.

## **Office of Environmental Health and Safety**

- Assist departments with implementing a regulatory compliant aerial and scissor lift program.
- Assist with aerial/scissor lift training.
- Periodically review and update the aerial/scissor lift written program.
- Periodically evaluate the work site usage of aerial/scissor lifts.
- Investigate aerial and scissor lift usage injuries and damage.

## **Supervisors**

- Review and ensure understanding of this program and its applicability to your department.
- Ensure employees comply with all provisions of this program.
- Ensure employees receive training appropriate to their assigned tasks and maintain documentation.
- Ensure employees are provided with and use appropriate personal protective equipment (PPE).
- Take prompt action including disciplinary action when unsafe conditions or acts are observed.
- Investigate aerial and scissor lift usage injuries and damage. Ensure periodic maintenance is performed on the lift.

## **Aerial and scissor lift operator**

- Adhere to owner's manual and all provisions in this program.
- Attend and adhere to all required training.
- Immediate report any unsafe acts or conditions to supervisor.
- Ensure worksite is barricaded.

- Complete worksite inspections and consult with supervisor and/or EH&S Office regarding any unusual hazards.

## **DEFINITIONS:**

**Aerial Lifts:** Any powered, mobile, vehicle-mounted device that may elevate, telescopically extend, articulate and may (or may not) rotate around a substantial axis in order to raise and support personnel to elevated job sites.

Aerial lifts include extendible boom platforms; vehicle-mounted aerial ladders; articulating, rotating boom platforms; vertical self-elevating towers; cherry pickers; bucket trucks and any other equipment built in accordance with either ANSI-A92.2 (1990), Vehicle-Mounted Elevating and Rotating Aerial Devices, or ANSI-A92.5 (1992), Boom Supported Elevating Work Platforms.

**Scissor Lifts:** Any powered, mobile device that has a personnel work platform which is mechanically raised vertically above the carriage by means of controls on the work platform.

This equipment is designed and fabricated according to either ANSI- A92.6 (1990), Self-Propelled Elevating Work Platforms, or ANSI-A92.3 (1990), Manually Propelled Elevating Aerial Platforms.

**Anchorage:** A secure point of attachment to be used with personal fall protection equipment.

**Certified Operator:** Certification of aerial/scissor lift operators at Geddis Paving & Excavating is a three- step process consisting of classroom instruction, hands-on training and hands-on evaluation. Once the employee has successfully completed all three steps they are considered to be a certified operator.

**Competent Trainer:** An employee who has successfully completed a Train-the- Trainer or equivalent type of training program and is familiar with the type of aerial/scissor lift in their work unit. A contractor or equipment vendor who has experience training aerial/scissor lift safety and operation and is familiar with the equipment is also permitted to be a Competent Trainer.

**Competent Evaluator (Hands-on):** An employee in the department who is experienced and competent with the aerial/scissor lift. An employee must be familiar with the equipment and its safe operation. In order to be considered competent in regards to conducting the evaluation portion of the aerial/scissor lift training, an employee must have successfully completed train-the-trainer course.

**Familiarization:** Providing information regarding the control functions and safety devices for the aerial /scissor lift to an operator of the equipment.

**Insulated Platform:** A platform designed and tested to meet the specific electrical insulation ratings consistent with the manufacturer's identification plate.

**Outriggers:** Devices that increase the stability of the aerial lift platform and that are capable of lifting and leveling the aerial / scissor lift platform.

**Rated Work Load:** The designated capacity of the aerial platform as specified by the manufacturer.

Stabilizers: Devices that increase the stability of the aerial lift platform but are not capable of lifting or leveling the aerial / scissor lift platform.

## **GENERAL REQUIREMENTS**

The following sections provide requirements and best management practices for the various types of aerial and scissor lifts used at Geddis Paving & Excavating. When in doubt, default to the manufacturer's instructions for the particular make and model of the lift for more detailed guidance.

The information in this document shall be supplemented by good judgment, safe operation, and caution in evaluating each situation. Since the operator is in direct control of the aerial/scissor lift, conformance with good safety practices is the responsibility of the operator. The operator shall make decisions on the use and operation of the aerial/scissor lift with due consideration for the fact that his or her own safety as well as the safety of others is dependent on their actions.

All operators SHALL be trained before operating aerial/scissor lifts. Operators are ONLY qualified to use lifts to the rated capacity of the equipment for which they are trained and evaluated. All operations shall be done safely and in accordance with accepted work practices and lift manufacturer guidelines. Various departments may impose additional restrictions on their operations as necessary.

## **PRE-USE INSPECTION**

- Every aerial/scissor lift must undergo a pre-use inspection prior to use on each shift. Aerial/scissor lifts not used during a shift do not have to undergo an inspection during that shift.
- Pre-use inspections must be documented using an appropriate checklist for the aerial/scissor lift similar to the one in Appendix B. Refer to the manufacturer's inspection requirements for complete inspection details.
- Completed checklists will be kept on file for one year.
- The pre-use inspection will identify conditions that could affect the safe use of the aerial/scissor lifts. If any unsafe conditions exist, the aerial/scissor lift shall be removed from service. In order to remove an aerial/scissor lift from service, the operator shall remove the keys and place an "Out of Service" tag near the operator control panel.
- Operators must immediately report any unsafe aerial/scissor lift conditions to their supervisor. When an aerial/scissor lift has been removed from service, the operator must give the keys to the supervisor for safekeeping. The supervisor is then responsible for ensuring the necessary arrangements are made for repair.
- Only authorized personnel shall perform aerial/scissor lift repairs and adjustments. All replacement parts shall be the same design as the original or an equivalent design as designated by the manufacturer.

## **WORKSITE INSPECTION**

Operators will inspect the workplace to remove hazards before and during aerial lift use. The worksite will be inspected for hazards such as:

- Overhead obstructions and high voltage hazards, must remain a minimum of 10' from overhead powerlines
- Slope(s), ditches, bumps, debris, drop-offs and floor obstructions.

- Wind and weather conditions.
- Other hazardous locations and atmospheres.
- Inadequate support (The working surface that the lift is sitting on cannot

support the weight of the machine, men, etc. for the operation).

- Presence of unauthorized persons or other hazardous conditions.

The Safety Director and operator's supervisor shall determine if there are any unusual hazards in areas where lifts will be used.

## **PERSONAL PROTECTIVE EQUIPMENT**

Fall protection equipment must be used as follows when operating aerial/scissor lifts:

### **1. Aerial Lifts:**

a. Operators shall be secured to the anchor point provided by the equipment manufacturer by either a self-retracting lanyard or by a lanyard short enough to prevent the employee from being ejected.

b. Operators must follow manufacturer's recommendations as to which fall protection system to use.

### **2. Scissor Lifts:**

a. The guardrail system provides fall protection. If the manufacturer has installed an anchorage point, a fall protection system (restrain, positioning, personal fall arrest system) as designated by the manufacturer's instructions must be utilized.

3. Tying a lanyard off to an adjacent pole, structure, or equipment while working from an aerial lift shall not be permitted.

4. Other types of personal protective equipment (PPE) such as hard hat, safety glasses, safety gloves, shall be worn according to the task specific PPE hazard assessment.

## **TRAINING**

1. Training must be completed prior to any use of the aerial/scissor lift. Certification of aerial/scissor lift operators at Geddis Paving & Excavating is a three-step process consisting of classroom instruction, hands-on training and hands-on evaluation.

2. Classroom instruction, hands-on training and hands-on evaluation can be conducted by either a competent trainer in the department, equipment manufacturer, safety professional and/or a vendor who specializes in aerial/scissor lift training.

3. To become a competent Geddis Paving & Excavating aerial/scissor lift trainer the employee must complete a train-the-trainer session.

4. Training must be specific to the type of aerial/scissor lift being used.

5. Training must cover the following:

a. The purpose and use of the equipment manuals.

b. That operating manuals are an integral part of the lift and must be properly stored on the vehicle.

- c. Pre-use inspection.
- d. Responsibilities associated with problems or malfunctions affecting the operation of the lift.
  - e. Factors affecting stability.
  - f. The purpose of placards and decals.
  - g. Worksite inspection and barricades.
  - h. Applicable safety rules and regulations.
  - i. Authorization to operate.
  - j. Operator warnings and instructions.
  - k. Proper use of personal fall protection equipment.
- l. Hands-on operation

6. Employees shall not be allowed to operate rented equipment unless they have been previously certified on similar equipment. Operators are also required to review the owner's manual and shall be given ample time to become familiar with the equipment and its controls before operation is permitted. The vendor is required to review equipment with the user when the user is not familiar with the type of aerial/scissor lift.

7. Trainees must successfully complete hands-on training and a hands-on evaluation before being allowed to operate an aerial/scissor lift independently. Trainees will be given adequate supervision and time to learn basic operating skills.

8. Initial operator hands-on evaluations must be completed using the checklist found in Appendix C or equivalent.

9. Documented re-evaluation of each aerial/scissor lift operator will be completed at least once every three years using Appendix C or equivalent.

10. Re-evaluations can be conducted by a train-the-trainer certified competent employee in the department who is experienced and competent with the aerial/scissor lift.

11. Refresher training in relevant topics will be provided to an aerial/scissor lift operator when any of the following occur:

- a. The operator has been observed to be using the aerial/scissor lift in an unsafe manner.
- b. The operator has been involved in an accident or a near-miss incident.
- c. The operator has received an evaluation that reveals the operator is not using the aerial/scissor lift safely.
- d. The operator is assigned to operate a different type of equipment.
- e. A condition in the workplace changes in a manner that could affect safe operation of the equipment.

## MAINTENANCE

Periodic (depending on activity, severity of service and environment) maintenance evaluations shall be performed by the manufacturer or authorized representative. The items listed in the owners' manual shall be tested, evaluated and, if applicable, corrected by qualified personnel before the aerial/scissor lift is returned to service. Lifts shall not be operated if they are out of compliance with manufacturer specifications. Modifications or disabling of safety devices, such as warning beepers, guards or interlocks is prohibited.

**REFERENCE DOCUMENTS**

- OSHA 29 CFR 1910.67 Vehicle-mounted elevating and rotating work platforms
- OSHA 29 CFR 1926.452 Additional requirements applicable to specific types of scaffolds
- OSHA 29 CFR 1926.453 Aerial lifts

**WORK AREA INSPECTION CHECKLIST FOR AERIAL / SCISSOR LIFT**

Instructions: Before an aerial lift is used and during use, the operator shall check the area in which the aerial platform lift is to be used for possible hazards such as, but not limited to:

- Drop-offs or holes
- Slopes
- Bumps and floor obstructions
- Debris
- Overhead obstructions and high voltage conductors
- Hazardous locations and atmospheres
- Tools and/or other equipment
- Inadequate surface and support to withstand all load forces imposed by the aerial platform lift
- Wind and weather conditions 🌍 At 20mph wind speeds or anticipated gusts, lifts will be lowered to a maximum height of 20 ft 🌍 At 25mph wind speeds or anticipated gusts, lifts will be grounded
- Presence of unauthorized people
- Other possible unsafe conditions

Operator Print Name and Sign: \_\_\_\_\_

Additional Operators: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

NOTE: This form must be kept on file for 1 year and is subject to review by the Environmental Health and Safety Office. Documentation of repairs shall be maintained with the aerial lifts preventive maintenance records

**Safe Work Practices**

**General Safe Work Practices**

- Operators shall not wear any loose clothing or any accessory that can catch in moving parts.
- Before machine is started, the operator must walk completely around the machine to ensure everyone and everything is clear of the machine.
- Articulating boom and extendable boom platforms, primarily designed as personnel carriers, shall have both platform (upper) and lower controls. Upper controls shall be in or beside the platform within easy reach of the operator. Lower controls shall provide for overriding the upper controls. Controls shall be plainly marked as to their function. Lower level controls shall not be operated unless permission has been obtained from the employee in the lift, except in case of emergency.

- Modifications and additions that may affect the capacity or safe operation of an aerial/scissor lift are strictly prohibited without the manufacturer's written approval. Capacity, operation, and maintenance instruction markings will be changed as necessary if the manufacturer approves a modification. o EHS must be notified before modification takes place.
- The insulated portion (if applicable) of an aerial / scissor lift shall not be altered in any manner that might reduce its insulating value.
  - Any signs, plates, or decals which are missing or illegible must be replaced.
  - Welding operations on aerial/scissor lifts shall be conducted per UNCP Hot Work Permit Program.
  - If the aerial / scissor lift becomes disabled, a "out of service" tag or equivalent shall be attached to the controls inside the platform in a conspicuous location.
  - Aerial/scissor lift devices with noted, reported deficiencies shall not be operated until repairs are made and equipment is authorized for use. Safe Work Practices Before Operation
  - Consideration shall be given to the amount of wind. Follow the manufacturer's instruction regarding operation in windy conditions. As a general rule aerial/scissor lifts shall not be operated in winds exceeding 25 MPH although this can vary depending on the model of equipment.
    - Guardrails must be installed and access gates or openings must be closed before raising the platform. • Boom and platform load limits specified by the manufacturer shall not be exceeded.
    - Before moving an aerial / scissor lift for travel, the boom(s) shall be inspected to see that it is properly cradled and outriggers are in stowed position.
    - Consideration shall be given to the protection of bystanders via barricading, having another employee keep bystanders at a safe distance or by other means.
    - Aerial / scissor lifts shall not be operated from trucks, scaffolds, or similar equipment.

### **Safe Work Practices During Operation**

- Attention shall be given towards the direction of travel, clearances above, below and on all sides.
- Employees shall not sit or climb on the guardrails of the aerial / scissor lift.
  - The use of a spotter or back up alarm is required.
- Planks, ladders or other devices shall not be used on the work platform.
- An aerial / scissor lift shall not be moved when the boom is elevated in a working position with employees in the basket, except for equipment which is specifically designed for this type of operation. • Aerial / scissor lift shall not be placed against another object to steady the elevated platform.
- Aerial / scissor lift shall not be used as a crane or other lifting device.
- Aerial / scissor lift devices shall not be operated on grades, side slopes or ramps that exceed the manufacturer's recommendations.
- The brakes shall be set and outriggers, when used, shall be positioned on pads or a solid surface.
- Speed of aerial/scissor lift devices shall be limited according to the conditions of the ground surface, congestion, visibility, slope, location of personnel and other factors that may cause hazards to other nearby personnel.
- Stunt driving and horseplay shall not be permitted.
- Booms and elevated platform devices shall not be positioned in an attempt to jack the wheels off the ground.
- The area surrounding the elevated platform shall be cleared of personnel and equipment prior to lowering the elevated platform.
- On boom-type machines, drive controls shall not be used to maneuver in close to an obstacle. The swing and boom functions shall be used for maneuvering.
- Operators are to call for assistance if the platform or any part of the machine becomes entangled.

- The operator shall maintain a clear view of the path of travel and a safe distance from other obstacles such as: debris, drop offs, holes, depressions, slopes, and overhead hazards. The following approach distances to energized electrical lines must be maintained:

### **Voltage Range (Phase to Phase)**

Minimum Safe Approach Distance (feet)

0 to 300V Avoid Contact

300V to 50 KV 10

>50KV to 200KV 15

>200KV to 350KV 20

>350KV to 500KV 25

>500KV to 750KV 35

>750KV to 1000KV 45

### **Safe Work Practices After Operation**

- Safe shutdown shall be achieved by utilizing a suitable parking area, placing the platform in the stowed position, placing controls in neutral, idling engine for gradual cooling, turning off electrical power, and taking the necessary steps to prevent unauthorized use.
- Aerial / scissor lifts shall be shut off prior to fueling. Fueling must be completed in well ventilated areas free of flames, sparks or other hazards which may cause fires or explosions.

# CRANES & RIGGING FOR MATERIALS SAFETY PROGRAM

## Purpose

• Cranes, hoists, and rigging devices are used by Geddis Paving & Excavating for lifting and moving materials. It is Geddis Paving & Excavating policy to obtain crane and hoist services from jobsite mechanical contractors, owners, or third-party subcontractors. If outsourcing crane or hoist operations is not feasible, Geddis Paving & Excavating will perform said operations with qualified and certified individuals. Geddis Paving & Excavating employees are restricted from operating cranes or hoist connected to occupied personnel platforms. All training and certification will be provided by licensed, qualified crane and hoist operator instructors.

## Scope

• The safety rules and guidance in this chapter apply to all Geddis Paving & Excavating operations that involve the use of cranes and hoists and to all Geddis Paving & Excavating employees, supplemental labor, and subcontractor personnel who use such devices.

## Regulatory References

• This crane and hoist safety program is intended to satisfy the following regulatory requirements applicable to periodic use in support of construction activities:  
29 CFR 1926.550, 1926.553, 1926.554, 1910.179, 1910.180

## Policy

- Only licensed or certified individuals are permitted to operate cranes or hoists and are designated as competent personnel.
- Geddis Paving & Excavating employees are not permitted to operate cranes or hoists connected to occupied personnel platforms.
- Cranes and hoists are used primarily for the transportation of materials and equipment or to assist in the setting of heavy equipment.
- Geddis Paving & Excavating employees will not work from or be transported by personnel platforms connected to cranes, hoists, derricks, etc. except where the use of more conventional means of reaching the worksite, such as a ladder, stairway, elevating work platform or scaffold, would be more hazardous or impractical because of structural design or worksite conditions

## Safety Director is responsible for

- Arranging training classes for all Crane & Hoist Operators
- Maintaining records of Crane and Hoist Operators licenses or certificates
- Obtaining monthly test and inspections of Geddis Paving & Excavating owned crane and hoist equipment.

- Periodically verifying monthly test and inspection reports.
- Maintaining qualification records on approved third party crane and hoist operator instructors.

**Supervisors are responsible for:**

- Ensuring that employees under their supervision receive the required training and are certified and licensed to operate the cranes and hoists in their areas.
  - Providing or arranging training for prospective crane and hoist operators. This training must be conducted by a qualified, designated instructor who is a licensed crane and hoist operator.
- Ensuring that hoisting equipment is inspected and tested monthly by a responsible individual and that rigging equipment is inspected annually.

**Crane and Hoist Operators are responsible for:**

- Meeting the physical, mental, educational, training, written and practical testing requirements as indicated in ASME B30.5-3.1.2(a) through (c).
- Operating hoisting equipment safely and exercising their authority to stop and refuse to handle loads if there is a safety concern.
- Conducting functional tests prior to using the equipment.
- Selecting and using rigging equipment appropriately.
- Having a valid operator's license or certificate on file with Geddis Paving & Excavating while operating cranes or hoists

**General Procedures** - General Safety Rules Operators shall comply with the following rules while operating the cranes and hoists:

- Ground conditions must firm, drained, graded and be able to support the crane, supporting materials plus the material or equipment that is being lifted.
- All assembling and disassembling of equipment such as booms or counterweights must follow manufacturer's instructions and prohibitions.
- A competent person shall supervise all assembling and disassembling
- Do not engage in any practice that will divert your attention while operating the crane.
- Crane operator is allowed to cancel operation if he feels there is a safety issue
- A signal person will be provided if the operators view is obstructed, if the operator determines one is necessary.
- Respond to signals only from the person who is directing the lift or any appointed signal person. Obey a stop signal always, no matter who gives it.
- Do not move a load over people. People shall not be placed in jeopardy by being under a suspended load. Also, do not work under a suspended load unless the load is supported by blocks, jacks, or a solid footing that will safely support the entire weight. Have a crane or hoist operator remain at the controls or lock open and tag the main electrical disconnect switch.
- Employees are not allowed to stand under suspended load
- Accessible areas within the swing radius of the rear of the rotating superstructure of the crane, either permanently or temporarily mounted, shall be barricaded in such a manner as to prevent an employee from being struck or crushed by the crane.
- Ensure that the rated load capacity of a crane's bridge, individual hoist, or any sling or fitting is not exceeded. Know the weight of the object being lifted or use a dynamometer or load cell to determine the weight.
- Ensure that a manufacturer's load rating chart and other essential information is conspicuously posted in all cranes cabs and on all hoists and other lifting equipment.
- Check that all controls are in the OFF position before closing the main-line disconnect switch.
- If spring-loaded reels are provided to lift pendants clear off the work area, ease the pendant up into the stop to prevent damaging the wire.

- Avoid side pulls. These can cause the hoist rope to slip out of the drum groove, damaging the rope or destabilizing the crane or hoist.
- To prevent shock loading, avoid sudden stops or starts. Shock loading can occur when a suspended load is accelerated or decelerated and can overload the crane or hoist. When completing an upward or downward motion, ease the load slowly to a stop.
- Adequate clearance shall be maintained between moving and rotating structures of the crane and fixed objects to allow the passage of employees without harm.
- fire extinguisher, rated at least 5 BC is in the cab of each crane.
- In the event the crane or hoist is powered by an internal combustion engine and is being operated in an enclosed space, the atmosphere will be tested, and the results recorded verifying that the atmosphere is safe for work.
  1. Test the upper-limit switch. Slowly raise the unloaded hook block until the limit switch trips.
  2. Make sure load lines are not crossed, twisted, or kinked.
  3. Make sure audible warning signals are operational if applicable.
  4. Visually inspect the hook, load lines, trolley, and bridge as much as possible from the operator's station; in most instances, this will be the floor of the building.
  5. If provided, test the lower-limit switch.
  6. Test all direction and speed controls for both bridge and trolley travel.
  7. Test all bridge and trolley limit switches, where provided, if operation will bring the equipment near the limit switches.
  8. Test the pendant emergency stop.
  9. Test the hoist brake to verify there is no drift without a load.
  10. If provided, test the bridge movement alarm.
  11. Lock out and tag for repair any crane or hoist that fails any of the above tests.
  12. Ensure that all deficiencies are repaired prior to use.
  13. Ensure that all manufacturer procedures applicable to the operational function of the equipment is complied with and that a copy is readily available.

### **Operating Near Power Lines**

- A Job Safety Analysis will be completed prior to beginning any task and include a determination as to the proximity (within 20') of overhead power lines.
- Lines rated 50KV or below:
  - Minimum clearance between lines and any part of crane or load shall be 20 feet.
  - Lines rated over 50KV:
    - Minimum clearance shall be 20 feet plus 0.4 inches per 1KV above 50KV
- If the clearances indicated above cannot be maintained, then the power line will be de-energized and visibly grounded.
  - A person shall be designated to observe clearance of the equipment and give timely warning for all operations where it is difficult for the operator to maintain the desired clearance by visual means.
  - Any overhead wire shall be considered energized unless and until the person owning such line or the electrical utility authorities indicate that it is not an energized line and it has been visibly grounded.
  - Center the hook over the load to keep the cables from slipping out of the drum grooves and overlapping, and to prevent the load from swinging when it is lifted. Inspect the drum to verify that the cable is in the grooves.
    - Use a tag line when loads must traverse long distances or must otherwise be controlled. Manila rope may be used for tag lines.
    - Plan and check the travel path to avoid personnel and obstructions.
    - No personnel shall be allowed to work or pass under a suspended load.
    - Lift the load only high enough to clear the tallest obstruction in the travel path.

- Watch for pinch points
- Start and stop slowly
- Land the load when the move is finished. Choose a safe landing.
- Never leave suspended loads unattended. In an emergency where the crane or hoist has become inoperative, if a load must be left suspended, barricade and post signs in the surrounding area, under the load, and on all four sides. Lock open and tag the crane or hoist's main electrical disconnect switch.

### **Parking a Crane or Hoist**

- Remove all slings and accessories from the hook. Return the rigging device to the designated storage racks.
- Raise the hook at least 2.1 m (7-ft) above the floor.
- Store the pendant away from aisles and work areas or raise it at least 2.1 m (7 ft) above the floor.
- Place the emergency stop switch (or push button) in the OFF position.

### **General Rigging Safety Requirements**

- Crane load rigging shall only be performed by Qualified Rigger.
- Only select rigging equipment that is in good condition.
- All rigging equipment, including slings and fasteners, shall be inspected for damage or defects by a qualified person prior to each use and as necessary during its use to ensure that it is safe.
- Defective equipment is to be removed from service and destroyed to prevent inadvertent reuse.
- Taglines shall be used to control swinging
  - Slings and shackles shall have permanently affixed and legible identification markings, as prescribed by the manufacturer, that indicate the recommended safe working load.
  - Slings and shackles that do not have affixed and legible identification markings as required shall not be used.
  - Slings and shackles shall not be loaded more than their rated capacities depicted on the identification markings permanently affixed to the sling.
  - All rigging equipment when not in use will be removed from the immediate work area.
  - Proof coil steel chain shall not be used for hoisting purposes.
  - Wrought iron chains in constant use shall be annealed or normalized at intervals not exceeding 6 months when recommended by the manufacturer.
  - Annealing or normalizing shall be done only in accordance with the chain manufacturer's specifications.
  - Deformed hooks or rings shall be replaced or repaired and reshaped under proper metallurgical control and proof tested.
  - Hooks and shackles shall be used in accordance with manufacturer's recommendations.
    - o Hooks shall have safety latches
  - All hooks for which no applicable manufacturer's recommendations are available shall be tested to twice the intended safe working load before they are initially put into use.
  - Special custom design grabs, hooks, clamps, or other lifting accessories for such units as modular panels, prefabricated structures, and similar materials, shall be marked to indicate the safe working loads and shall be proof-tested to 125 percent of the rated load prior to use.
  - Rigging equipment, when not in use, shall be removed from the immediate work area so as not to present a hazard to employees.

### **Qualifications for Riggers**

A Qualified Rigger is defined as employees who have the training, experience and have completed a rigger training program that covers the following basic classroom and hands on instruction:

- Procedures and Precautions
  - o Load control/taglines
  - o Lift planning
  - o Sling inspection
  - o Unbinding loads
  - o Personnel transfer
  - o Sling handling and storage
  
- Rigging Basics
  - o Pinch points/body positions
  - o Personal Protective Equipment (PPE)
  - o Signals/communications
  - o Load stability
  
- Rigging Hardware
  - o Sheaves, blocks, hooks, latches, rings links, swivels
  - o Shackles, turnbuckles, cable clips o Spreader and equalizer beams
  - o Pad eyes, eyebolts, and other attachment points
  
- Slings
  - o Sling configurations
  - o Sling angle
  - o Rated load
  - o Sling types
  - o Cargo nets, baskets

#### Rigging a Load

Do the following when rigging a load:

- Determine the weight of the load. Do not guess.
- Determine the proper size for slings and components.
- Do not use manila rope for rigging.
- Make sure that shackle pins and shouldered eyebolts are installed in accordance with the manufacturer's recommendations.
  - Make sure that all hooks have functional latches in place.
  - Make sure that ordinary (shoulder less) eyebolts are threaded in at least 1.5 times the bolt diameter.
  - Use safety hoist rings (swivel eyes) as a preferred substitute for eye bolts wherever possible.
  - Pad sharp edges to protect slings. Remember that machinery foundations or angle-iron edges may not feel sharp to the touch but could cut into rigging when under several tons of load. Wood, tire rubber, or other pliable materials may be suitable for padding.
  - Do not use slings, eyebolts, shackles, or hooks that have been cut, welded, or brazed.
  - Chain or wire rope slings shall not be kinked, shortened with knots or bolts, or other makeshift devices.
  - Install wire-rope clips with the base only on the live end and the U-bolt only on the dead end. Follow the manufacturer's recommendations for the spacing for each specific wire size.

- Determine the center of gravity and balance the load before moving it.
- Slings used in a basket hitch must be balanced to prevent slippage.
- All slings shall be set to avoid slippage.
- Initially lift the load only a few inches to test the rigging and balance.
- Employees must stay clear of loads about to be lifted and from suspended loads.
- Tag lines should always be used when possible when hoisting a load.
- Hands or fingers shall not be placed between the sling and its load while the sling is being tightened around the load.
- Always wear gloves while handling a tag line
- Never wrap a tag line around your hand, arm, leg or any other part of your body.
- Do not step into the loop of a tag line.
- Keep tag lines from becoming tangled around your feet.
- Do not place your body between an immovable object and the load to be hoisted or being hoisted.
- Suspended loads shall be kept clear of all obstructions.
- Shock loading is prohibited.
- Slings shall not be pulled from under a load when the load is resting on the sling and damage to the sling may result.

### **Crane Overloading**

- Cranes or hoists shall not be loaded beyond their rated capacity for normal operations.
- Any crane or hoist suspected of having been overloaded shall be removed from service by locking open and tagging the main disconnect switch. Additionally, overloaded cranes shall be inspected, repaired, load tested, and approved for use before being returned to service.

### **Hand Signaling**

- A signal person must be provided in each of the following situations:
  - o The load travel or the area near or at load placement is not in full view of the operator
  - o When the equipment is traveling, the view in the direction of travel is obstructed
  - o The operator or person handling the load determines a signal person is necessary due to site specific safety concerns
- Signals to operators must use the hand, voice, audible method. Means of transmitting the signals (direct line of sight, radio, etc.) must be suitable and appropriate for the site conditions.
- The ability to transmit signals between the operator and signal person must be maintained
- Each signal person must:
  - o Know and understand the type(s) of signals used
  - o Be competent in the application of the type of signals used
  - o Have a basic understanding of equipment operation and limitations, including the crane dynamics involved in swinging and stopping loads and boom deflection from hoisting loads
  - o Demonstrate that he/she meets the qualification requirements through an oral or written test, and through a practical test
- Only one person shall give signals to a crane at a time, unless the emergency stop signal is given due to safety issues.
- The device used to transmit signals must be tested on site before beginning operations to ensure that the signal transmission is effective, clear, and reliable.

**Inspections:** Supervisors shall schedule and supervise (or perform) prior to use, monthly and annual inspections of all cranes, hoists, ropes, slings, fasteners, and attachments by qualified personnel.

## Prior to Use Inspections

- Inspections shall be performed by the crane operator prior to the use and through observation during normal operation of the equipment.
- All deficiencies shall be documented and examined by qualified personnel to determine if they constitute a safety hazard.
- Inspections shall include:
  - o All functional operating mechanisms for maladjustment interfering with proper operation.
  - o Deterioration or leakage in lines, tanks, valves, drain pumps, and other parts of air or hydraulic systems.
  - o Hooks, if deformations or cracks are found the hook shall be tagged out of service until repaired and tested by qualified personnel.
  - o Hoist chains, ropes, including end connections, for excessive wear, twist, distorted links interfering with proper function, or stretch beyond manufacturer's recommendations

## Monthly Inspections

Monthly inspections shall include all items from the daily inspections and shall be documented with a certification record which includes the signature of the Geddis Paving & Excavating qualified person who performed the inspection, the date, and identifier (serial number, unit number, etc.) for each piece of equipment. If safety hazards are found during inspections, the equipment in question shall be tagged out and not used until repairs are made.

## Annual Inspections

At least annually, a periodic inspection of all equipment covered by this program shall be inspected by a qualified third party. The inspection shall be documented.

Any deficiencies constituting a safety hazard shall cause the equipment to be tagged out of service until repairs are made. The inspection shall include the items from the daily and monthly inspections as well as the additional items below:

- Hoisting and lowering mechanisms.
- Trolley travel or monorail travel.
- Bridge travel.
- Limit switches and locking and safety devices.
- Structural members.
- Bolts or rivets.
- Sheaves and drums.
- Parts such as pins, bearings, shafts, gears, rollers, locking devices, and clamping devices.
- Brake system parts, linings, pawls, and ratchets.
- Load, wind, and other indicators over their full range.
- Gasoline, diesel, electric, or other power plants.
- Chain-drive sprockets.
- Crane and hoist hooks.
- Electrical apparatus such as controller contractors, limit switches, and push button stations.
- Wire rope.
- Hoist chains.

## Rope Inspections

- A thorough inspection of all running ropes shall be made and a certification record which includes the signature of the person who performed the inspection and an identifier for the ropes which were inspected. The record shall be kept on file where readily available to appointed personnel.
- Monthly
  - o Any deterioration resulting in appreciable loss of strength shall be carefully observed and the determination made as to whether further use of the rope would constitute a safety hazard. Conditions that could result in an appreciable loss of strength are:
    - o Reduction of rope diameter below nominal diameter due to loss of core support, internal or external corrosion, or wear of outside wires
    - o Several broken outside wires and the degree of distribution or concentration of such broken wires.
    - o Worn outside wires.
    - o Corroded or broken wires at end connections.
    - o Corroded, cracked, bent, worn, or improperly applied end connections.
    - o Severe kinking, crushing, cutting, or unstranding.
- Other Rope Inspections
  - o All rope which has been idle for a period of a month or more due to shutdown or storage of a crane on which it is installed shall be given a thorough inspection before it is placed in service. This inspection shall be for all types of deterioration and shall be performed by an appointed person whose approval shall be required for further use of the rope. A written and dated report of the rope condition shall be available for inspection.

### **Sling Inspections**

o All slings, fasteners and attachments shall be inspected each day prior to use and whenever service conditions warrant more frequent inspections. The inspections will be performed by an Geddis Paving & Excavating designated competent person and will examine the slings, fasteners and attachments for defects or damage. Damaged or defective slings or components will be immediately removed from service.

Below is a listing of damage that typically occurs on the various slings and components that warrant removal from service:

- o Nylon slings
- o Abnormal wear.
- o Torn stitching.
- o Broken or cut fibers.
- o Discoloration or deterioration.
- o Wire-rope slings
- o Kinking, crushing, bird caging, or other distortions.
- o Evidence of heat damage.
  - o Cracks, deformation, or worn end attachments.
- o Six randomly broken wires in a single rope lay.
- o Three broken wires in one strand of rope.
- o Hooks opened more than 15% at the throat.
- o Hooks twisted sideways more than 10deg. from the plane of the unbent hook.
- o Alloy steel chain slings
- o Cracked, bent, or elongated links or components.
- o Cracked hooks.

- o Shackles, eye bolts, turnbuckles
- o Stripped threads.
- o Deformed shafts or pins.

### **Load Testing**

- Rated load test. Prior to initial use Geddis Paving & Excavating will verify that all newly installed, extensively repaired/altered cranes and hoists are tested by or under the direction of an appointed or authorized person, confirming the load rating of the crane.
- The load rating will not be more than 80 percent of the maximum load sustained during the test.
- Test loads shall not be more than 125 percent of the rated load unless otherwise recommended by the manufacturer.
- All tests reports shall be placed on file where readily available to appointed personnel.
- Slings shall have appropriate test data when purchased. It is the responsibility of the purchaser to ensure that the appropriate test data are obtained and maintained.
- Re-rated cranes and hoists shall be load tested to 125% of the new capacity if the new rating is greater than the previous rated capacity
- Fixed cranes or hoists that have had major modifications or repair shall be load tested to 125% of the rated capacity.
- Cranes and hoists that have been overloaded shall be inspected prior to being returned to service.
- Personnel platforms, baskets, and rigging suspended from a crane or hoist hook shall be load tested initially, then re-tested annually thereafter or at each new job site.
- All cranes and hoists with a capacity greater than 2722 kg (3 tons) should be load tested every four years to 125% of the rated capacity. Cranes and hoists with a lesser capacity should be load tested every eight years to 125% of the rated capacity.
- All mobile hoists shall be load tested at intervals to be determined by third party inspectors.
- Written reports on rated load test showing the test procedures and attesting to the correctness of any alteration or repair to the equipment. These written tests reports shall be placed on file where readily available to appointed personnel.

### **Maintenance**

- Geddis Paving & Excavating will verify that a preventive maintenance program based on the crane manufacturer's recommendations will be followed. If any deteriorated components or unsafe conditions are discovered during the required inspections, they must be corrected before the crane is returned to service. Qualified designated personnel will complete all maintenance and repairs.
- Before adjustments and repairs are started on a crane the following precautions shall be taken:
- The crane to be repaired shall be run to a location where it will cause the least interference with other cranes and operations in the area.
- All energy systems associated with the crane will be locked out and tagged out. In addition, the following will apply for Overhead and Gantry Cranes.
  - o All controllers shall be at the off position.
  - o The main or emergency switch shall be open and locked in the open position.
  - o Warning or "out of order" signs shall be placed on the crane, also on the floor beneath or on the hook where visible from the floor.
  - o Where other cranes are in operation on the same runway, rail stops, or other suitable means shall be provided to prevent interference with the idle crane.

- Where temporary protective rail stops are not available, or practical, a signalperson should be placed at a visual vantage point for observing the approach of an active crane and warning its operator when reaching the limit of safe distance from the idle crane.
- After adjustments and repairs have been made the crane shall not be operated until all guards have been reinstalled, safety devices reactivated, and maintenance equipment removed.

### **Crane and Hoist Safety Design Requirements**

All rental and company owned cranes used by Geddis Paving & Excavating will meet the following minimum design requirements.

- The design of all commercial cranes and hoists shall comply with the current requirements of ASME/ANSI B30.5 standards and Crane Manufacturer's Association of America standards (CMAA-70 and CMAA-74). Fabricated lifting equipment shall comply with the requirements in Chapter 2.2 (Lifting Equipment) of Mechanical Engineering Design Safety Standards (latest edition).
  - All crane and hoist hooks shall have safety latches.
  - Hooks shall not be painted (or re-painted) if the paint previously applied by the manufacturer is worn.
  - Crane pendants shall have an electrical disconnect switch or button to open the main-line control circuit.
  - Cranes and hoists shall have a main electrical disconnect switch. This switch shall be in a separate box that is labeled with lockout capability.
  - Crane bridges and hoist monorails shall be labeled on both sides with the maximum capacity.
  - Each hoist-hook block shall be labeled with the maximum hook capacity.
  - Directional signs indicating N-W-S-E shall be displayed on the bridge underside, and a corresponding directional label shall be placed on the pendant.
  - A device such as an upper-limit switch or slip clutch shall be installed on all building cranes and hoists. A lower-limit switch may be required when there is insufficient hoist rope on the drum to reach the lowest point.
  - All cab and remotely operated bridge cranes shall have a motion alarm to signal bridge movement.
  - All newly installed cranes and hoists, or those that have been extensively repaired or rebuilt structurally, shall be load tested at 125% capacity prior to being placed into service.
  - If an overload device is installed, a load test to the adjusted setting is required.
  - Personnel baskets and platforms suspended from any crane shall be designed in accordance with the specifications in 29 CFR 1926.550(g).
  - No modifications or additions which affect the capacity or safe operation of the equipment may be made without manufacture's approval.
- #### **12.0 Training**
- All Geddis Paving & Excavating employees shall be trained in basic rigging and crane and hoist safety awareness. All Geddis Paving & Excavating Employees assigned as operators shall be trained and certified for the specific type of equipment being operated. This training shall be provided by licensed, qualified crane and hoist operator instructors.
  - Only licensed or certified individuals will be permitted to operated cranes or hoists. Training and certification will be provided by licensed, qualified crane and hoist operator instructors.
  - Crane and hoist safety awareness training will be provided to all employees through weekly safety meetings, quarterly safety meeting and/or Toolbox Safety Meetings.

**Reporting & Recordkeeping Training** - All training shall be documented.

Reports – All crane, hoist and rigging incidents shall be reported.

Incident/Accident Report - All incidents resulting in injury or loss of consciousness of an employee or significant property damage shall be recorded as Incidents on an Geddis Paving & Excavating Incident/Accident Report.

**Near Miss Reports** - All incidents not resulting in employee injury or significant property damage but with the potential for serious injury or significant damage shall be recorded as near miss events on an Geddis Paving & Excavating Near Miss Report.

## **Geddis Paving & Excavating First Aid Written Policy**

This procedure is developed in accordance with provisions as outlined in OSHA standard 29 CFR 1910.151 (First Aid Standard).

**Purpose:** This policy establishes training and operational procedures that will be followed at to ensure prompt and knowledgeable treatment of injured employees, which will prevent minor injuries from becoming severe.

**Scope:** This policy applies to all employees and all visitors or vendors.

**Responsibilities:** The following responsibilities apply to various levels within the company.

**Senior Management:**

Require the full application and integration of this policy into daily operations, as applicable, in all areas of responsibility and with all direct reports.

- Assess managers and supervisors on their ability to apply this policy in their areas of responsibility.

**The Safety Director:**

Will administer all aspects of this policy to include:

- Maintaining and updating the written program as required.
- Coordinating necessary training for all affected employees.
- Providing necessary technical assistance to managers and supervisors.

– Periodically assessing the effectiveness of this program and its implementation in all affected areas of the company.

Managers and supervisors will: – Know how this policy applies to their areas, and know which employees are trained to be first responders and when they require retraining.

– Decide where it is necessary and appropriate to place first aid kits in their areas and ensure that the kits are restocked after use.

– Integrate and enforce the provisions of this policy in their areas of responsibility.

– Periodically audit the effectiveness of this policy in their areas of responsibility.

– Coordinate training for all affected employees, including those that will become first responders.

– Provide appropriate coaching and corrective action when necessary to ensure this policy is fully integrated.

– Ensure that first aid responders are available to assist injured workers on every jobsite or that a hospital is available within close proximity.

**All affected employees :**

Seek care when injured and report all work-related injuries to their supervisor. If hosting a guest of, they will similarly report a guest injury. – Follow all training, instructions and directives relative to this policy. – Seek clarification whenever there are questions concerning the application of this policy into daily operations.

**First Aid Program**

**Policy Evaluations and Updates:**

It is our goal to maintain a safety program that is understandable, effective and one that promotes a safe work environment. Any employee can make recommendations for improvement to this program or any other aspect of our safety system. These suggestions should be directed to any member of management, any safety committee member or to the Safety Director.

As a matter of policy, this program will be reviewed on an annual basis by the Safety Director to determine if all aspects still meet the needs of this organization. If there are significant events that take place during the year that indicate the program is less than effective, an immediate evaluation will be conducted and appropriate steps taken to increase the reliability of this plan.

Date of Review Name of Reviewer

Changes Required Yes or No

Current Revision Number

Definitions The following definitions help clarify words or phrases found in this policy:

**Emergency:** An unplanned event that could jeopardize the safety of people or property in our facility. An emergency can originate on our site or off-site, and it has an impact on either the people within our facility or property.

**First Aid:** Emergency care provided for injury or sudden illness before emergency medical treatment is available.

**First Aid Injury:** An injury that can be adequately treated using topical wound cleaning, topical medications, ice, heat, nonprescription medications (at nonprescription strength), temporary splinting during transport, simple splinter removal or blister drainage, tetanus immunization, adhesive bandages or wound closures, non-rigid splints, irrigation for a foreign body and the use of eye patches or finger guards.

**First Aid Kit:** Medical supplies suitable for the provision of basic first aid.

**First Responder:** Employee of who has undergone first aid training and has been certified to administer first aid in the event of a medical emergency.

**Emergency Medical Treatment:** Treatment by a physician or other licensed health care professional, or treatment using prescription-strength medications. Immunizations besides tetanus, such as hepatitis B or rabies, are considered medical treatment.

### Procedure

Overview In many cases, prompt and knowledgeable treatment of injured employees prevents minor injuries from becoming major. Geddis Paving & Excavating will train personnel in basic first aid and bloodborne pathogens exposure. Only these trained individuals will respond to medical problems or medical emergencies.

**Injured Employees:** Any employee injured on the job should immediately seek care and report their injury to a supervisor.

**Co-Workers of Injured Employees:** Treatment and supplies can be administered only by designated, trained personnel. All incidents must be properly documented. You will find the following information listed:

- Names and departments of first aid workers
- Name and telephone number of company physician
- Name and telephone number of nearest hospital and ambulance service

If a co-worker is trained as a first responder, it is permissible to provide care using the nearest first aid kit. If untrained or uncomfortable providing care, co-workers should help locate another first responder on the premises. Co-workers may consider assisting the injured employee in getting transportation, seeking help or notifying management. When in doubt, co-workers should contact supervisors, first responders and emergency medical care.

**First Aid Supplies:** First aid supplies should be monitored and restocked on a periodic basis. will be responsible for choosing types and amounts of first-aid supplies and maintaining those supplies. The supplies will be adequate and will reflect the most common injuries in the facility. First aid cabinets or kits will be maintained in accessible places in all parts of the facility. They will be regularly stocked and monitored to ensure availability in the event of an emergency.

First aid kits include:

1 Eyewash, 1oz with 2 Eye Pads and Strips	3
Adhesive Plastic Bandages, 1" x 3"	6
	0

Alcohol Wipes	1 0
Burn Dressing, 4" x 4"	1
Cold Pack, 4" x 5"	1
Conforming Gauze Roll, 4"	1
CPR Face Shield	1
First Aid Guide	1
First Aid Tape, 1/2" x 5yd	1
First Aid/Burn Cream Packets, 0.9g	1 0
Hand Sanitizer Packets, 0.9g	6
Nitrile Exam Gloves	4
Scissors	1
Sterile Gauze Pads, 4" x 4"	6
Sting Relief Wipes	4
Sunscreen Lotion Packets	2
Trauma Pads, 5" x 9"	2
Triangular Bandage, 40" x 40" x 56"	1
Triple Antibiotic Ointment Packets, 0.5g	1 0
Tweezers	1

### **Emergency Eyewash Stations and Emergency Showers:**

Exposure to chemicals may happen even with good engineering controls and personal protective equipment (PPE) programs in place. To protect workers from serious injury, Geddis Paving & Excavating has installed emergency eyewash stations and emergency showers in the following locations: In Foreman's Truck and in Mechanic Shop @ Main Office. The first 10 to 15 seconds after you are exposed to corrosive substances or hazardous chemicals are the most important for preventing serious injuries. Emergency eyewash stations and emergency showers provide on-the-spot drenching facilities to allow workers to immediately wash away hazardous substances that might otherwise cause serious injury. Follow these guidelines to ensure that you receive the most protection possible from serious injury.

- Quickly remove contact lenses before using the eyewash station.
- Emergency showers and eyewashes should be used for a minimum of 15 minutes.
- If possible, notify a supervisor immediately.

All employees will receive training on the proper operation and location of the emergency eyewash stations and emergency showers.

**Transportation by Car:** There may be cases in which injured employees needing professional medical attention can be transported to the hospital or medical facility by car. However, in other cases, transportation by ambulance may be necessary. If there is any doubt about the appropriate mode of transportation, an employee must call an ambulance. The following are some examples of conditions that necessitate an ambulance: – Employee is unconscious or in shock – Hemorrhaging – Severe abdominal cramps and/or vomiting – An apparent fracture – Other symptoms of internal injury Animal Bites Due to

the possibility of rabies, all animal bites must receive prompt medical attention by a physician. In the event of a bite, every attempt to confine the animal should be made.

**Cell Phone Use:** If the need for emergency medical services arises, personnel with cell phones may use them to call for assistance.

**Medical Emergency:** In the event of a medical emergency, the following actions will be taken:

- Notify a member of management who will initiate the 911 notification system
- Evaluate scene safety
- if there is any concern, all personnel should stay at a safe distance away from the scene
- Do not move the ill/injured person (unless s/he is in danger from their surroundings)
- Avoid all contact with blood and other bodily fluids
- Never attempt to provide first aid unless you are trained and equipped to do so
- A calm employee may stay with the ill/injured person to provide comfort
- The supervisor will assign at least two employees to wait for the EMS responders at the parking lot entrance and guide the responders to the scene of the emergency
- All uninvolved personnel should clear the area
  - If there has been any blood or bodily fluid release, trained personnel will clean and sanitize the area after the emergency phase has concluded

**Training** First aid training will be administered by Northwest Ohio Safety Council. Personnel designated to respond to medical problems or emergencies will receive training and periodic refresher courses (at least annually) in the following areas:

#### **Preparing to Respond to a Health Emergency**

- Prevention as a strategy in reducing fatalities, illnesses and injuries
- Interacting with the local EMS system
- Maintaining a current list of emergency telephone numbers (police, fire, ambulance, poison control, etc.) accessible to all employees
  - Understanding legal aspects of providing first-aid care, including good samaritan legislation, consent, abandonment, negligence, assault and battery, state laws and regulations
  - Understanding the effects of stress, fear of infection or panic, how they interfere with performance and what to do to overcome them
  - Learning the importance of universal precautions and body substance isolation to provide protection from bloodborne pathogens and other potentially infectious materials
  - Learning how to properly use PPE, including gloves, eye protection, masks and respiratory barrier devices
  - Learning proper management and disposal of blood-contaminated sharps and surfaces

#### **Assessing the Scene and Victim(s)**

- Assessing the scene for safety, number of injured individuals and nature of the event
  - Assessing the toxic potential of the environment and need for respiratory protection
- Establishing when a confined space necessitates respiratory protection or special training to perform a rescue
- Prioritizing care when there are several injured
- Assessing each victim for responsiveness, airway blockage, breathing, circulation and medical alert tags

- Taking a victim's history at the scene, including determining the mechanism of injury
  - Performing a logical head-to-toe check for injuries – Stressing the need to continuously monitor the victim
- Emphasizing early activation of EMS
- Indications for and methods Responding to Life-Threatening Emergencies
- Establishing responsiveness
- Establishing and maintaining an open and clear airway
  - Performing rescue breathing
  - Treating airway obstruction in a conscious victim
  - Performing CPR
- Using an AED
- Recognizing the signs and symptoms of shock and providing first aid for shock due to illness or injury
- Assessing and treating a victim who has an unexplained change in level of consciousness or sudden illness
- Controlling bleeding with direct pressure

Poisoning – Ingested poisons: alkali, acid and systemic poisons and the role of the Poison Control Center (800-222-1222)

- **Inhaled poisons:** *carbon monoxide, hydrogen sulfide, smoke, chemical fumes, vapors and gases* – Knowledge of the chemicals at the worksite and of first aid and treatment for inhalation or ingestion – Effects of alcohol and illicit drugs so the provider can recognize the physiologic and behavioral effects of these substances

Recognizing asphyxiation and the danger of entering a confined space without appropriate respiratory protection

**Responding to Medical Emergencies** – Chest pain – Stroke – Breathing problems – Anaphylactic reaction  
 – Hypoglycemia in diabetics taking insulin – Seizures – Pregnancy complications – Abdominal injury – Reduced level of consciousness – Impaled object

**Responding to Non-Life-Threatening Emergencies:**

- Wounds Assessment and first aid for abrasions, cuts, lacerations, punctures avulsions, amputations and crush injuries
  - o Principles of wound care, including infection precautions
  - o Principles of body substance isolation, universal precautions and use of PPE
- Burns
  - o Assessing the severity of a burn
  - o Recognizing whether a burn is thermal, electrical or chemical and administering the appropriate first aid
  - o Reviewing corrosive chemicals at a specific worksite along with administering appropriate first aid
- Extreme Temperatures
  - o Exposure to cold, including frostbite and hypothermia
  - o Exposure to heat, including heat cramps, heat exhaustion and heat stroke
    - Musculoskeletal Injuries
      - o Fractures
      - o Sprains, strains, contusions and cramps
      - o Head, neck, back and spinal injuries
      - o Appropriate handling of amputated body parts
    - Eye injuries
      - o First aid for eye injuries
      - o First aid for chemical burns
    - Mouth and Teeth Injuries
      - o Oral injuries, lip and tongue injuries, broken and missing teeth
      - o The importance of preventing aspiration of blood and/or teeth
  - o Bites and Stings
    - o Human and animal bites
    - o Bites and stings from insects, instruction in first-aid treatment of anaphylactic shock

Evaluation Employees undergoing the first aid training must pass written and practical tests before receiving certification as a First Responder.

Frequency of Training At a minimum, training will be conducted:

- Upon hire
- When this plan changes
- When employee duties change

**Training for Non-First Responders Training will consist of:**

- Methods of alerting employees of an emergency
- Employee duties upon discovering an emergency
  - Evacuation routes and evacuation locations – Procedures to be followed upon notification of emergency
- Special critical operations duties assigned to employees
- Operation and location of eyewash stations and emergency showers

**Recordkeeping:** Some medical emergency procedures may be considered “medical treatment” for OSHA recordkeeping purposes. The OSHA Recording and Reporting Occupational Injuries and Illnesses regulation (29 CFR 1904) requires that if any procedure considered to be medical treatment is performed on an employee with an occupational injury or illness, then the injury or illness will be regarded as recordable on the OSHA 300 Log.

Each injury or illness that requires the administration of first aid by a first responder will be fully documented and investigated so as to prevent future incidents of a similar nature.

## **GROUND FAULT PROTECTION (GFCI) WRITTEN PROGRAM**

**Purpose:**

This section covers Geddis Paving & Excavating’s program for protecting employees from hazardous electrical energy due to equipment malfunctions, defects, or improper grounding. OSHA requires that employers shall use either ground-fault circuit interrupters or an assured equipment grounding conductor program to protect employees on construction sites.

**Scope:**

All company operations shall use this program both in business units and project operations.

## Regulatory References:

This Ground Conductor and GFCI Employee Protection Program is primarily intended to satisfy the following regulatory requirements: o 29 CFR 1926.404

## Policy:

**Training** - All Geddis Paving & Excavating employees shall be trained in the Ground Conductor and GFCI Employee Protection Program.

**Assured Grounding Program** - shall be implemented and maintained on all Geddis Paving & Excavating jobsites.

**GFCI's** - All 120-volt, single-phase 15- and 20-ampere receptacle outlets used by Geddis Paving & Excavating employees as temporary power, and which are not part of the permanent wiring of the facility, shall have approved ground-fault circuit interrupters.

**Testing GFCI's** - All GFCI's shall be tested once every three (3) months to make sure they are working properly.

**Visual Inspections** - All cord sets, plugs and receptacles of cord sets, and any equipment connected by cord and plug shall be visually inspected before each use (daily) for damage, defects, or signs of wear.

**Remove from Service** - All equipment found or suspected of having damage, defects or excessive wear shall be removed from service and tagged "Do Not Use". Report this equipment to your supervisor or equipment manager.

## Definitions:

**Geddis Paving & Excavating "Competent Person"** - (OSHA Definition) means one who can identify 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 and is in charge of this program.

**GFCI** - Ground-Fault Circuit Interrupter is a device to protect against electric shock.

## Responsibilities:

**Management** – Geddis Paving & Excavating Management is responsible for the following:

- Ensure that the Program includes a Ground Conductor and GFCI Employee Protection Program and that the program is reviewed annually and revised as necessary.
- Provide Ground Conductor and GFCI training for all Geddis Paving & Excavating employees.
- Provide leadership and support for employees in communicating their responsibility to stop the work when observing unsafe behaviors or unsafe conditions.
- Provide resources to implement and maintain the Ground Conductor and GFCI Employee Protection Program.

**Supervision** – Geddis Paving & Excavating Supervisors are responsible for the following:

- Understand and enforce Geddis Paving & Excavating's Ground Conductor and GFCI Employee Protection Program.
- Ensure that GFCI's are tested a minimum of once every three (3) months by a competent person.

- Ensure that all tests and inspections required by the Assured Grounding Program are conducted by a competent person.
- Provide on-the-job training for all employees regarding Geddis Paving & Excavating's Ground Conductor and GFCI Employee Protection Program.
- Provide guidance for all employees in recognizing defective, damaged, or out of compliance electrical cords, receptacles and equipment.
- Document and maintain all records (training, tests, inspections) required by this program.

**Employees** – Geddis Paving & Excavating Employees are responsible for the following:

- Geddis Paving & Excavating employees are to stop the work and immediately inform their supervisor if they suspect the work is unsafe or a hazard exists that was not identified on the JSA and control methods discussed.
- Visually inspect all cord sets, attachment cap, plugs and receptacles of cord sets, and any equipment connected by cord and plug for damage, defects, or signs of wear.
- Remove from service all equipment found or suspected of having damage, defects or excessive wear. Report this equipment to your supervisor or the tools and equipment manager.

Ground Fault Protection

**Ground-Fault Circuit Interrupters (GFCI)**

**GFCI's** - All 120-volt, single-phase 15- and 20-ampere receptacle outlets used by Geddis Paving & Excavating employees as temporary power for construction and maintenance, and which are not part of the permanent wiring of the facility, shall have approved ground-fault circuit interrupters (GFCI's) for personnel protection.

**Testing GFCI's** - All GFCI's shall be tested once every three (3) months to make sure they are working properly and are protecting employees from electric shock.

1. To test the receptacle GFCI, first plug a test-light or shop-light into the outlet. The light should be ON. Then, press the "TEST" button on the GFCI. The GFCI's "RESET" button should pop out, and the light should go out.

2. If the "RESET" button pops out but the light does not go out, the GFCI has been improperly wired. Contact a qualified electrician to correct the wiring errors.

3. If the "RESET" button does not pop out, the GFCI is defective and should be replaced.

4. If the GFCI is functioning properly, and the lamp goes out, press the "RESET" button to restore power to the outlet.

**Assured Equipment Grounding Conductor Program**

The following Assured Grounding Program shall be implemented and maintained on all Geddis Paving & Excavating jobsites. This program covers all cord sets and receptacles that are not a part of the permanent wiring of the facility, and equipment connected by cord and/or plug used by Geddis Paving & Excavating employees.

The Assured Grounding Program shall comply with the following minimum requirements:

- 1) The written copy of this program and the specific procedures that follow shall be available at each jobsite for inspection and copying by OSHA and any affected employee.
- 2) One or more "competent person" shall be designated at each jobsite to implement and maintained the program.
- 3) Each cord set, attachment cap, plug and receptacle of cord sets, and any equipment connected by cord and plug, shall be visually inspected before each day's use for external defects, such as deformed or missing pins or insulation damage, and for indications of possible internal damage. Equipment found damaged or defective shall not be used.
- 4) The following tests shall be performed as a minimum once every three (3) months on all cord sets and receptacles covered by the program and cord and plug-connected equipment required to be grounded:
  - a. All equipment grounding conductors shall be tested for continuity and shall be electrically continuous.
  - b. Each receptacle and attachment cap or plug shall be tested for correct attachment of the equipment grounding conductor. The equipment grounding conductor shall be connected to its proper terminal.
- 5) All required tests shall be performed:
  - a. Before first use.
  - b. Before equipment is returned to service following any repairs.
  - c. Before equipment is used after any incident which can be reasonably suspected to have caused damage (for example, when a cord set is run over).
  - d. At intervals not to exceed 3 months, except that cord sets and receptacles which are fixed and not exposed to damage shall be tested at intervals not exceeding 6 months.
- 6) Equipment not satisfying the above requirements shall not be used.
- 7) Each receptacle, cord set, and cord and plug-connected equipment shall be uniquely identified by a marking or tagging method suitable for the environment. Tests and inspections shall be recorded on an Geddis Paving & Excavating "Assured Grounding Program Test and Inspection Form" and shall identify each receptacle, cord set, and cord and plug-connected equipment that passed the test and shall indicate the date it was tested.
- 8) Failed and damaged equipment shall be tagged "Do Not Use" and removed (isolated) from service until repaired or replaced.

### **Training**

Geddis Paving & Excavating will provide "Ground Conductor and GFCI Employee Protection" program training.

### **Training Content – Content includes:**

- Purpose & Policy
- Employee Responsibilities
- Ground-Fault Circuit Interrupters (GFCI)
- GFCI's Testing Procedure
- Assured Grounding Program

- Program Color Code
- Reporting & Documentation

**Personnel Training** – All Geddis Paving & Excavating employees shall receive “Ground Conductor and GFCI Employee Protection Program” training.

**Training Frequency** - “Ground Conductor and GFCI Employee Protection Program” training shall be included in the Equipment & Electrical Grounding training and shall be refreshed annually as part of the Toolbox Safety Meeting Program.

#### **Reporting and Recordkeeping**

**Custodian** – Geddis Paving & Excavating’s Safety Director shall be the custodian of all “Ground Conductor and GFCI Employee Protection Program” records.

**Control** – Records associated with this program shall be handled in the following manner.

**Inspection & Testing** – Records shall be collected weekly by site supervisors. A copy of the latest inspection shall be kept on the jobsite as required by 29 CFR 1926.404(b) (1) (iii)(G).

**Training Records** – Training Records shall be forwarded promptly to project or business unit offices.

**Retention** - Records shall be retained as follows:

Inspection & Testing - shall be retained for 5 years.

Training Records - shall be retained for a minimum of the employee’s duration of employment.

## **Hydrogen Sulfide Written Program**

### **Purpose**

- This program covers Geddis Paving & Excavating policy related to Hydrogen Sulfide (H<sub>2</sub>S) hazards in the workplace. The intent of this program is to provide employees with knowledge and guidelines enabling them to anticipate, recognize, evaluate, and control (H<sub>2</sub>S) hazards and to protect themselves and others from unnecessary Hydrogen Sulfide exposure.
- Employees with exposure to or conducting any of the following operations could have a potential of exposure to Hydrogen Sulfide: Manhole maintenance, repair or adjusting, Drilling Operations, Recycled Drilling Mud, Water from sour crude wells, Blowouts, Tank Gauging (tanks at producing, pipeline & refining operations), Field Maintenance, and, Tank batteries and wells, etc.

## Scope

- The Hydrogen Sulfide Hazard Program and Policy is intended for support of and use by company operations both in business units and project operations. This program is hazard recognition and education focused and does not imply that any training associated with this program certifies or qualifies any employee to analyze worksites for Hydrogen Sulfide hazards, measure contaminants or determine safe exposure levels.

## Regulatory References

- This Hydrogen Sulfide Program is primarily intended to satisfy the following regulatory requirements: o 29 CFR 1910.1000, 29 CFR 1926.64,

## Policy

- Upon discovery or suspicion of hydrogen sulfide (H<sub>2</sub>S) being present on a jobsite, Geddis Paving & Excavating employees are to stop the work immediately, evacuate the area and inform their supervisor.
- When monitor alarms sound vacate the area and do not re-enter. Notify or contact necessary personnel, and do not return to work area until clearance is given for re-entry.
- It is Geddis Paving & Excavating policy that employees shall not knowingly work on, open, or participate in anyway in operations that involve systems known to contain hydrogen sulfide (H<sub>2</sub>S) until the system has been declared safe by a competent person.
- All employees assigned to job-sites where exposure to Hydrogen Sulfide may be possible shall participate in the identification, evaluation, and control of Hydrogen Sulfide hazards.
- Employees assigned to work in areas where exposure or possible exposure to Hydrogen Sulfide hazards exists will be required to monitor the immediate work area with a fixed field monitor or by utilizing a personal H<sub>2</sub>S monitor.
- Personal H<sub>2</sub>S monitors must be worn in the upper breathing zone on the outside of all clothing with the sensor facing outwards and unobstructed.
- Fixed field monitors as well as personal H<sub>2</sub>S monitors must be set to alarm when the permissible exposure limit (PEL) of 20ppm for general industry is reached or exceeded and 10ppm for construction industry is reached or exceeded.
- 29 CFR 1910.1000 table Z-2 indicates the acceptable ceiling concentration for Hydrogen Sulfide is 20 parts per million (ppm). Ceiling concentrations shall not be exceeded at any point during an 8-hour shift. A peak of 50 parts per million (ppm), is permissible for 10 minutes, once only during an 8-hours shift. Exposures more than these values shall trigger written (H<sub>2</sub>S) Safe Work, Confined Space Entry and Permit to Work type procedures.
- Medical surveillance shall be limited to that required for long-term exposure.

## Responsibilities

**Management** – Geddis Paving & Excavating Management is responsible for the following:

- Ensure that the HSE Management System includes a Hydrogen Sulfide policy and that the policy is reviewed and revised as necessary.
- Provide Hydrogen Sulfide (H<sub>2</sub>S) Hazard Training for all employees.
- Provide leadership and support for employees in communicating their responsibility to stop the work when Hydrogen Sulfide hazards are discovered or suspected.
- Provide resources to address and correct any Hydrogen Sulfide related events/concerns that arise.

**Supervision** – Geddis Paving & Excavating Supervision is responsible for the following:

- Understand and enforce the Hydrogen Sulfide Policy
- Implement site controls isolating employees from Hydrogen Sulfide hazards when Hydrogen Sulfide is discovered or suspected on a jobsite.
- Immediately inform management of any Hydrogen Sulfide exposures on a jobsite.
- Provide immediate on-the-spot training for all employees on the jobsite regarding Geddis Paving & Excavating Hydrogen Sulfide Policy and guidelines enabling employees to protect themselves and others from unnecessary Hydrogen Sulfide exposure.
- Contact a competent individual when Hydrogen Sulfide is discovered or suspected on a jobsite.

**Employees** – Geddis Paving & Excavating Employees are responsible for the following:

- Upon discovery or suspicion of Hydrogen Sulfide being present on a jobsite, employees are to stop the work immediately, evacuate the area and inform their supervisor.
- Protect themselves and others from unnecessary Hydrogen Sulfide exposure.
- Conduct operations in accordance with Geddis Paving & Excavating Provided Hydrogen Sulfide Hazard Training.
- Immediately report to a supervisor any changes, deficiency or breaches in site controls established to isolate employees from Hydrogen Sulfide hazards on a jobsite.
  - Participate in JSA and hazard recognition activities. Make every effort to identify potential H2S hazards during daily JSA's.
  - Follow all written (H2S) Safe Work, Confined Entry and Permit to Work procedures.
  - Respect all controlled access areas and Hydrogen Sulfide (H2S) Hazard signs and postings.
  - Employees must be aware of and follow all provisions of the site specific contingency plan.

### **Hazard Recognition & Control**

- Hydrogen sulfide (H<sub>2</sub>S), is an extremely hazardous, toxic compound. It is a colorless, flammable gas that can be identified in relatively low concentrations, by a characteristic rotten egg odor. The gas occurs naturally in coal pits, sulfur springs, gas wells, and as a product of decaying sulfur-containing organic matter, particularly under low oxygen conditions. It is therefore commonly encountered in places such as sewers, sewage treatment plants (H<sub>2</sub>S is often called sewer gas),
- Hydrogen sulfide has a very low odor threshold, with its smell being easily perceptible at concentrations well below 1 parts per million (ppm) in air. The odor increases as the gas becomes more concentrated, with the strong rotten egg smell recognizable up to 30 ppm. Above this level, the gas is reported to have a sickeningly sweet odor up to around 100 ppm. However, at concentrations above 100 ppm, a person's ability to detect the gas is affected by rapid temporary paralysis of the olfactory nerves in the nose, leading to a loss of the sense of smell. This means that the gas can be present at dangerously high concentrations, with no perceivable odor. Prolonged exposure to lower concentrations can also result in similar effects of olfactory fatigue. This unusual property of hydrogen sulfide makes it extremely dangerous to rely totally on the sense of smell to warn of the presence of the gas.

### **Where do you find Hydrogen Sulfide?**

- The gas occurs naturally in sewers, septic tanks, livestock waste pits, man holes and well pits. Hydrogen sulfide gas also can be found in groundwater, especially in wells near oil fields or in wells that penetrate shale or sandstone. Industrial sources of hydrogen sulfide include petroleum and natural gas extraction and refining, pulp and paper manufacturing, rayon textile production, leather tanning, chemical manufacturing and trucks that transport chemical wastes may release hydrogen sulfide gas.

- Hydrogen sulfide gas also is found in petroleum and natural gas. Natural gas can contain up to 28 percent hydrogen sulfide gas, so it may be an air pollutant near natural gas production areas and petroleum refineries. The gas also can be produced by industries that work with sulfur compounds.

### **Health Hazards Associated with Hydrogen Sulfide**

- Inhalation - H<sub>2</sub>S is classified as a chemical asphyxiate, like carbon monoxide and cyanide gases. It inhibits cellular respiration and absorption of oxygen, causing biochemical suffocation. At 10-50 ppm, typical exposure symptoms include headache, dizziness, nausea, and vomiting, coughing, and breathing difficulty. At concentration of 50-200 ppm, symptoms include severe respiratory tract irritation, shock, convulsions, coma, and death in severe cases.
- Absorption - Because (H<sub>2</sub>S) is so fast acting, absorption through skin is not generally a concern, although (H<sub>2</sub>S) does affect and lead to eye problems.

### **Long Term Health Effects of Exposure to Hydrogen Sulfide**

- Long term exposure to (H<sub>2</sub>S) can result in chronic poisoning. Symptoms include eye irritation, acute conjunctivitis, bronchitis, dizziness, headaches, sensitivity to light and a gray-green line on the gums.

### **Controls & Protection**

- Engineering Controls - Hydrogen Sulfide is an extremely dangerous toxic gas. Engineering controls are preferred as a method of reducing hazardous exposures. Wherever possible, exposure should be minimized by employing methods such as ventilation and isolation. Where engineering controls cannot adequately control levels of exposure, it may be necessary to supplement them with the use of suitable personal protective equipment (PPE) such as supplied-air respirators.
- Safe Working Practices – Any operation that exposes personnel to potential sources of Hydrogen Sulfide or Confined Spaces must utilize a permit to work process such as the Confined Space Entry Program. Established procedures ensure comprehensive consideration of all elements including hazard identification, safe work practices, PPE, emergency response plans and controlled access. Any work that must be conducted in a known or suspected Hydrogen Sulfide hazard not fully controlled by engineering methods must follow the OSHA Confined Space Entry Standard 1910.146, and a written (H<sub>2</sub>S) Safe Work Procedure approved by a Certified Industrial Hygienist or safety professional competent in (H<sub>2</sub>S) hazards.
- Protection - Because of the potential severity of the hazard associated with this substance, stringent PPE control measures are necessary but are only a back-up to engineering and safe work practice controls. Geddis Paving & Excavating employees shall not work in locations with a measurable concentration of Hydrogen Sulfide (H<sub>2</sub>S) gas unless a written Safe Work Procedure has been developed and approved by a competent individual for (H<sub>2</sub>S) hazards.
  - A gas monitor will be worn when any possibility of working around Hydrogen Sulfide (H<sub>2</sub>S) and will sound an alarm once levels reach 10 ppm.
  - Inhalation PPE – Because of the nature of Hydrogen Sulfide, respiratory protection will be a primary component of any (H<sub>2</sub>S) hazard control plan. Only a Certified Industrial Hygienist or safety professional competent in (H<sub>2</sub>S) hazards and protection shall select and approve PPE for (H<sub>2</sub>S) Safe Work Procedures. Respiratory protection will likely be of the following types:
    - Positive pressure, full-face piece Self-Contained Breathing Apparatus (SCBA)
    - Positive pressure, full-face piece Supplied-Air Respirator (SAR) with an auxiliary positive pressure SCBA.
    - Escape: Gas mask with organic vapor canister; or escape type SCBA.

### **First Aid & Exposure Response**

- If a person is overcome by H<sub>2</sub>S gas, do not attempt to rescue unless you are properly trained, authorized, and have the proper level of personal protective equipment. At levels above 200 ppm, collapse, coma, and death due to respiratory failure can occur within seconds after only a few inhalations so you can be overcome very quickly. Multiple H<sub>2</sub>S related fatalities are common because many coworkers attempt to rescue their partner and are overcome by the gas themselves.
- Emergency response and rescue will be part of any written (H<sub>2</sub>S) Safe Work Procedure and Confined Space Entry Procedure. Follow the approved procedures and permit to work process. After the victim has been removed to a fresh air location, check for breathing. If breathing has stopped, trained personnel should begin artificial respiration or, if the heart has stopped, cardiopulmonary resuscitation (CPR) immediately. Seek medical attention immediately.

### **Training**

- Geddis Paving & Excavating will provide Hydrogen Sulfide training for all employees assigned to at-risk locations.
- Training Content - Training will cover the following topics:
  - o Hydrogen Sulfide Hazard Training
  - o Geddis Paving & Excavating Hydrogen Sulfide Policy
  - o Responsibilities
  - o Hazard Recognition & Control
    - Evacuation procedures
- Personnel Training – Geddis Paving & Excavating personnel shall receive the following training: o All employees assigned to at-risk locations shall receive Hydrogen Sulfide Hazard training.
- Training Frequency - Training and re-training frequency shall be as follows: o Initial training shall take place when employees mobilize to job-sites with known Hydrogen Sulfide hazards. o Hydrogen Sulfide Hazard training shall be refreshed as needed as part of the Safety Meeting Program, Hazard Communication, and Industrial Hygiene agenda.

### **Reporting and Recordkeeping**

- Training - All training shall be documented.
- Reports – All Hydrogen Sulfide related events shall be reported.
- Incident Report - All Hydrogen Sulfide exposure shall be recorded as incidents on a Supervisor Incident Report.
- Near Miss Reports - Failures in containment, control methods, isolation, etc., not resulting in employee exposure, but would have resulted in employee exposure if an employee had been in the immediate area shall be recorded as near miss events on an Geddis Paving & Excavating Near Miss Report.
- Control & Retention – Records associated with this program shall be handled in the following manner. H<sub>2</sub>S incidents shall be handled per the Incident Reporting and Record Keeping Program. Records shall be retained for a minimum of the employee's duration of employment plus 30 years.

# **Construction General Waste Management Geddis Paving & Excavating**

## **Purpose**

This written program documents the steps Geddis Paving & Excavating has taken to minimize General Refuse and Construction & Demolition debris resulting from various construction activities consistent with Civil Industrial operations present at our construction sites. Through the use of sound waste minimization practices utilizing a, reduce, reuse and recycle approach Geddis Paving & Excavating will strive to reduce their volume of waste.

**Geddis Paving & Excavating Management:** has overall responsibility for coordinating Safety, Health and Environmental programs in this company. Copies of the written program may be obtained at the job site or in the Corporate Office. If, after reading this program, you find that improvements can be made, please contact Geddis Paving & Excavating. We encourage all suggestions because we are committed to creating a safe workplace for all our employees and to the success of our Construction Waste Management Program. We strive for clear understanding, safe behavior, and involvement with the program from every level of the company.

### **Responsibilities**

The Program Administrator: Geddis Paving & Excavating Safety Director, Jeremy Oliver

This person is responsible for:

Issuing and administering this program and making sure that it satisfies all applicable federal, state and local requirements. Identifying waste minimization opportunities and prescribing appropriate solutions

Informing all employees of the procedures involved with Construction Waste Management.

### **Project Managers, Superintendents and Foreman**

These people are responsible for:

Estimation of the waste that will be generated prior to work being performed so that the need for containers and waste removal, if necessary, can be determined.

Coordinate with the project site or owner to ensure proper disposal of wastes or construction and demolition debris.

Assign or ensure a Geddis Paving & Excavating employee is given the responsibility to handle the task of proper disposal, reuse or recycling of wastes or C&D debris.

### **GEDDIS PAVING & EXCAVATING GENERAL CONTRACTORS**

Assuring that safe operations are maintained on the jobsite to prevent injuries to the eyes, face, head, hands and feet during handling of wastes.

Enforcing the use of this program in the areas in which it's required or necessary

### **Employees**

Using PPE when required

Properly store and maintain all General and C&D debris

Designated Recycling Coordinators

TBD

### **Definitions**

**General trash/refuse:** includes domestic, office and warehouse wastes, paper and other nonhazardous refuse. Waste should be free of liquids and should not include any recyclable waste, used oil, hazardous wastes or universal wastes.

**Clean construction or demolition debris:** also known as "clean fill", is defined as uncontaminated broken concrete without protruding metal bars, bricks, rock, stone, reclaimed asphalt pavement, or dirt or sand generated from construction or demolition activities.

**General construction or demolition debris:** is defined as non-hazardous, uncontaminated materials resulting from the construction, remodeling, repair, and demolition of utilities, structures, and roads, limited to the following: soil \* wall coverings \* reclaimed asphalt pavement \* rock \* plaster \* glass \* nonhazardous painted wood \* drywall \* plastics \* non-hazardous treated wood \* plumbing fixtures \* electrical wiring \* non-hazardous coated wood \* non-asbestos insulation \* bricks \* wood products \* roofing shingles \* concrete \* general roof coverings

To the extent allowed by federal law, clean construction or demolition debris shall not be considered "waste" if it is: used as fill material outside of a setback zone if the fill is placed no higher than the highest point of elevation existing prior to the filling immediately adjacent to the fill area, and if covered by sufficient uncontaminated soil to support vegetation within 30 days of the completion of filling or if covered by a road or structure; or separated or processed and returned to the economic mainstream in the form of raw materials or products, if it is not speculatively accumulated and, if used as a fill material, it is used in accordance with the first identical paragraph immediately above within 30 days of its generation; or solely broken concrete without protruding metal bars used for erosion control; or generated from the construction or demolition of a building, road, or other structure and used to construct, on the site where the

construction or demolition has taken place, a manmade functional structure not to exceed 20 feet above the highest point of elevation of the property immediately adjacent to the new manmade functional structure as that elevation existed prior to the creation of that new structure, provided that the structure shall be covered with sufficient soil materials to sustain vegetation or by a road or structure, and further provided that no such structure shall be constructed within a home rule municipality with a population over 500,000 without the consent of the municipality.

#### **C&D versus General Trash or Refuse**

Construction and demolition (C&D) debris is nonhazardous, uncontaminated material resulting from construction, remodeling, repair, or demolition of utilities, structures, and roads. These materials include the following:

Bricks, concrete, and other masonry materials

Soil

Rock

Wood, including nonhazardous painted, treated, and coated wood and wood products

Wall coverings

Plaster

Drywall

Plumbing fixtures

Non-asbestos insulation

Roofing shingles and other roof coverings

Reclaimed asphalt pavement

Glass

Plastics that do not conceal waste

Electrical wiring and components that do not contain hazardous substances

Piping

Metal materials incidental to any of the materials above

General trash includes domestic, office and warehouse wastes, paper and other nonhazardous refuse. Waste should be free of liquids and should not include any recyclable waste, used oil, hazardous wastes or universal wastes.

#### **Accumulation and Storage**

Use appropriate PPE, such as rubber or neoprene gloves, boots and safety glasses, and a facemask or goggles.

When handling trash, use caution to avoid splinters, cuts or other injuries.

Trash can be accumulated in bags, drums, baskets, gondolas or dumpsters. Outdoor receptacles should be covered to prevent stormwater pollution.

#### **Waste Management Locations**

Dumpsters should be kept within plain sight of the office if possible, to facilitate oversight of contractors or others who use it. C&D debris can be transported to a permitted facility by any hauler. The hauler is not required to have a special waste haulers permit. You should first call the disposal facility to determine if it accepts C&D debris.

If you have lead-based paint that was removed from non-household waste (for example, paint that was removed from the substrate), the paint waste must be tested by a laboratory using the toxicity characteristic leachate procedure (TCLP) before landfilling. Currently this waste must be managed as a special waste.

Well labeled trash barrels are to be located throughout the jobsite, covered and labeled; "General Trash".

#### **Recycling and Disposal**

All general refuse other than office waste is currently thrown in the dumpster and hauled to the landfill. Employees will be made aware of the proper disposal of waste at their jobsites (refer to Construction Waste Management Plan for details). However; every effort should be made to recycle or reuse certain types of general refuse

C&D debris: Three recycling methods available to contractors include the following:

Mixed material collection - Recyclable materials are transported from the job site, sorted at a designated facility, and sent to processors for recycling.

Source separation - Similar materials are separated from other wastes at the job site by category (such as wood, metal, and concrete) and sent to processors for recycling.

On-site processing - Recyclable materials are processed on site and made ready for reuse.

## CONSTRUCTION WASTE MANAGEMENT PLAN

Company Name: Contact Person: Telephone #: Address: Project Location: Contractor: Contact Person: Telephone #:  
Recycling Coordinators: Designated Recycling Coordinators:  
Project Description:

**Waste Management Goals:** This project will recycle or salvage for reuse a minimum of \_\_\_ % by weight of the waste generated on-site. Waste reduction will be achieved through building design, and reuse and recycling efforts will be maintained throughout the construction process.

**Waste Prevention Planning:** Voluntary recycling requirements for Geddis Paving & Excavating project recyclables include:  
o newspaper o corrugated cardboard o white and colored office paper o glass bottles and jars o metal cans

**Compliance with EPA. and Ohio Landfill Bans,** i.e. no disposal of tires, appliances, yard waste, mandatory recyclables, hazardous waste, batteries, fluorescent tubes, and large metal items. Project Construction Documents – Requirements for waste management which will be included in all work. The General Contractor will contractually require all subcontractors to comply with any client driven mandatory recycling requirements. A copy of this Construction Waste Management Plan will accompany all Subcontractor Agreements and require subcontractor participation.

**The Construction Waste Reduction Plan** shall be implemented and executed as follows and as on the chart:

- o Salvageable materials will be diverted from disposal where feasible.
- o There will be a designated area on the construction site reserved for a row of dumpsters each specifically labeled for respective materials to be received.
- o Before proceeding with any removal of construction materials from the construction site, Recycling Coordinators will inspect containers for compliance with local landfill requirements.
- o Wood cutting will occur in centralized locations to maximize reuse and make collection easier.
- o Hazardous waste will be managed by a licensed hazardous waste vendor.

### **Communication & Education Plan:**

The General Contractor will conduct an on-site pre-construction meeting with subcontractors. Attendance will be required for the subcontractor's key field personnel. The purpose of the meeting is to reinforce to subcontractor's key field employees the commitments made by their companies with regard to the project goals and requirements. As each new subcontractor comes on site, the recycling coordinators will present him/her with a copy of the Waste Management Plan and provide a tour of the recycling areas. The subcontractor will be expected to make sure all their crews comply with the Waste Management Plan. All recycling containers will be clearly labeled. Containers shall be located in close proximity to the building(s) under construction in which recyclables/salvageable materials will be placed. Lists of acceptable/unacceptable materials will be posted throughout the site. All subcontractors will be informed in writing of the importance of non-contamination with other materials or trash.

Recycling coordinators shall inspect the containers on a weekly basis to insure that no contamination is occurring and precautions shall also be taken to deter any contamination by the public.

### **Evaluation Plan:**

The General Contractor will develop, update, and post at the jobsite a graph indicating the progress to date for achieving the project's waste recycling goal of XX% by weight of the total project waste stream.

### **Expected Project Waste, Disposal, and Handling:**

The following charts identify waste materials expected on this project, their disposal method, and handling procedures:

**Land clearing debris.** Keep separate for reuse and or wood sale Keep separated in designated areas on site.

#### **Clean dimensional wood and palette wood**

Keep separate for reuse by on-site construction or by site employees for either heating stoves or reuse in home projects. Keep separated in designated areas on site. Place in "Clean Wood" container.

#### **Plywood, OSB, particle board**

Reuse, landfill, Keep separated in designated areas on site. Place in "Trash" container.

**Painted or treated wood** Reuse, landfill Keep separated in designated areas on site. Place in "Trash" container.

**Concrete** - Recycle

**Concrete Masonry Units** Keep separate for re-use by on-site construction or by site employees  
Keep separated in designated areas on site

**Metals Recycle at:**

Keep separated in designated areas on site. Place in "Metals" container.

**Gypsum drywall (unpainted)** Recycle with supplier, Keep scraps separate for recycling – stack on pallets in provided on site. All scrap drywall will be taken back by contractor to drywall supplier

**Paint:** Reuse or recycle. Keep separated in designated areas on site

**Insulation:** Reuse, landfill Flooring Reuse, landfill

**Carpet and pad:** Reuse or recycle.

Glass Bottles: Recycle at:

Keep separated in designated areas on site. Place in "Glass/Plastic bottles/Metal Cans/Mixed Paper/ Cardboard" container

**Plastics**

Plastic Bottles: Recycle at:

**Plastic bags/scraps:** Reuse, landfill

Keep separated in designated areas on site. Place in "Glass/Plastic bottles/Metal Cans/Mixed Paper/ Cardboard" container

**Beverage:** Keep separated in designated areas on site. Place in "Glass/Plastic bottles/Metal Cans/Mixed Paper/ Cardboard" container

**Cardboard** Keep separated in designated areas on site. Place in "Glass/Plastic bottles/Metal Cans/Mixed Paper/ Cardboard" container

**Paper and newsprint:** Keep separated in designated areas on site. Place in "Glass/Plastic bottles/Metal Cans/Mixed Paper/ Cardboard" container TOTAL

**Waste Disposal: Contractor: Contact:**

Name of landfill for disposal of non-recyclable waste: o Transfer Stations: o Landfills (ultimate disposal location): Landfill tipping fee: \$XX / ton Estimate of waste for landfill disposal:

**Recycling Calculation:**

If all construction waste was disposed in landfill:  $XX \text{ lbs} = XX \text{ tons} \times \$XX/\text{ton} = \$XX$

With recycling: TOTAL = \$XX

## Geddis Paving & Excavating Ladder Safety Program

**PURPOSE:** Ladders are a major source of injuries and fatalities. OSHA estimates that there are approximately 25,000 injuries and as many as 35 fatalities each year due to falls from stairways and ladders. Most of these accidents can be prevented if proper safety precautions are initiated. This poses a serious problem for exposed

workers and their employer. The OSHA Standards governing Stairs and Ladders establish uniform requirements to ensure that the hazards existing in U.S. workplaces are evaluated, safety procedures implemented, and that the proper hazard information is transmitted to all affected workers.

**GENERAL:** Geddis Paving & Excavating will ensure that all potential hazards regarding ladders within our facility or job sites are evaluated. This standard practice instruction is intended to address comprehensively the issues of evaluating and identifying potential deficiencies, evaluating the associated potential hazards, communicating information concerning these hazards, and establishing appropriate procedures and protective measures for employees.

**RESPONSIBILITY:** The Safety Manager is solely responsible for all facets of this program and has full authority to make necessary decisions to ensure success of the program. The Safety Manager is the sole person authorized to amend these instructions and is authorized to halt any operation of the facility where there is danger of serious personal injury.

### **Geddis Paving & Excavating Ladders Safety Program**

1. Written Program.
2. General Requirements.
3. Fiberglass/Wooden Ladders Safety Policy.
4. Portable Fiberglass/Wooden Ladders.
5. Metal Ladders Safety Policy.
6. Portable Metal Ladders.
7. Procurement and Disposal of Ladders.
8. Training.

Geddis Paving & Excavating will review and evaluate this standard practice instruction on an annual basis, or when changes occur to the governing regulatory standards that prompt revision of this document, or when facility operational changes occur that require a revision of this document.

Effective implementation requires a written program for job safety and health that is endorsed and advocated by the highest level of management within this facility and that outlines our goals and plans. This written program will be communicated to all required personnel. It is designed to establish clear goals and objectives.

**General Requirements.** All facilities and equipment owned by Geddis Paving & Excavating will be maintained in a safe and healthful manner. All ladders must be inspected prior to use and monthly. Any defective ladder must be removed from service. Certain work conditions may be associated with a reasonable probability of injury that can be prevented by proper maintenance and supervision. Geddis Paving & Excavating will do everything possible to ensure the safety of our employees. No employee will knowingly be subjected to a hazardous condition without all possible protective measures first being implemented. Any ladder accessing elevated work surfaces must extend to a minimum of 3' above the landing surface.

#### **Fiberglass/Wooden Ladders Safety Policy:**

To ensure safety and serviceability, the following precautions concerning the care and use of fiberglass/wooden ladders will be observed:

Care: fiberglass/wooden ladders. The following safety precautions will be observed in connection with the care of fiberglass/wooden ladders:

1. Ladders will be maintained in good condition at all times; the joint between the steps and side rails will be tight, all hardware and fittings securely attached, and the movable parts will operate freely without binding or undue play.
2. Metal bearings of locks, wheels, pulleys, etc., will be frequently lubricated.
3. Frayed or badly worn rope will be replaced.
4. Safety feet and other auxiliary equipment will be kept in good condition to insure proper performance.
5. Ladders will be inspected frequently and those which have developed defects will be withdrawn from service for repair or destruction and tagged or marked as "Dangerous, Do Not Use."
6. Rungs should be kept free of grease and oil.
7. Load limits will not be exceeded.
8. Do not use other than designed.

Use the following safety precautions will be observed in connection with the use of fiberglass/wooden ladders:

1. Portable rung and cleat ladders will, where possible, be used at such a pitch that the horizontal distance from the top support to the foot of the ladder is one-quarter of the working length of the ladder (the length along the ladder between the foot and the top support). The ladder will be so placed as to prevent slipping, or it will be lashed, or held in position. Ladders will not be used in a horizontal position as platforms, runways, or scaffolds.
2. Ladders for which dimensions are specified should not be used by more than one person at a time nor with ladder jacks and scaffold planks where use by more than one person is anticipated. In such cases, specially designed ladders with larger dimensions of the parts should be procured.
3. Portable ladders will be so placed that the side rails have a secure footing. The top rest for portable rung and cleat ladders will be reasonably rigid and will have ample strength to support the applied load.
4. Ladders will not be placed in front of doors opening toward the ladder unless the door is blocked, locked, or guarded.
5. Ladders will not be placed on boxes, barrels, or other unstable bases to obtain additional height.
6. Ladders with broken or missing steps, rungs, or cleats, broken side rails, or other faulty equipment will not be used, ladders having any of these conditions present will be destroyed and disposed of. Improvised repairs will not be made.
7. Short ladders will not be spliced together to provide long sections.
8. Ladders made by fastening cleats across a single rail will not be used.
9. Ladders will not be used as guys, braces, or skids, or for other than their intended purposes.
10. Tops of ordinary stepladders will not be used as steps.
11. On two-section extension ladders the minimum overlap for the two sections in use will be as follows:

Size Of Ladder (Feet)	Overlap (Feet)
Up to and including 36	3
Over 36 up to and including 48	4
Over 48 up to and including 60	6
12. Portable rung ladders with reinforced rails will only be used with the metal reinforcement on the under side.
13. No ladder should be used to gain access to a roof or elevated work area unless the top of the ladder is extended at least 3 feet above the point of support.

14. All portable rung ladders will be equipped with nonslip bases when there is a hazard of slipping. Nonslip bases are not intended as a substitute for care in safely placing, lashing, or holding a ladder that is being used upon oily, metal, concrete, or slippery surfaces.

15. The bracing on the back legs of step ladders is designed solely for increasing stability and not for climbing.

16. Extension ladders placed against a top support must adhere to a ratio of 4:1 slope.

**Portable Fiberglass/Wooden Ladders.** In order to ensure safety under normal conditions of usage, this facility will purchase and maintain portable fiberglass/wooden ladders that conform the following minimum requirements for the construction, care, and use of common types of portable fiberglass/wooden ladders.

1. Materials. All fiberglass/wooden parts will be maintained free from sharp edges and splinters; sound and free from accepted visual inspection from shake, wane, compression failures, decay, or other irregularities.

2. Step spacing. Must not be more than 12 inches. Steps will be parallel and level when the ladder is in position for use.

3. Side rail width. The minimum width between side rails at the top, inside to inside, must not be less than 11 1/2 inches. From top to bottom, the side rails must spread at least 1 inch for each foot of length of stepladder.

4. Metal spreaders/locking devices. A metal spreader or locking device of sufficient size and strength to securely hold the front and back sections in open positions must be properly maintained for each stepladder. The spreader must have all sharp points covered or removed to protect the user.

**Portable stepladders:** Stepladders longer than 20 feet will not be used by this facility.

Stepladders of one of the following types specified will be used:

Type I--Industrial stepladder, 3 to 20 feet for heavy duty, such as utilities, contractors, and industrial use.

Type II--Commercial stepladder, 3 to 12 feet for medium duty, such as painters, offices, and light industrial use.

Type III--Household stepladder, 3 to 6 feet for light duty, such as light household use.

#### **Portable rung ladders.**

Single ladder. Single ladders longer than 30 feet will not be used by this facility.

Two-section ladder. Two-section extension ladders longer than 60 feet will not be used by this facility.

Trestle and extension trestle ladder. Trestle ladders, or extension sections or base sections of extension trestle ladders longer than 20 feet will not be used.

Special-purpose ladders.

Painter's stepladder. Painter's stepladders longer than 12 feet will not be used.

Mason's ladder. A mason's ladder is defined as a special type of single ladder intended for use in heavy construction work. Mason's ladders longer than 40 feet will not be used.

**Metal Ladders Safety Policy.** To insure safety and serviceability the following precautions concerning the care and use of metal ladders will be observed:

Care: metal ladders. The following safety precautions will be observed in connection with the care of metal ladders:

Ladders must be maintained in good usable condition at all times.

If a ladder is involved in any of the following, immediate inspection is necessary:

If ladders tip over, inspect ladder for side rails dents or bends, or excessively dented rungs; check all rung-to-side-rail connections; check hardware connections; check rivets for shear.

If ladders are exposed to oil and grease, equipment should be cleaned of oil, grease, or slippery materials. This can easily be done with a solvent or steam cleaning.

### **GEDDIS PAVING & EXCAVATING PORTABLE LADDER SAFETY**

Modify only under the supervision of the Safety Manager.

Ladders having defects are to be marked and taken out of service until repaired by either maintenance department or the manufacturer.

**Metal ladders.** The following safety precautions will be observed in connection with the use care of metal ladders:

A simple rule for setting up a ladder at the proper angle is to place the base a distance from the vertical wall equal to one-fourth the working length of the ladder.

Portable ladders are designed as a one-man working ladder based on a 200-pound load. 5.2.3 The ladder base section must be placed with a secure footing.

The top of the ladder must be placed with the two rails supported, unless equipped with a single support attachment.

When ascending or descending, the climber must face the ladder.

Ladders must not be tied or fastened together to provide longer sections. They must be equipped with the hardware fittings necessary if the manufacturer endorses extended uses. Ladders should not be used as a brace, skid, guy or gin pole, gangway, or for other uses than that for which they were intended, unless specifically recommended for use by the manufacturer.

Metal ladders will not be used when work is performed on or near electric circuits.

No new metal ladders will be purchased. All metal ladders removed from service for any reason will be replaced with fiberglass ladders.

### **Portable Metal Ladders.**

This facility will purchase only ladders without structural defects or potential accident hazards such as sharp edges, burrs, etc. This facility will purchase ladders meeting industrial grade specifications.

Homemade or in-house constructed ladders will not be used by this facility.

**Procurement and Disposal of Ladders.** Procurement of ladders will be accomplished based on the type of work anticipated to be performed and in accordance with this Standard Practice Instruction and applicable OSHA Regulations.

**Training.** All employees expected to perform work on and use portable ladders will receive appropriate training, as necessary. Training will be conducted by a qualified person and include proper inspection techniques, use and maintenance.

All training will be documented.

## **Powered Industrial Truck Operation Plan**

Geddis Paving & Excavating's written Powered Industrial Truck Operation Program establishes guidelines for GEDDIS PAVING & EXCAVATING operators, and training and record-keeping personnel. The program shall be recognized as our standard for operating procedures in an effort to promote the following:

- **Provide a safe working environment,**
- **Certify & govern operator use of powered industrial fork trucks, and**
- **Ensure proper care & maintenance of powered industrial fork trucks.**

These guidelines are designed to insure that powered industrial truck safety training, operation, and maintenance practices are clearly communicated and understood by operators, training and record-keeping personnel. Adherence to these guidelines ensures a program of excellence.

### **Administrative Duties**

The Safety Director designs, develops, implements and maintains records for the Powered Industrial Truck Operation Program.

### **Training**

Powered industrial truck training has been scheduled annually to train new employees and refresh certified operators by a qualified instructor. Supervisors or foremen may however, identify new employees to the Safety Director during the year to assess the need for immediate certification. An individual training course or annual training shall be options of choice, as **all new operators shall receive training regardless of previous experience.** Supervisors shall be responsible for their respective crewmember adherence to this policy. A valid Ohio, (or state of residence), driver's license shall be prerequisite for participation in powered industrial fork truck training at Geddis Paving & Excavating.

## **Initial Training**

Initial operator training will consist of classroom and practical training. Classroom training includes: Trainer presentation and video, trainee feedback through discussion, oral or written test, and evaluation of course content and learning preferences.

### **Classroom training covers:**

- General information.
- Inspections and maintenance.
- Vehicle capacity.
- Vehicle stability.
- Standard Operating Procedures.
- Refueling/recharging.
- Workplace-related topics, (determined from open classroom discussions).
- Fork attachment adaptation operation and limitations.

### **Practical training covers:**

- Inspection.
- Vehicle capacity/limitations.
- Vehicle stability.

- Controls and Instrumentation
- Steering and maneuvering.
- Load manipulation, stacking.
- Operation on sloped surfaces.
- Workplace-related topics, (determined from open classroom discussions).

### ***Training Certification***

An employee who successfully completes classroom training and demonstrates skill mastery during a site-specific exercise may become a GEDDIS PAVING & EXCAVATING certified operator. Records of operator training, testing and certification are kept on file in the office of the Safety Director.

## **Performance Evaluation**

Certified powered industrial truck operators shall be evaluated every 3 years to verify their safe practice of truck knowledge and skill. The Supervisor shall conduct site-specific evaluations for every operator in the program. An accident, deficiency in standard operating procedure, or a desire for refreshment, shall be cause for retraining. Otherwise, retraining shall occur every 3 years.

### ***Pre-Operational Inspection Procedures***

Inspection checklists are located behind the seat of each powered industrial truck for driver convenience. Geddis Paving & Excavating requires operators to perform pre-operational inspections each shift or prior to each use. When completing the inspection checklist, a check (√) denotes satisfactory, an X discrepancy and N/A non-applicable. Operators should add comments to describe problems they discover during inspection. This may take time, but will aid the troubleshooting efforts of maintenance personnel.

### **Pre-operational inspection includes:**

- Leaks
- Tires
- Masts/forks
- Check all fluid levels and pressure
- Hoses/Belts/Cables
- Fuel/Battery Level
- Horns/Alarms
- Gauges/controls
- Safety equipment
- Steering
- All Brakes
- Unusual Noise/Odor

Inspection checklists may be obtained from the Safety Director or Foreman

***Important Note: Powered industrial trucks used 24-hours-a-day shall be inspected before and after each shift.***

### ***Periodic Inspection Procedures***

Periodic inspections occur in conjunction with maintenance and service schedules, expressed in days and hours of operation. Specialized service technicians provide repair beyond recommended service schedules.

## Standard Operating Procedures

The safe operation of powered industrial trucks is the only way to prevent certain hazards from occurring.

### ***Background information concerning driving a powered industrial truck***

Driving a powered industrial truck is fundamentally different than driving other trucks. They usually have rear wheel steering; drive more easily loaded than empty; are driven in reverse as often as forward; are often steered with one hand; and have a center of gravity towards the rear, shifting to the front as forks are raised. Powered industrial trucks have a greater chance of tipping over when turned suddenly. They are designed with a very short rear wheel swing, which, when driven at high speeds may cause the center of gravity to shift dramatically. Speed coupled with sudden turns may cause the truck to tip, as might speeding over rough areas. (See Appendix A).

### **Standard Operating Procedures are as Follows:**

#### *Operation SOPs:*

- ***Perform pre-operational required inspection.***
- ***Mount and dismount powered industrial truck facing the truck; use a three-point stance with two hands and one foot in contact with the floor or unit at all times.***
- **Become familiar** with all controls, as they may vary from unit to unit.
- **Understand** every control for the powered industrial truck you are to operate before starting the motor/engine.
- **Review** operator's manual housed behind seat to answer specific questions you may have, or ask your supervisor directly.
- ***Fasten your seatbelt every time. It will help to hold you in the frame of the safety cage. Do not attempt to jump from an overturning powered industrial truck!!!***
- **Start powered industrial truck** from the operator's position.
- ***Keep your hands, arms and legs inside the powered industrial truck at all times.***
- ***Raise the forks approximately two-four inches off the floor for safe traveling.***
- **Keep** a clear, safe area around you at all times. Powered industrial trucks are very heavy and will not stop quickly, especially when loaded.

### ***Background information concerning load lifting and carrying***

***All powered industrial trucks of Geddis Paving & Excavating indicate load capacity on the respective data rating plates. Built with a three-point suspension, an imaginary triangle is formed from the left front wheel to the right front wheel to the point between the two back wheels of the fork truck. The truck's center of gravity must lie within this triangle or it will tip. The load and its position on the forks, as well as traveling speed and surface slope, all affect center of gravity. Operators shall be trained in standard operating procedures for load lifting and carrying to prevent tipping and load falling hazards.***

### *Standard Operating Procedures are as Follows:*

#### *Load Lifting SOPs:*

- **Never exceed** the rated capacity of your truck.

- **Check** for overhead obstructions.
- **Space** forks properly.
- **Raise** the forks to the proper height before driving into the pallet.
- **Drive** into the load as far as possible.
- **Tilt** the load back slightly and then lift it.
- **Watch** for overhead objects or obstructions to the sides.
- **Sound horn, back up** to get clearance.
- **Lower the load** to 2 – 4 inches from the floor before traveling.
- **Be certain** the forks clear the pallet before turning or changing height.

*Standard Operating Procedures are as Follows:*

#### **Traveling SOPs:**

- **Familiarize yourself** with operations, stock locations and traffic patterns.
- **Be aware** of slippery floors, bumps and holes.
- **Be aware** of pedestrians, they always have the right-of-way.
- **Look** in the direction of travel.
- **Start and stop** gradually.
- **Drive** in reverse only when your forward vision is obstructed.
- **Always** drive at a safe speed.
- **Slow down and sound horn** when approaching blind corners and aisles.
- **Sound horn** before reversing.
- **Maintain** a safe following distance between powered industrial trucks (at least 3 lengths).
- **Generally**, operate unloaded trucks with the forks or attachment downgrade.
- **Keep** hands and legs inside the compartment when traveling.
- **Never pass** another vehicle at a blind spot or aisle.
- **Never allow** anyone to ride on your powered industrial truck.
- **Never drive** over debris or objects.

*Standard Operating Procedures are as Follows:*

#### **Placing a Load SOPs:**

- **Stop** the powered industrial truck completely before raising the load.
- **Move** slowly with the load raised.
- **Tilt** the load forward only when over a stack or rack.
- **Always stack** the load square and straight.
- **Stack** rolls and round objects tightly together.

#### **Dock Operation/Traveling with a Load SOPs:**

- **Make sure dock plates** are properly positioned before driving into transportation vehicles, or;
- **Check** that the trailer wheels have been chocked.
- **Travel slowly** on the dock-boards or bridge-plates. High-speed travel and/or sudden acceleration can jar them loose.
- **Check the flooring** of the vehicle you are entering for cracks or holes.
- **Do not lift or lower a load** when traveling, keep load 2 – 4 inches high.
- **Angle mast back** slightly.

#### ***Background information concerning fuel handling and storage***

Some of our powered industrial trucks operate with highly flammable and combustible fuels. Storage and handling of liquid fuels such as gasoline and diesel is maintained in accordance with NFPA Flammable and Combustible Liquids Code (NFPA 30-1969). Training in the safe handling and use of liquid fuels for all employees who handle or use flammable liquids is conducted annually in the following procedures.

*Standard Operating Procedures are as Follows:*

#### **Fueling with Gasoline or Diesel SOPs:**

- **No smoking** or open flame.
- **Shut off** the engine.
- **Use** the proper fuel.
- **Avoid** overfilling the tank.
- **Replace** the fuel cap.
- **Clean up** any spills following proper safety procedures for fuel spills.
- **Use your sense of smell** to troubleshoot for leaks.

*Fueling with Propane SOPs:*

- **No smoking** or open flame.
- **Shut off** engine.
- **Shut valve off** to use propane in the line before changing tanks.
- **Check** all valves and seals before connecting the new tank.
- **Handle tanks carefully.** Propane can cause a “freeze burn” to skin.
- **Use your sense of smell** to troubleshoot for leaks
- **Store tanks** in storage area, NOT where leaking gas might accumulate.

#### ***Carbon Monoxide Awareness***

Powered industrial trucks with internal combustion engines produce carbon monoxide (CO), an odorless, and deadly gas produced by the incomplete burning of any carbon containing material. Gasoline, natural gas, propane, coal, and wood are examples of carbon containing material. The most common source of CO is the internal combustion engine. Trucks, cars, powered industrial trucks, floor polishers, pressure washers, and other fossil-fueled powered machines generate carbon monoxide. When inhaled, CO restricts the ability of your blood system to carry oxygen to the body. Overexposure results in carbon monoxide poisoning. Mild poisoning may cause headaches, chest tightness, dizziness, drowsiness, inattention, fatigue, flushed face, and/or nausea. Continued exposure causes lack of coordination, confusion, weakness, and/or loss of consciousness. Smoking tobacco, using drugs and/or alcohol, pregnancy, and some heart conditions may aggravate CO poisoning. Physical activity will increase exposure, as oxygen uptake increases. Carbon monoxide has the potential to cause death within minutes, sometimes with no warning symptoms in cases of severe poisoning. The more CO there is in the air and the longer the exposure, the greater the danger. Standard operating procedures reduce CO levels, & prevent CO overexposure and illness.

#### **Pedestrians**

Each powered industrial truck was purchased for a specific purpose and will function in a specific area most of the time. Occasionally, powered industrial trucks are driven in locations shared with pedestrians.

As every baseball catcher knows, the shortest distance between 2 points is a straight line. GEDDIS PAVING & EXCAVATING employees apply this fact to their daily hectic schedules. Often, instead of using sidewalks, they may be seen darting through parking lots, and hurrying across streets to get to their destinations. The wise operator will keep a lookout for **ALL** pedestrians at **ALL** times and drive defensively.

## **Maintenance**

Upon delivery of a new truck, the Equipment Manager completes receiving inspection. The powered industrial truck is matched with its specifications, tested for performance, and either approved or red-flagged until satisfactory. Transportation department personnel perform maintenance, adhering at minimum, to the manufacturer's recommendations for maintenance and lubrication schedules, daily inspection, and record keeping for the life of the truck. Time and effort invested in proper upkeep of our powered industrial trucks increase their longevity and enhance resale. More importantly, operators are secure with safe, reliable equipment.

# SPILL PREVENTION/RESPONSE PROGRAM

**PURPOSE** The purpose of this Spill Prevention and Response Plan is to outline the procedures and training necessary to insure adequate and efficient control, containment, and management of waste materials [e.g. construction debris] and equipment fluids [e.g. diesel fuel, oil, etc.] which may be accidentally released during work operations and including loading, transport, and handling.

**ENVIRONMENTAL SPILL OR DISCHARGES** A spill/discharge is any process related material discharged to the environment (including liquids, vapors, haze or very small particulate matter/dust from a process). ↪ A reportable quantity (RO) is the amount of a spilled chemical above which notification to EPA and other government agencies is required within 15 minutes after the spill has been found by a contractor or other person. ↪ A list of chemicals should be available to contractors at a designated location in each customer facility.

## GENERAL ENVIRONMENTAL REQUIREMENTS

Geddis Paving & Excavating is committed to environmental excellence. All Geddis Paving & Excavating employees and visitors are expected to understand and comply with customer facility requirements:

**Air Pollution:** Visitors, contractors, and tenants must not release into the atmosphere, and shall take all necessary measures to prevent a release to the atmosphere of any air contaminants, regardless of source that may cause a violation of any local, state or federal regulations.

**Water Pollution:** Visitors, contractors, and tenants must prevent the discharge of any substances or materials that may cause pollution into any facility waterway. Visitors must also obtain prior approval from the Environmental Departmental designee for discharging any materials into any installation sanitary sewer system drain sink, clean-out, or sump.

**Storm Water Pollution:** Visitors, contractors, and tenants may not discharge any substance or materials onto the ground or into any storm drain of the facility. There are no exceptions. Visitors' vehicles may not be washed anywhere on facility property. Storage of materials outside must be kept to a minimum. For materials stored outside, a spill containment kit must be at the storage location and the storage area kept neat and clean. All stored materials must be kept in sealed containers. Any material that may present the threat of a storm water discharge must be stored under cover.

**Trash/Hazardous Waste:** All trash must be handled appropriately. Contractors shall properly label, store, and dispose of all waste materials they generate. Drums brought on site, once unloaded, must be accurately labeled at all times, even empty drums. Solid / hazardous waste must be segregated in accordance with container labels and waste disposal coordinated with the Environmental Department. Rolloff boxes will be used only for wastes designated on the box.

**Miscellaneous Environmental:** No chemicals of any kind may be brought on-site without approval of the Environmental Department. If approval is obtained, all containers must be properly labeled and a Safety Data Sheet (SDS) must accompany the chemical when applicable and be provided to the facility. SDS's for chemicals on the facility can be obtained from the safety department.

**Environmental Aspects and Impacts:** Environmental aspects and their associated impacts are posted in active areas of the facility. It is your responsibility to understand aspects and impacts for areas we enter. If you have questions, ask your facility contact person or your safety director.

**SAFE WORK PRACTICES** Our projects are typically multi-employer worksites. Geddis Paving & Excavating employees must be aware of potential spills or discharges that could affect themselves, others and the environment. Communication must be made with all owners and subcontractors and any other craft on-site. This will be performed during pre-job meetings, contractor orientation and at the direction of customer facilities. Employees should be aware of owners' contingency plans and provisions. It is Geddis Paving & Excavating policy that, in order to minimize both the chance of a spill and the consequences of a spill, that all chemicals and wastes shall be stored in a designated and controlled holding area. The storage area shall be designated in consultation with the client/owner and designed to physically limit the spread of liquids to drains or other sensitive areas. Good housekeeping is an integral part of any job site. To further minimize the likelihood of a spill, each job site will be kept clean and orderly. It is the supervisor's responsibility to maintain proper housekeeping and identify any potential spill scenarios. Every Foreman truck is equipped with an appropriate sized Spill Kit. All employees will be trained on how to prevent spills and the proper response procedures.

### **SECURITY AWARENESS PLAN**

Report any suspicious behavior, incident or item on site to Cargill management. Suspicious behavior may include:

- Person acting nervous or hiding something
- Person making unusual or repeated requests for information
- Person/people loitering inside or outside of a plant
- A vehicle driving by without lights on or parked outside for unusually long periods of time, etc.

### **STORMWATER RUNOFF MANAGEMENT**

Report all spills immediately to customer personnel or activate EAP for that facility.

All spilled material must be cleaned up within a reasonable time and disposed of properly. Proper spill kits will contain the appropriate supplies for materials that may be spilled. Supplies will be easily accessible when required and considerations will be made for both the type and the quantity of the materials. All outdoor chemical storage tanks require secondary containment. Any tanks (i.e. small gasoline or diesel tanks) brought on site by a contractor must meet customer's storage requirements and must be registered with their management process. In the case of flammable liquids approved cabinets must be used. Access to chemical storage shall be limited to authorized individuals. Further, chemical substances will be stored in proper containers to minimize the potential for a spill. Clearly label where chemicals and waste chemicals are stored. Accurately label the waste containers as to their exact contents. Whenever possible chemicals should be kept in closed containers and stored so they are not exposed to storm water.

### **WASTES- SPILL CONTROL AND EMERGENCY RESPONSE PROCEDURE**

If an incident occurs which causes an unintentional release of wastes, chemicals, and/or equipment fluids, the procedures as noted below must be followed:

1. Investigate and if necessary activate the Emergency Action Plan (EAP) immediately.
2. The response must occur as soon as safely practical. The supervisor will estimate the quantity of material released and decide whether simple material handling or machinery, such as a front end loader or fork lift, will be required to reload the material into a container.

3. In all cases, the supervisor will immediately notify the client contact about the spill and the circumstances of the incident and provide a telephone number or location where a return call may be made to provide further instructions or assistance in evaluating the specific action that should be taken.
4. Immediately after making initial contact with the client or Project Manager, the supervisor will follow the recommended response.
5. If necessary, the supervisor and customer will work in coordination to promptly call local emergency services (911) and notify them of the incident including the size, nature, and location of the spill.
6. If necessary, a Geddis Paving & Excavating Incident Form will be filled out by the foreman with a detailed description of the event and a copy will be distributed to the client.

**WASTE DISPOSAL** Prior to working on a job site the Project Manager shall, in conjunction with the client, determine the means and procedures for handling and disposing of contract generated waste material. Project wastes, trash, and/or scrap materials will be taken into consideration before work begins. The Project Manager shall then document the plan and inform the supervisor of the requirements. The general guidelines for handling waste material are:

Any waste material shall be stored in such a way so as to prevent its release or spreading. To the best degree possible wastes will be segregate to take advantage of opportunities for recycling. Each job site is to be cleaned at the end of the day by sweeping and picking up of uncontained waste. As necessary, a designated and possibly secured, waste storage area may be established. Supervisors should practice good personal hygiene during the handling of any waste. Appropriate Personal Protective Equipment, including protective clothing (e.g. boots, safety glasses, and gloves) should be used when handling any waste material.

**HAZARDOUS WASTE** Hazardous waste would be products that would not be disposed of in general trash dumpsters. Examples of Hazardous Waste include (but are not limited to): Solvents, Epoxy, "Empty" Aerosol Cans, Liquid Paint Waste, Degreasers that contain chlorinated solvents or waste that contains: Arsenic, Mercury or Methanol. Ignitable waste (solid or liquid) with a flash point less than 140 F, Liquid waste with a pH of less than 2, Reactive Waste (reacts violently with water), Nuclear radiation devices for level gauges are used in several different locations. Only personnel specifically trained to be a Radiation Safety Officer are allowed to work on these devices. Special disposal procedures must be followed for disposal. Used oil includes hydraulic fluids, lubricants, etc. and is collected for recycling. These must not be mixed with any other wastes such as antifreeze or any other process liquids. Used oil dry/absorbent is collected in designated locations and must not contain free liquids. To dispose of used oil dry material, put the material in a sealed bucket and put the entire bucket in the designated location on the job site. Universal waste includes all halogen and fluorescent light bulbs, lithium batteries, NiCad batteries, led batteries, and electronic equipment such as CPU's, monitors, printers, etc. All universal waste can be taken to a designated location for disposal. No wastes of any kind are to be removed from a customer facility unless by an approved and licensed vendor.

# Heat Stress Awareness Program

## Objective:

To educate employees of Geddis Paving and Excavating on the risks associated with heat stress, preventive measures, and appropriate responses to heat-related illnesses to ensure a safe and healthy work environment.

## Scope:

This program applies to all employees working in environments where heat stress may occur, including outdoor work sites and indoor areas lacking climate control.

## Heat Stress Recognition:

Types of heat-related illnesses (heat stroke, heat exhaustion, heat cramps, heat rashes).

**Heat Stroke** is the most serious heat related disorder and occurs when the body's temperature regulation fails and body temperature rises to critical levels. The condition is caused by a combination of highly variable factors, and its occurrence is difficult to predict. Heat stroke is a medical emergency that may result in death. The primary signs and symptoms of heat stroke are confusion; irrational behavior; loss of consciousness; convulsions; a lack of sweating (usually); hot, dry skin; and an abnormally high body temperature, e.g., a rectal temperature of 41°C (105.8°F). The elevated metabolic temperatures caused by a combination of work load and environmental heat, both of which contribute to heat stroke, are also highly variable and difficult to predict.

If a worker shows signs of possible heat stroke, professional medical treatment should be obtained immediately. The worker should be placed in a shady, cool area and the outer clothing should be removed. The worker's skin should be wetted and air movement around the worker should be increased to improve evaporative cooling until professional methods of cooling are initiated and the seriousness of the condition can be assessed. Fluids should be replaced as soon as possible. The medical outcome of an episode of heat stroke depends on the victim's physical fitness and the timing and effectiveness of first aid treatment.

Regardless of the worker's protests, no employee suspected of being ill from heat stroke should be sent home or left unattended unless a physician has specifically approved such an order.

**Heat Exhaustion** signs and symptoms are headache, nausea, vertigo, weakness, thirst, and giddiness. Fortunately, this condition responds readily to prompt treatment. Heat exhaustion should not be dismissed lightly. Fainting or heat collapse which is often associated with heat exhaustion. In heat collapse, the brain does not receive enough oxygen because blood pools in the extremities. As a result, the exposed individual may lose consciousness. This reaction is similar to that of heat exhaustion and does not affect the body's heat balance. However, the onset of heat collapse is rapid and unpredictable and can be dangerous especially if workers are operating machinery or controlling an operation that should not be left unattended; moreover, the victim may be injured when he or she faints. Also, the signs and symptoms seen in heat exhaustion are similar

to those of heat stroke, a medical emergency. Workers suffering from heat exhaustion should be removed from the hot environment and given fluid replacement. They should also be encouraged to get adequate rest and when possible ice packs should be applied.

**Heat Cramps** are usually caused by performing hard physical labor in a hot environment. These cramps have been attributed to an electrolyte imbalance caused by sweating. Cramps appear to be caused by the lack of water replenishment. Because sweat is a hypotonic solution ( $\pm 0.3\%$  NaCl), excess salt can build up in the body if the water lost through sweating is not replaced. Thirst cannot be relied on as a guide to the need for water; instead, water must be taken every 15 to 20 minutes in hot environments. Under extreme conditions, such as working for 6 to 8 hours in heavy protective gear, a loss of sodium may occur. Recent studies have shown that drinking commercially available carbohydrate-electrolyte replacement liquids is effective in minimizing physiological disturbances during recovery.

**Heat Rashes** are the most common problem in hot work environments where the skin is persistently wetted by unevaporated sweat. Prickly heat is manifested as red papules and usually appears in areas where the clothing is restrictive. As sweating increases, these papules give rise to a prickling sensation. Heat rash papules may become infected if they are not treated. In most cases, heat rashes will disappear when the affected individual returns to a cool environment.

**Heat Fatigue** is often caused by a lack of acclimatization. A program of acclimatization and training for work in hot environments is advisable. The signs and symptoms of heat fatigue include impaired performance of skilled manual, mental, or vigilance jobs. There is no treatment for heat fatigue except to remove the heat stress before a more serious heat-related condition develops.

#### **Prevention Strategies:**

- Importance of hydration and drinking water frequently.
- Proper clothing and use of personal protective equipment (PPE).
- Acclimatization to hot environments.
- Provide cool-down areas.

#### **Response Procedures:**

In the event of a heat-related illness at Geddis Paving and Excavating, immediate medical treatment and emergency response are crucial. First responders should be trained to recognize symptoms of heat stress and initiate prompt action. For heat cramps, employees should rest in a cool area and drink water or an electrolyte solution. For heat exhaustion, move the affected individual to a shaded or air-conditioned place, provide cool water, and apply cool, wet cloths to the skin. In cases of heat stroke, which is a medical emergency, call 911 immediately. While waiting for medical personnel, move the person to a cooler environment, remove excess clothing, and cool the person rapidly using cold water, ice packs, or wet towels. All employees should be aware of these procedures, and emergency contact information should be readily accessible. Regular drills and training sessions will ensure everyone is prepared to respond effectively to heat-related emergencies.

#### **Workplace Policies:**

- Work/rest schedules.
- Use of shaded or air-conditioned rest areas.

- Encouragement of the buddy system to monitor coworkers.

#### **Work Environment Assessment:**

- Regular monitoring of workplace temperature and humidity.
- Identification of high-risk areas and activities.
- Implementation of engineering controls to reduce heat exposure (e.g., fans, ventilation, cooling systems, cool-down areas).

#### **Hydration Program:**

- Provision of cool drinking water near work areas.
- Encouragement of frequent water intake (one cup every 20 minutes).
- Avoidance of caffeine.

#### **Acclimatization Plan:**

- Gradual exposure of new workers to hot environments.
- Progressive increase in work duration and intensity over a period of 7-14 days.
- Monitoring of new and returning employees for signs of heat stress.

#### **Emergency Action Plan:**

- Immediate response procedures for suspected heat-related illnesses.
- Designation of trained personnel to provide first aid.
- Clear communication of emergency contacts and medical facilities.

#### **Ongoing Training:**

- Annual refresher courses for all employees.
- Tailored training sessions for new hires and high-risk job roles.
- Toolbox talks and safety meetings during peak heat periods.

#### **Program Evaluation:**

- Annual review of the program's effectiveness.
- Feedback collection from employees to identify areas of improvement.
- Updates to training materials and policies as needed.

#### **Compliance and Enforcement:**

- Ensure adherence to OSHA standards and guidelines on heat stress prevention.
- Regular audits and inspections to verify compliance.
- Disciplinary actions for non-compliance with heat stress prevention policies.

#### **Contact Information:**

# Work Zone Traffic Control Safety Policy

## Purpose

The purpose of this Work Zone Traffic Control Safety Policy is to ensure the safety of workers and the public in and around work zones by adhering to established traffic control procedures. This policy outlines the use of traffic control devices, pre-work site assessments, training for flaggers and spotters, and the use of high visibility garments.

## Scope

This policy applies to all employees, contractors, and subcontractors of Geddis Paving Inc. involved in work zone activities.

## Roles and Responsibilities

- **Employees:** Employees must follow the traffic control procedures and use the provided traffic control devices correctly.
- **Supervisors:** Supervisors are responsible for conducting pre-work site assessments, ensuring proper placement of traffic control devices, and verifying that all workers are trained.
- **Safety Manager:** The Safety Manager oversees the implementation of the traffic control policy, ensures compliance with jurisdictional requirements, and conducts regular audits.

## Use of Traffic Control Devices

1. **Device Types:** The use of work zone traffic control devices, including signs, cones, barrels, and barriers, must conform to jurisdictional requirements such as those outlined in the Manual on Uniform Traffic Control Devices (MUTCD).
2. **Placement:**
  - **Signs:** Place warning, regulatory, and guide signs at appropriate distances to provide adequate warning to motorists.
  - **Cones and Barrels:** Use cones and barrels to channelize traffic and protect work zones.
  - **Barriers:** Implement barriers to provide a physical separation between workers and traffic.
3. **Inspection and Maintenance:** Regularly inspect all traffic control devices to ensure they are in good condition and properly positioned. Replace or repair damaged devices immediately.

## Pre-Work Site Assessments

1. **Assessment:** Before beginning any work, conduct a pre-work site assessment or traffic control survey to identify potential hazards in and around the work zone.
  - **Hazard Identification:** Identify potential hazards such as high traffic volumes, blind curves, intersections, and pedestrian areas.
  - **Risk Mitigation:** Develop a traffic control plan that addresses identified hazards and outlines the placement of traffic control devices.

2. **Documentation:** Document the findings of the pre-work site assessment and the traffic control plan. Ensure that this documentation is available on-site and accessible to all workers.

### Training for Flaggers and Spotters

1. **Flagger Training:**
  - o **Requirements:** Train all flaggers in accordance with jurisdictional requirements, such as those specified by OSHA or state DOT regulations.
  - o **Content:** Training must include proper flagging techniques, communication methods, and emergency procedures.
2. **Spotter Training:**
  - o **Requirements:** Train all spotters on the proper procedures for directing vehicles and equipment safely within the work zone.
  - o **Content:** Training must include hand signals, communication methods, and the identification of potential hazards.
3. **Certification:** Ensure that flaggers and spotters are certified as required by jurisdictional standards. Maintain records of certification and training completion.

### High Visibility Garments

1. **Requirements:** All workers within the work zone must wear high visibility garments that comply with ANSI/ISEA 107 standards.
  - o **Class 2 Garments:** For daytime work in high traffic areas.
  - o **Class 3 Garments:** For nighttime work or low visibility conditions.
2. **Inspection and Maintenance:** Regularly inspect high visibility garments for wear and tear. Replace any garments that are faded, torn, or otherwise compromised.
3. **Usage:** Ensure that high visibility garments are worn at all times while working within the work zone.

### Review and Continuous Improvement

- The Work Zone Traffic Control Safety Policy will be reviewed annually by the Safety Manager to ensure its effectiveness and compliance with jurisdictional requirements.
- Feedback from employees and supervisors will be solicited to improve the policy and training programs.

# Subcontractor Management Policy

Geddis Paving & Excavating provides various services for customers at several different industrial facilities. These customers require that Geddis Paving & Excavating has a Sub-contractor process which ensures that our sub-contractors are following the same federal, state, local and customer regulations and procedures as Geddis Paving & Excavating. This program defines safety requirements in which the sub-contractor shall comply with and enforce on all Geddis Paving & Excavating jobsites.

## **SUB-CONTRACTOR SAFETY PROCEDURES**

It is the employee's responsibility for their own safety and that of their coworkers. Employees are responsible for reporting hazardous conditions and dangers to their supervisor. They must also report any job-related injury or illness to their supervisor and safety director and seek treatment promptly. All contractor employees, whether it is Geddis Paving & Excavating or a Geddis Paving & Excavating sub-contractor, have the right to stop work, work of their co-workers or customers and refuse unsafe work conditions. All Geddis Paving & Excavating sub-contractors will be prequalified by reviewing their safety programs, safety training documents and safety statistics as criteria for selecting subcontractors. Safety statistics will include safety metrics such as EMR, TRIR, DART and Fatality Rates. Each sub-contractor shall submit their written safety manual, which must be approved and accepted by Geddis Paving & Excavating Safety Director prior to the commencement of any work at any Geddis Paving & Excavating projects as our sub-contractor. At a minimum, each subcontractor's policy must meet the policies, procedures and guidelines set forth by our customer requirements.

## **GUIDELINES:**

Geddis Paving & Excavating management has the responsibility to coordinate work being performed by our subcontractor and our customer. The sub-contractor is responsible for their employee's safety and to ensure that their employees perform their work in a safe and proper manner. Applicable contract documents shall be received by Geddis Paving & Excavating sub-contractors. Safety concerns shall be discussed, hazards identified and safety processes in place before work is to commence. Geddis Paving & Excavating management shall address the workplace and determine workplace hazards are present or likely to be present that would necessitate the use of engineering controls, administrative controls or PPE through site orientation prior to work beginning. No work shall begin by a Geddis Paving & Excavating sub-contractor until they have been approved by the customer facility where work is to be performed. No work shall begin by a Geddis Paving & Excavating sub-contractor until their employees have attended the customer safety orientation training. All Geddis Paving & Excavating sub-contractors shall attend tailgate safety meetings, safety pre-job meetings, safety kick-off meetings, job safety inspections, perform job hazard assessments, and understand the scope of work and safety procedures to be followed. No work shall begin by a Geddis Paving & Excavating sub-contractor without customer notification that they are there on their site and permission has been given to proceed. No work shall begin by a Geddis Paving & Excavating sub-contractor until all applicable permits have been verified and issued.

All lockouts shall be double verified to ensure re-energization of hazardous energy does not take place. This may be done by a Geddis Paving & Excavating foreman, sub-contractors foreman and customer safety coordinator issuing the permit. All confined space work shall follow the Geddis Paving & Excavating Confined Space Program and customer procedures. Geddis Paving & Excavating shall not employ or other individual whether initially or as a replacement, against whom the customer may have reasonable objection. Many customers reserve the right to conduct for random or reasonable suspicion testing of any persons on their company property. Any person refusing to submit to testing or complying with the request to be tested shall be denied access to the property. Those persons refusing to comply will be escorted off of the Geddis Paving & Excavating jobsite and not allowed to return. All Geddis Paving & Excavating sub-contractors shall not use or

disclose to any party any Confidential Information without the prior written consent of the managing customer. A post-job safety performance reviews will be conducted on subcontractors.

### **TRAINING REQUIREMENTS**

Each sub-contractor shall be responsible to ensure their employees have been trained on all applicable safety procedures and programs before work is to begin on a Geddis Paving & Excavating jobsite. Each sub-contractor shall attend the applicable customer safety orientation and have the opportunity to ask questions and get answers to those questions. All employees shall be trained on powered mobile equipment before operating. Pre-Use Checklists shall be completed before use to identify any deficiencies. Equipment that does not pass inspection shall be tagged out of service and repaired before operation is to commence.

# Geddis Paving & Excavating Covid-19 Management Response Policy

In response to the recent outbreak of Coronavirus, Geddis Paving & Excavating has developed a policy to ensure it's essential employees are taking the necessary precautions to mitigate the risk of exposure. Safety and health of our employees is a top priority for Geddis Paving and Excavating. We believe that training and education is paramount to the control of any hazards including infectious diseases as well as enforcing our policy to all employees. We will be monitoring our jobsites for compliance on the following guideline:

- Maintaining a social distance of at least 6 feet – no shaking hands, avoid any direct physical contact, cough into elbows, do not touch eyes, mouth or nose, use and discard tissues.
- Hand Sanitizer is provided for all jobsites
- Tissues and disinfecting wipes are provided
- Personal Protection Equipment (Masks, face shields, gloves, eye glasses as applicable) are mandatory and provided by Geddis Paving & Excavating and to the extent it is available
- Employees must engage in excellent hygiene and wash hands frequently
- No sharing of tools or equipment unless proper PPE is being used.
- Any shared surfaces must be frequently and thoroughly disinfected.
- Identifying which jobs are at a risk of exposure by consistently monitoring jobsite changes and eliminating those risks as much as possible
- Educating the employees about the virus – symptoms of illness, how to maintain a strong immune system (Rest, hydration, good nutrition and exercise).
- Instructing employees to self-monitor and report to GPE any malaise, fever, sore throat or any other symptom of illness.
- Employees are expected to stay at home and self-quarantine if they report any symptoms. Furthermore, if an employee has a sick spouse or child, we expect the employee to stay home and self-quarantine to help prevent the spread
- In the event of an exposure, a thorough investigation will take place to determine which employees had exposure and which surfaces, equipment or tools have been exposed. Employees that have exposure will be notified and instructed to self-quarantine for 14 days. Any equipment that was exposed will have to be decontaminated.

**Steve Oliver**

Steve Oliver, President

# Policy on Use of Earbuds and Headphones

To ensure a safe and productive work environment, Geddis Paving & Excavating, Inc. prohibits the use of earbuds and headphones while employees are working. This policy aims to prevent accidents and injuries that may occur due to the distraction or inability to hear important safety signals and instructions.

## Scope

This policy applies to all employees, contractors, and visitors at Geddis Paving & Excavating, Inc.

## Policy

### 1. Prohibition of Earbuds and Headphones:

- Employees are not permitted to wear earbuds or headphones while performing their job duties. This includes but is not limited to listening to music, podcasts, or any other audio content.

### 2. Work Areas:

- The prohibition applies to all work areas, including construction sites, warehouses, and any other location where company business is conducted.

### 3. Safety Considerations:

- Employees must remain alert and aware of their surroundings at all times.
- The ability to hear alarms, warning signals, instructions, and communication from coworkers is essential for maintaining a safe work environment.

### 4. Exceptions:

- Exceptions to this policy may be made for specific roles or tasks that are performed in a controlled environment and do not pose any safety risk.
  1. These exceptions may only be made by the safety supervisor.
- **Drivers:** Employees who are driving company vehicles or operating heavy machinery may use earbuds for phone calls only, provided that the use of earbuds does not interfere with their ability to hear and respond to important sounds and signals. This exception is intended to facilitate hands-free communication while ensuring safety.

### 5. Enforcement:

- Supervisors and foremen are responsible for enforcing this policy and ensuring compliance.
- Employees found in violation of this policy will be subject to disciplinary action, up to and including termination.

### 6. Employee Responsibilities:

- Employees must adhere to this policy and remove any earbuds or headphones when entering work areas.
- Employees are encouraged to report any observed violations of this policy to their supervisor or the Safety Director.

**Disciplinary Action**

Violations of this policy will be addressed according to the company's disciplinary procedures, which may include verbal warnings, written warnings, suspension, and termination, depending on the severity and frequency of the violation.

**Review and Updates**

This policy will be reviewed annually and updated as necessary to ensure its effectiveness and compliance with OSHA regulations and other relevant safety standards.

## POLICIES AND PROCEDURES ACKNOWLEDGEMENTS

I have read and understand the attached company policies and procedures and agree to abide by them. I have also had the duties of the position which I have accepted explained to me, and I understand the requirements of the position. I understand that any violation of the above policies is reason for disciplinary action up to and including termination.

\_\_\_\_\_  
Employee Printed Name

Date: \_\_\_\_\_

\_\_\_\_\_  
Employee Signature

## APPENDIX A SAFETY CHECKLIST

### JOBSITE:

Prior to starting the job, were utilities notified & underground services located?	Yes	No
Were overhead transmission lines noted and precautions taken to avoid contact by cranes, etc.?	Yes	No
Housekeeping at job site was satisfactory?	Yes	No
Was the storage of material and equipment satisfactory?	Yes	No
Is spoil bank placed at least two (2) feet from the edge of trench?	Yes	No

### Excavation or Trench:

If over five (5) feet deep, is it sloped to maximum allowable slope, or shored, or is the trench box (shield) used?	Yes	No
If less than five (5) feet deep but soil is unstable, is it sloped, shored or shielded?	Yes	No
Is the shoring system inspected daily by a competent person?	Yes	No
If necessary to use a pump, is it placed downwind from the excavation?	Yes	No

### Exits:

If trench is four (4) feet or more in depth is a ladder, ramp or steps provided?	Yes	No
Are they located to require no more than twenty-five (25) feet of lateral travel?	Yes	No
Are ladder in good condition?	Yes	No
Do they extend from the floor of the trench to three (3) feet above the top of the excavation?	Yes	No
Are ladders secured at the top?	Yes	No

### Completion of Job:

Is the trench backfilled as the shoring is dismantled?	Yes	No
Are jacks or braces removed slowly and is the shoring removed from bottom up?	Yes	No
In unstable soil, are ropes used to pull out jacks or braces from above?	Yes	No

## APPENDIX B

### Accident Report

#### Geddis Paving & Excavating, Inc.

Employee Name: \_\_\_\_\_ Employee Number: \_\_\_\_\_

SSN: \_\_\_\_\_ Trade: \_\_\_\_\_

Check One:     Lost Time     Restricted     Near Miss     No Treatment  
 First Aid     Medical Treatment (name facility) \_\_\_\_\_

Date Accident Occurred: \_\_\_\_\_ Time: \_\_\_\_\_ am/pm

Date Accident Reported: \_\_\_\_\_ Person Notified: \_\_\_\_\_

Location of Accident (job name): \_\_\_\_\_ Job #: \_\_\_\_\_

Describe Accident: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Nature of Injury(s):  
 What injury(s) are you (superintendent) able to visually observe?  
 (check all that apply)

<input type="checkbox"/>	Laceration	<input type="checkbox"/>	Puncture	<input type="checkbox"/>	Dermatitis	<input type="checkbox"/>	Fracture	<input type="checkbox"/>	Abrasion
<input type="checkbox"/>	Burn	<input type="checkbox"/>	Amputation	<input type="checkbox"/>	Dislocation	<input type="checkbox"/>	Contusion	<input type="checkbox"/>	Infection
<input type="checkbox"/>	Foreign Body	<input type="checkbox"/>	Allergic Reaction	<input type="checkbox"/>	Other (Name)				

In the injury(s) that are not readily observable what part(s) of the body is the employee claiming he/she injured (be specific).  
 \_\_\_\_\_  
 \_\_\_\_\_

Part of Body Injured (check and circle appropriate letter-word-number)

<input type="checkbox"/>	Eye (L R Both)	<input type="checkbox"/>	Back (Upper Middle Lower)	<input type="checkbox"/>	Feet (L R Both)
<input type="checkbox"/>	Head, Neck, Face	<input type="checkbox"/>	Arm (L R Both)	<input type="checkbox"/>	Leg (L R Both)
<input type="checkbox"/>	Ribs (L R)	<input type="checkbox"/>	Hand (L R Both)	<input type="checkbox"/>	Toes (L R Both 1 2 3 4 5)
<input type="checkbox"/>	Chest	<input type="checkbox"/>	Fingers (L R Both 1 2 3 4)	<input type="checkbox"/>	Abdomen
<input type="checkbox"/>	Joint (Specify L R & Name Joint)				

Witness to Incident: \_\_\_\_\_

**Medical Release Form to be signed and attached to this Injury Report. Signing this report does not constitute certification of an industrial claim.**

Signature of Superintendent: \_\_\_\_\_ Date: \_\_\_\_\_

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