RW LaPine Inc. CONFINED SPACE ENTRY PERMIT Date: ____/____/____

Entry Location: _____ Purpose of Entry: _____
_____

Time In: _____ Permit Canceled Time: _____
Time Out: _____ Reason Permit Canceled: _____

Supervisor: _____

Rescue and Emergency Services: _____

Hazards of Confined Space	Yes	No	Special Requirements	Yes	No
Oxygen deficiency			Hot Work Permit Required		
Combustible gas/vapor			Lockout/Tagout		
Combustible dust			Lines broken, capped, or blanked		
Carbon Monoxide			Purge-flush and vent		
Hydrogen Sulfide			Secure Area-Post and Flag		
Toxic gas/vapor			Ventilation		
Toxic fumes			Other- List:		
Skin- chemical hazards			**Special Equipment**		
Electrical hazard			Breathing apparatus- respirator		
Mechanical hazard			Escape harness required		
Engulfment hazard			Tripod emergency escape unit		
Entrapment hazard			Lifelines		
Thermal hazard			Lighting (explosive proof/low voltage)		
Slip or fall hazard			PPE- goggles, gloves, clothing, etc.		
			Fire Extinguisher		

Communication Procedures: _____

Monitor / Model _____ Day/Time Calibrated: _____

DO NOT ENTER IF PERMISSABLE ENTRY LEVELS ARE EXCEEDED		Test Start and Stop Time: Start	Stop
	Permissable Entry Level		
% of Oxygen	19.5 % to 23.5 %		
% of LEL	Less than 10%		
Carbon Monoxide (CO)	50 PPM (8 hr.)		
Hydrogen Sulfide (H2S)	10 PPM (8 hr.)		
Other			

Name(s) or Person(s) testing: _____

Authorized Entrants

_____
_____
_____

Authorized Attendants

_____
_____
_____

PERMIT AUTHORIZATION **I Certify that all actions and conditions necessary for safe entry have been performed.**	
Name-Print:	
Signature:	
Date:	Time:

Entry Procedure Checklist: Complete the following steps before, during, and after a confined space entry:

Step 1
Obtain a Permit-Confined Space Entry Form from Program Coordinator. **Step**
Step 2
Notify Supervisor before the **Confined Space Entry**
Step 3
Verify Confined Space Monitor has been calibrated and is in working order
Step 4
Complete the top portion of the Permit-Confined Space Entry Form
Step 5
Ensure all rescue equipment (e.g. tripod, body-belt, lanyard) is in place prior to entry **Step**
Step 6
Monitor the confined space with the calibrated Gas Detector prior to entry. The entrant and attendant should sign the permit authorization section on the bottom of the permit to ensure all actions and conditions necessary for safe entry have been performed.
Step 7
Employee entering the confined space should only enter after the Gas Detector pre-atmosphere test. The employee should also have a full body harness and lanyard attached to the rescue tripod. Employee shall have a radio and any other necessary personal protective equipment including a Gas Detector if needed.
Step 8
Employee can enter the confined once Step 7 is completed. The entrant and attendant should complete the Hazards of Confined Spaces and Special Requirements Section of the Permit-Confined Space Entry Form once the employee is within the confined space. The entrant if wearing a Gas Monitor, should also gather the % Oxygen, % Explosive Gases, Carbon Monoxide, and Hydrogen Sulfide readings and communicate them to the attendant to place on the Permit Form.
Step 9
The attendant should maintain constant communication with the entrant until the entrant has exited the confined space.
Step 10
The attendant should contact Supervisor once the entrant has exited the confined space.
Step 11
The Permit-Confined Space Entry Form should be given to program coordinator, to file in the Confined Space Records.

PERMIT REQUIRED CONFINED SPACE ENTRY PROGRAM

Date: 11-15-2005
Revision Date: 01-08-2016

INDEX

Scope – Background

The Occupational Safety and Health Administration (OSHA) has promulgated a permit system for entry into confined spaces. Designated as **Permit-Required Confined Spaces** (Permit Spaces), which pose special dangers for entrants because their configuration hampers efforts to protect entrants from serious hazards, such as toxic, explosive or asphyxiating atmospheres. The new standard provides a comprehensive regulatory framework within which employers can effectively protect employees who work in permit spaces.

The following written program and its implementation is designed by R.W. LaPine, Inc., to comply with Federal and State standards, as it pertains to Non-Permit and Permit-Required Confined Spaces, 29 CFR Part 1910.146.

Terms and Definitions

Acceptable Entry Conditions:

Means the conditions that must exist in a permit space to allow entry and ensure that employees can safely enter into and work within the space.

Attendant:

Means an individual stationed outside the permit space that monitors the authorized entrants.

Authorized Entrant:

Means an employee who is authorized by the employer to enter a permit space.

Confined Space:

Means a space that;

1. Is large enough and so configured that an employee can bodily enter into and perform assigned work; and

2. Has limited or restricted means of entry or exit. (Example: A tank, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry and exit); and

3. Is not designed for continuous employee occupancy.

Emergency:

Means any occurrence, event internal or external to the permit space that could endanger the entrants.

Engulfment:

Means the surrounding and effective capture of a person by a liquid or fine divided (flow-able) solid substance that can be aspirated to cause death by filling or plugging the respiratory system, or that can exert enough force to the body to cause death by strangulation, constriction, or crushing.

Terms and Definitions, (Continued):

Entry:

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

Entry Permit:

Means the written or printed document that is provided by the employer to allow and control entry into a permit space. An entry permit is required prior to entering any listed or identified permit space.

Entry Supervisor:

Means the person responsible for determining if acceptable entry conditions are present at a permit space where entry is planned. For authorizing entry and overseeing entry operations, and for terminating entry.

Note:

> An entry supervisor also may serve as an attendant or as authorized entrant; as long as that person is trained for each role he/she may fill.
>
> Also, the duties of entry supervisor may be passed from an individual to another during the course of an entry operation.

Hot Work Permit:

Means the employer's written authorization to perform operations such as riveting, welding, cutting, burning, and heating capable of providing a source of ignition.

Isolation:

Means the process by which a permit space is removed from service and completely protected against the release of energy and material into the space by such means as; misaligning or removing sections of lines, pipes, ducts, lockout of all sources of energy, blocking or, disconnecting all mechanical linkages.

Permit System:

Means the employers written procedure for preparing and issuing permits for entry and for returning the permit space to service following termination of entry.

GENERAL REQUIREMENTS

The term **Employer**, noted in this section and proceeding sections shall be R.W. LaPine, Inc.

The term **Employee**, noted in this section and proceeding sections, shall be those persons employed by R.W. LaPine, Inc., whose primary and secondary duties involves entry into permit spaces.

(1) The employer shall evaluate the workplace to determine if any spaces are permit-required confined spaces.

During the course of work, employees of R.W. LaPine, Inc. may enter into spaces such as vessels, tunnels, tanks, pits and other locations defined as confined spaces by the Host Employer.

(2) If the workplace contains permit spaces, the employer shall inform exposed employees, by posting danger signs or by other equally effective means, of the existence and location of and all dangers posed by the permit spaces.

Per this requirement, R.W. LaPine, Inc. has informed all exposed employees thru training, the hazards posed by the permit spaces.

(3) If the employer decides that its employees will enter permit spaces the employer shall develop and implement a written permit space entry program that complies with Permit-Required Confined Spaces, CFR Part 1910.146. The written program shall be available for inspection by employees and their authorized representatives.

Per this requirement, R.W. LaPine, Inc. has determined that its employees will enter on occasion permit spaces, and have developed and implemented a written permit space entry program. This program shall be made available upon request.

(4) Outside Contractors:

In the event, R.W. LaPine, Inc. has an outside contractor perform work involving entry into permit spaces the following procedures will be utilized.

A. The contractor shall be informed that the workplace contains permit spaces and that permit space entry is only allowed through a permitting system.

General Requirements, Continued:

(4) Outside/ Sub-Contractors

B. The contractor shall be apprised of the elements; including the hazards identified in the space that makes the space a permit required space.

C. Apprise the contractor of any precautions, or procedures that R.W. LaPine, Inc. has implemented for the protection of employees in or near the permit space.

D. Coordinate entry operations when both R.W. LaPine, Inc. employees and contractor employees will be working together in the permit space.

PERMIT-REQUIRED CONFINED SPACE PROGRAM

The following is the written program by R.W. LaPine, Inc., to implement the measures necessary to prevent the unauthorized entry, and identify and evaluate hazards of Permit-Required Confined Spaces prior to employees entering them.

Workplace: R.W. LaPine, Inc. provides commercial and industrial construction along with millwright services and machinery moving.

Purpose of Entry: To install, maintain sheet metal or piping construction activities.
.

Potential Hazards: The recognized hazards associated with the entry tasks are as follows;

1. Oxygen Deficiency: A concentration of oxygen less than 19.5 %.
2. Oxygen Enriched: A concentration of oxygen above 23.5%
3. Flammable/Explosive Gases or Dusts: Equal to or greater than 10% of Lower Flammable Limit (LFL).
4. Toxic Gases: Above the Permissible Exposure Level (PEL)
5. Heat Stress
6. Fire Hazards
7. Slips and Falls
8. Electrical Shock
9. External Hazards of the confined space

Control of Hazards:

Heat Stress: Open Confined Space entrances and let area cool down prior to entry. Check air and inner surface temperatures to assure they are within acceptable limits before entering.

Atmospheric Hazards: Prior to entry the atmospheric conditions shall be tested to confirm that there exist no atmospheric hazards. The testing shall be done in the following order.

1. Oxygen Content
2. Flammability
3. Toxics

NOTE: The person performing the testing shall NOT ENTER into the permit space. Only the monitor/instrument shall be placed within the space.

Fire Hazards: Hot Work permits are required prior to inserting any ignition source into a confined space.

Slips & Falls: Employees will use safe ladder procedures, using lines to raise and lower equipment if necessary. And shall use lifelines and harnesses when the space is 5 foot in depth or more. Further a retrieval system shall also be in place to raise and lower employees in spaces that are 5 foot in depth or more.

Electrical Shock: Electrical equipment shall be in good serviceable condition and rated for the conditions they will be exposed to in the confined space. Further all electrical power sources shall be isolated and locked out in accordance with lockout procedures.

External Hazards: External hazards of the confined space such as pedestrians and vehicular traffic shall be controlled by barricading the space along with an attendant to monitor and control those activities so as not to pose a hazard to the confined space entrant.

PERMIT SYSTEM

Before entry can be made, the entry permit must be filled out. The confined space MUST meet Non-Permit Space requirements before entry is allowed. R.W. LaPine, Inc. employees will not work in conditions that are IDLH (Immediately Dangerous to Life and Health), unless utilizing a supplied air respirator system.

The completed permit must be signed by the entry supervisor and shall be made available at the time of entry to all authorized entrants. The permit shall be posted at the entry portal or by any other equally effective means, so that the entrants can confirm that pre-entry preparations have been completed, and the entry supervisor has authorized entry.

The duration of the permit may not exceed the time required to complete the task or job identified on the permit.

The supervisor shall terminate entry and cancel the entry permit when:

1. The entry operations covered by the entry permit have been completed.

2. A condition that is not allowed under the entry permit arises in or near the permit space.

Any problems encountered during an entry operation shall be noted on the pertinent permit so that appropriate revisions to the permit space program can be made.

After the supervisor cancels the entry permit it shall be forwarded to R.W. LaPine, Inc.'s Office Manager were it shall be retained for at least 1 year to facilitate the review of the permit-required confined space program required by CFR Part 1910.146.

See attachment A: Confined Space Entry Permit

AIR MONITORING

Prior to entering any confined space air monitoring shall be done. The atmosphere shall be tested to determine the following:

1. Oxygen level
2. Flammable or Explosive atmosphere
3. Toxic atmosphere

If there is continuous air ventilation into the space, the air shall be periodically tested. Employees or their representatives can request additional air monitoring at any time.

TRAINING

R.W. LaPine, Inc. shall provide training so that all employees whose work involves confined space entry; acquire the understanding, knowledge, and skills necessary for the safe performance of their assigned job duties.

Training shall be provided to each affected employee:

1. Before the employee is first assigned duties involving confined space entry.

2. Before there is a change in assigned duties.

3. Whenever there is a change in permit space operations that presents hazards that employees have not been previously trained.

The training shall establish employee proficiency in the duties required and shall introduce new or revised procedures, as necessary. This training shall be documented.

DUTIES OF AUTHORIZED ENTRANTS

1. Know the hazards that may be faced during entry.

2. Properly use equipment, and advise your supervisor or job foreman if there is any damaged equipment or need for maintenance on the equipment.

3. Communicate with attendant as necessary to enable the attendant to monitor entrant's status, and to enable the attendant to alert entrants to the need to evacuate the space.

4. Alert attendant whenever;

   A. The entrant recognizes any warning sign or symptom of exposure to a dangerous situation.
   B. The entrant detects a prohibited condition.

5. Exit from the permit space as quickly as possible whenever;

   A. An order to evacuate is given by the attendant or the supervisor.
   B. The entrant recognizes any warning signs or symptoms of exposure to a dangerous situation.
   C. The entrant detects a prohibited condition.

6. Entrant or their representatives are given the opportunity to participate in and review calibrated air monitoring data before entry.

DUTIES OF ATTENDANTS

1. Know the hazards that may be faced during entry.

2. Be aware of possible effects of the hazards to entrants.

3. Maintain accurate count of all authorized entrants in the permit space.

4. Remain outside the permit space during entry operations until relieved by another attendant, or supervisor or job foreman.

5. Communicate with entrants as necessary to monitor entrant's status and alert entrants of the need to evacuate the space.

6. Monitor activities inside and outside the space to determine if it is safe for entrants to remain in the space.

7. Summon rescue and other emergency services as soon as the attendant determines that entrants need assistance.

8. Keep all unauthorized persons away from the permit space entry operation.

9. If there is more than 1 confined space operation taking place in the same area, there shall be an attendant at each space.

DUTIES OF ENTRY SUPERVISOR

The entry supervisor shall be the supervisor responsible for the permit space in his/her area, or assignment.

1. Know the hazards that may be faced during entry.

2. Verify that the entry permit has been correctly and completely filled out. That all equipment and procedures specified by the permit are in place before endorsing the permit and allowing entry to begin.

3. Terminate the entry and cancel permit.

4. Remove unauthorized individuals who enter or who attempt to enter the permit space during entry operations.

5. Verifies that attendant knows how to activate rescue services and has a means of communication and it's operable.

DUTIES OF ENTRY SUPERVISOR

6. Determines whenever responsibility for permit space entry operation can be transferred. Those entry operations remain consistent with the terms of the entry permit and that acceptable entry conditions are maintained.

MULTI-EMPLOYER WORK SITE

In the event that a confined space operation involves different employers working in the same, the following actions will be taken:

1. Coordinate with the other employers to determine that their operations will not endanger our employees.

2. Coordinate with the other employers to determine that our operations in the space will not endanger their employees.

3. Determine who the authorized entrants will be, along with the assigned attendant and entry supervisor.

4. Determine who will perform the air monitoring

RESCUE SERVICE REQUIREMENTS

The following rules pertain to employees who enter permit spaces to perform rescue services.

1. Provide each member with personal protective equipment and other equipment necessary to perform rescues.

2. Train members to perform assigned rescue duties.

3. Train members as “Authorized Entrants” for confined space.

4. Practice permit required confined space (PRCS) rescues, in actual or representative spaces, at least once a year.

5. Train all members in basic first aid and CPR and keep members current.

6. Have a mechanical device available to retrieve personnel from vertical permit spaces more than 5 feet deep.

RESCUE PLAN

In the event an employee is injured in a confined space the following actions shall be taken.

1. The attendant will communicate with the injured employee to obtain the extent of injuries.

   A. **Minor Injury**

      (1) Have entrant exit space and provide first aid.

   B. **Serious Injury**

      (1) Unconscious entrant – Attendant shall immediately activate the 911 EMS system.

      (2) Test for atmospheric hazards. Oxygen-Flammability-Toxics, they must be in the acceptable entry condition range before the rescuer can enter space, or the rescuer has a self-contained breathing apparatus, (SCBA).

      (3) Remove entrant from the space, unless doing so would increase injury to the entrant.

      (4) Once entrant has been removed from the space, rescuer should perform primary and secondary injury survey and provide needed first aid until EMS system arrives.

   C. Safety Data Sheets (SDS) shall be made available for any product or chemical entrants may be exposed to.

   D. Rescue services are (1) provided by the host facility; or (2) provided by an outside service which is given an opportunity to examine the entry site, practice rescue and decline as appropriate; or (3) provided by the employer by selecting a rescue team that is equipped and trained to perform the needed rescue services.

   E. Rescue service must be on-site for immediately dangerous to life and health (IDLH) conditions while work is being performed. Rescue service must be on-site for immediately dangerous to life and health (IDLH) conditions while work is being performed.

ATTACHMENT A:

CONFINED SPACE ENTRY PERMIT

RW LaPine Inc. **CONFINED SPACE ENTRY PERMIT** **Date:** ____/____/____

Entry Location: _____ **Purpose of Entry: _____**

_____

Time In: _____ **Permit Canceled Time:**

_____

Time Out: _____ **Reason Permit Canceled: _____**

Supervisor:

_____

Rescue and Emergency Services:

_____

Hazards of Confined Space	Yes	No	Special Requirements	Yes	No
Oxygen deficiency			Hot Work Permit Required		
Combustible gas/vapor			Lockout/Tagout		
Combustible dust			Lines broken, capped, or blanked		
Carbon Monoxide			Purge-flush and vent		
Hydrogen Sulfide			Secure Area-Post and Flag		
Toxic gas/vapor			Ventilation		
Toxic fumes			Other- List:		
Skin- chemical hazards			**Special Equipment**		
Electrical hazard			Breathing apparatus- respirator		
Mechanical hazard			Escape harness required		
Engulfment hazard			Tripod emergency escape unit		
Entrapment hazard			Lifelines		
Thermal hazard			Lighting (explosive proof/low voltage)		
Slip or fall hazard			PPE- goggles, gloves, clothing, etc.		
			Fire Extinguisher		

Communication Procedures:

_____

Monitor / Model _____ **Day/Time Calibrated: _____**

DO NOT ENTER IF PERMISSABLE ENTRY LEVELS ARE EXCEEDED		**Test Start and Stop Time:** **Start**	**Stop**
	Permissable Entry Level		
% of Oxygen	19.5 % to 23.5 %		
% of LEL	Less than 10%		
Carbon Monoxide	35 PPM (8 hr.)		
Hydrogen Sulfide	10 PPM (8 hr.)		
Other			

Name(s) or Person(s) testing:

_____

Authorized Entrants

_____
_____
_____
_____

Authorized Attendants

_____
_____
_____
_____

PERMIT AUTHORIZATION **I Certify that all actions and conditions necessary for safe entry have been performed.**	
Name-Print:	
Signature:	
Date:	Time:

Entry Procedure Checklist: Complete the following steps before, during, and after a confined space entry:

Step 1
Obtain a Permit-Confined Space Entry Form from Program Coordinator.

Step 2
Notify Supervisor before the **Confined Space Entry**

Step 3
Verify Confined Space Monitor has been calibrated and is in working order

Step 4
Complete the top portion of the Permit-Confined Space Entry Form Step 5
Ensure all rescue equipment (e.g. tripod, body-belt, lanyard) is in place prior to entry.

Step 6
Monitor the confined space with the calibrated Gas Detector prior to entry. The entrant and attendant should sign the permit authorization section on the bottom of the permit to ensure all actions and conditions necessary for safe entry have been performed.

Step 7
Employee entering the confined space should only enter after the Gas Detector pre-atmosphere test. The employee should also have a full body harness and lanyard attached to the rescue tripod. Employee shall have a radio and any other necessary personal protective equipment including a Gas Detector if needed.

Step 8
Employee can enter the confined once Step 7 is completed. The entrant and attendant should complete the Hazards of Confined Spaces and Special Requirements Section of the Permit-Confined Space Entry Form once the employee is within the confined space. The entrant if wearing a Gas Monitor, should also gather the % Oxygen, % Explosive Gases, Carbon Monoxide, and Hydrogen Sulfide readings and communicate them to the attendant to place on the Permit Form.

Step 9
The attendant should maintain constant communication with the entrant until the entrant has exited the confined space.

Step 10
The attendant should contact Supervisor once the entrant has exited the confined space.

Step 11
The Permit-Confined Space Entry Form should be given to program coordinator, to file in the Confined Space Records.

Additional Air Monitoring Log

DO NOT ENTER IF PERMISSABLE ENTRY LEVELS ARE EXCEEDED		Test Start and Stop Time: Start	Stop
	Permissable Entry Level		
% of Oxygen	19.5 % to 23.5 %		
% of LEL	Less than 10%		
Carbon Monoxide	35 PPM (8 hr.)		
Hydrogen Sulfide	10 PPM (8 hr.)		
Other			

DO NOT ENTER IF PERMISSABLE ENTRY LEVELS ARE EXCEEDED		Test Start and Stop Time: Start	Stop
	Permissable Entry Level		
% of Oxygen	19.5 % to 23.5 %		
% of LEL	Less than 10%		
Carbon Monoxide	35 PPM (8 hr.)		
Hydrogen Sulfide	10 PPM (8 hr.)		
Other			

DO NOT ENTER IF PERMISSABLE ENTRY LEVELS ARE EXCEEDED		Test Start and Stop Time: Start	Stop
	Permissable Entry Level		
% of Oxygen	19.5 % to 23.5 %		
% of LEL	Less than 10%		
Carbon Monoxide	35 PPM (8 hr.)		
Hydrogen Sulfide	10 PPM (8 hr.)		
Other			

DO NOT ENTER IF PERMISSABLE ENTRY LEVELS ARE EXCEEDED		Test Start and Stop Time: Start	Stop
	Permissable Entry Level		
% of Oxygen	19.5 % to 23.5 %		
% of LEL	Less than 10%		
Carbon Monoxide	35 PPM (8 hr.)		
Hydrogen Sulfide	10 PPM (8 hr.)		
Other			

ATTACHMENT B:

HOT WORK PERMIT

A Hot Work Permit must be obtained before any Cutting, welding, other spark or heat producing Operation is initiated outside of designated welding Area.

Issued To: _____

Permit Date: ___/___/___ Expires: ___/___/___

Job Started ___ Am Pm Ended ___ Am Pm

I. DESCRIPTION:

Building: _____

Floor & Dept: _____

Work to be Done: _____

To report a fire call: 911

II. SIGNATURES:

Supervisor sign after Section III is completed.

Approved By: _____

Title: _____ Date: ___/___/___

III. PRECAUTIONS TO BE TAKEN:

	Yes	No	N/A
A. Cutting/Welding Equipment in good repair.	__	__	__
B. Housekeeping: Floors swept, debris cleaned up.	___	___	___
C. Flammable materials 35 ft. away from area	___	___	___
D. Sparks are contained by walls, tarps, or other Barriers.	___	___	___
E. Drains/trenches covered.	___	___	___
F. Has area been tested for explosive atmosphere.	___	___	___
G. Exposures to adjacent Areas & Production Processes have been Reviewed.	___	___	___
H. Fire Watch.	___	___	__
I. Extinguishers & other Fire equipment available.	___	___	___

RW LaPine Inc. Non-Permit Confined Space Form

Name of Confined Space: _____ Date: _____

Checklist Completed by: _____

DO NOT USE THIS FORM IF SPACE IS POSTED:

DANGER
CONFINED SPACE
PERMIT REQUIRED

IF POSTED AS ABOVE, DO NOT ENTER AND CONTACT SUPERVISOR.

MINIMUM CONDITIONS FOR ENTRY

If the specified conditions are met, and hazard control is verified on this checklist, then one or more persons may enter the confined space without an entry permit and an attendant (stand-by person). **If the specified conditions cannot be met and/or hazard control cannot be verified, DO NOT ENTER;** the space becomes a **PERMIT REQUIRED CONFINED SPACE** and cannot be safely entered without further hazard evaluation and control. Contact immediate supervisor for assistance.

VERIFICATION OF HAZARD CONTROL				
HAZARD	**METHOD/MEANS OF HAZARD CONTROL**	**HAZARD ELIMINATED?** (Circle appropriate response then initial)		
1. Engulfment Hazards?	Have all engulfment hazards been eliminated? (Engulfment means the surrounding and effective capture of a person by liquid or finely divided solid substance.)	N/A	YES	NO
2. Entrapment Hazards?	Have all entrapment hazards been eliminated? (Any 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.)	N/A	YES	NO
3. Hazardous Energies?	Have all hazardous energies (exposed electrical conductors and moving machinery) been secured and locked/tagged out?	N/A	YES	NO
4. Hazardous Atmosphere?	Will work being performed introduce any substances or processes which could produce a hazardous atmosphere? (Non-permit spaces, by themselves, have been determined to not have hazardous atmospheres or dangerous processes.)	N/A	YES	NO
5. Permit Required?	If any of items 1 through 3 are "NO", or if item 4 is "YES", **AN ENTRY PERMIT IS REQUIRED. STOP! DO NOT ENTER SPACE. NOTIFY SUPERVISOR.**		YES	NO

Heat Illness Prevention

R.W. LaPine Inc.
Mechanical Contractors

Date: 1-15-2018

Purpose:

This program is designed to reduce the risk of work-related heat illnesses.

Scope:

This procedure applies to all work being performed in hot environments.

Definitions:

"Acclimatization" means temporary adaptation of the body to work in the heat that occurs gradually when a person is exposed to it. Acclimatization peaks in most people within four to fourteen days of regular work for at least two hours per day in the heat.

"Heat Illness" means a serious medical condition resulting from the body's inability to cope with a particular heat load, and includes heat cramps, heat exhaustion, heat syncope and heat stroke.

"Preventative recovery period" means a period of time to recover from the heat in order to prevent heat illness.

"Shade" means blockage of direct sunlight. Canopies, umbrellas and other temporary structures or devices may be used to provide shade. One indicator that blockage is sufficient is when objects do not cast a shadow in the area of blocked sunlight. Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. For example, a car sitting in the sun does not provide acceptable shade to a person inside it, unless the car is running with air conditioning.

Requirements:

All managers and supervisors are responsible for implementing and maintaining the Heat Illness Program in their work areas.

Provision of Water

Employees shall have access to potable drinking water. Employees shall have access to potable drinking water. Where it is not plumbed or otherwise continuously supplied, it shall be provided in sufficient quantity at the beginning of the work shift.

Access to Shade

Employees will be provided with access to shade. Employees suffering from heat illness or believing a preventative recovery period is needed shall be provided access to an area with shade that is either open to the air or provided with ventilation or cooling. Such access to shade shall be permitted at all times.

Control Measures

Each work location involved in working in hot environments should implement measures that help to control the effects of environmental factors that can contribute to heat related illnesses. The most common environmental factors are air temperature, humidity, radiant heat sources and air circulation.

Physical factors that can contribute to heat related illness shall be taken into consideration before performing a task. The most common physical factors that can contribute to heat related illness are type of work, level of physical activity and duration, and clothing color, weight and breathability.

Supervisors must ensure personal factors that contribute to heat related illness are taken into consideration before assigning a task where there is the possibility of a heat-related illness occurring. The most common personal factors that can contribute to heat related illness are age, weight, fitness, drug/alcohol use, prior heat-related illness, etc.

Each work site shall develop site specific procedures but shall include the minimum:

- Be sure water is provided at the start of the shift and the supervisors/designated persons will monitor water containers every 30 minutes, and employees are encouraged to report to supervisor/designated person low levels or dirty water.
- Supervisors will provide frequent reminders to employees to drink frequently.
- Every morning there will be short tailgate meetings to remind workers about the importance of frequent consumption of water throughout the shift during hot weather.
- Place water containers as close as possible to the workers.
- When drinking water levels within a container drop below 50%, the water should be replenished immediately or water levels should not fall below the point that will allow for adequate water during the time necessary to effect replenishment.
- Disposable/single use drinking cups will be provided to employees or provisions will be made to issue employees their own cups each day.
- Supervisors should set up umbrellas, canopies or other portable devices at the start of the shift and relocate them to be closer to the crew, as needed.
- Non-agricultural employers can use other cooling measures if they demonstrate that these methods are as effective as shade.

Working hours will be modified to work during the cooler hours of the day, when possible.

When a modified or shorter work-shift is not possible, more water and rest breaks will be provided.

Supervisors will continuously check all employees and stay alert to the presence of heat related symptoms.

Supervisors will carry cell phones or other means of communication, to ensure that emergency services can be called and check that these are functional at the worksite prior to each shift.

Every morning, workers will be reminded about address and directions to the worksite to inform medical responders and emergency procedures.

All newly hired workers will be monitored by the supervisor or experienced coworker to ensure that they understood the training and follow the company procedures.

Training:

Training in the following topics shall be provided to all supervisory and non-supervisory employees:

- The environmental and personal risk factors for heat illness;
- The importance of frequent consumption of small quantities of water, up to 4 cups per hour, when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties;
- The importance of acclimatization;
- The different types of heat illness and the common signs and symptoms of heat illness;
- The importance to employees of immediately reporting to the employer, directly or through the employee's supervisor, symptoms or signs of heat illness in themselves, or in co-workers;
- Proper procedures for responding to symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary;
- Proper procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by an emergency medical service provider;
- Proper procedures for ensuring that, in the event of an emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders.

Supervisors must receive training in the prevention of heat related illnesses prior to supervising employees working in heat. Supervisors shall be trained in heat illness emergency response procedures to prevent heat illness and procedures to follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures.

Communication for employees shall be in a form readily understandable by all affected employees.

RW LaPine Inc. shall ensure that all employees working outdoors have been trained in heat illness prevention.

Incident Investigation

Date: 1-14-2018

Purpose:

The purpose of this program is to have effective procedures for reporting and evaluating/investigating incidents and non-conformance in order to prevent further occurrences.

Responsibilities:

Responsibilities for investigations will be pre-determined and assigned prior to any incidents.

Safety Manager

- Ensures investigations are conducted properly and assists in identifying corrective actions.

Site Manager and Supervisors

- Investigates (or assists) incident investigations.
- Corrects non-conformances.

Accompany (if needed) injured employees to the medical provider for initial treatment.

Employees

Immediately report any injury, job related illness, spill or damage to any property to their immediate supervisor. If their supervisor is not available, the employee will immediately notify the project manager. Employees who could be first responders should be trained and qualified in first aid to help control any loss during the post incident phase.

Procedure:

After immediate rescue or response, actions to prevent further loss should begin when the scene is safe. For example, witnesses, maintenance, engineering personnel, etc. should help assess with integrity of buildings, equipment, bracing, any special equipment, and safe rendering of hazards.

Investigations of Incidents & Non-conformance

Investigation is an important part of an effective safety program in that it determines the root cause and corrective actions necessary to prevent similar incidents or non-conformance.

The following must be reported to the employee's supervisor immediately. If that person is not available, then the company Safety Manager shall be immediately notified for:

- Near miss incidents with the potential to harm people, the environment or assets.
- Work related illnesses or injuries; Property damage including vehicle incidents.
- Hazardous chemical spillage, loss of containment and contamination.
- Non-conformance to safety or environmental rules, policies or standards.

The supervisor shall make the necessary notifications and begin the incident investigation process.

In the case of a major injury or incident, the scene of the event should be closed off and kept "as is" at the time of the incident. This is vital for effective incident investigation.

Incident investigation occurs as soon as possible, while the facts are still fresh in the minds of those involved (i.e. witnesses). Take the opportunity to talk with all those involved before they become unavailable or memory fades. An incident investigation must be thorough and concerned only with cause and prevention and must be separate from administrative disciplinary action.

Equipment

Proper equipment will be available to assist in conducting an investigation. Equipment may include writing items such as pens/paper, tape measures, rulers, cameras, small tools, audio recorder, PPE, flags, equipment manuals, etc. The Safety Manager should have an investigation kit prepared in advance.

Incident Reporting Matrix

The incident reporting Matrix identifies, based on type of incident, who within corporate management shall be verbally notified and when. It also specifies which type of report shall be completed based on the type of incident.

Reporting of the incident must occur in a specified manner based on site specific requirements and the reporting sequence shall be posted.

INCIDENT NOTIFICATION MATRIX

TYPE OF INCIDENT	WHO TO NOTIFY VERBALLY	WHEN	INCIDENT REPORT FORM
Minor First Aid	Safety Manager	24 hours	Yes
Clinic or Doctor Visit	Safety Manager, Office Manager	ASAP	Yes
In-patient Hospitalization Amputation Loss of an Eye	President, Safety Manager, Office Manager, OSHA	Within 24 hours to State or Federal OSHA	Yes
Fatality	President, Safety Manager, Office Manager, OSHA	Within 8 hours to State or Federal OSHA	Yes
Reportable Spill	Safety Manager	ASAP	Yes
Non-conformance	Safety Manager	24 hours	Verbally Initially
Workman's Comp	Workman's Comp Carrier	1 business day	Employer's Report of Injury

OSHA defines "in-patient hospitalization" as a formal admission to the in-patient service of a hospital or clinic for care or treatment. Treatment In an emergency room is not reportable.

OSHA defines "amputation" as the traumatic loss of all or part of a limb or other external body part. This would include fingertip amputations with or without bone loss; medical amputations resulting from irreparable damage; and amputations of body parts that have since been reattached. If and when there is a health care professional's diagnosis available, the employer should rely on that diagnosis.

Results of incident investigations are communicated to employees via the Incident Notice form as well as Stand Down, and Tool Box Talk.

Time Elements of When Incidents Should be Reported to Applicable Regulatory Agency(s) and the Host Facility/Client

Required incidents must be reported to applicable agency(s) within 8 hours of their discovery. Incidents must also be reported to the client (host facility) as soon as possible, or in a timely manner (within 24 hrs. of the incident).

Incident Review Team and Incident Investigation Report

All incidents will be investigated to the appropriate level with regards to incident severity. While all incidents should be investigated, the extent of the investigation will reflect the seriousness of the incident using a root cause analysis process or similar method determined by the Safety Manager. They may form an incident review team that participates in the determination of the final root cause investigative incident report. The team should be representatives of management or other designees as assigned by the Safety Manager.

Initial Identification/Assessment of Evidence

Initial identification of evidence immediately following the incident might include a list of people, equipment, and materials involved and a recording of environmental factors such as weather, illumination, temperature, noise, ventilation, and physical factors like fatigue, age, or medical condition

Collection/Preservation and Security of Evidence

Evidence such as people, positions of equipment, parts, and papers must be preserved, secured, and collected through notes, photographs, witness statements, flagging, and impoundment of documents and equipment. All shall be dated.

Witness Interviews and Statements

Witness interviews and statements must be collected. Locating witnesses, insuring unbiased testimony, obtaining appropriate interview locations, and use of trained interviewers should be detailed. The need for follow-up interviewers should also be addressed. All items shall be dated.

The final incident investigation report consists of findings with critical factors, evidence, corrective actions, responsible parties, and timeliness for corrective action completion.

Results of incident investigations are communicated to employees via the incident Notice form, stand downs, or tool box talks.

Preparation of the Written Incident Report

Written incident reports will be prepared and include any Field Incident Report Form and a detailed narrative statement concerning the events. The format of the report may include an introduction, methodology, summary of the incident, Incident Review Team member names, narrative of the event, any findings and recommendations. Photographs, witness statements, drawings, etc. should be included.

The supervisor completes the Field Incident Report and takes steps below when beginning an incident investigation.

- Provide emergency assistance as needed and qualified for.
- Secure the area as quickly as possible to retain the same condition at the time of the incident.
- Notify management by phone according to the Incident Notification Matrix.
- Identify potential witnesses.

- Use investigation tools as needed (camera, drawings, video, etc.).
- Tag out for evidence any equipment that was involved.
- Interview any witnesses (including affected employee) and obtain written, signed statements, as well as complete the Incident Report and forward to the Safety Manager/Office Manager.
- Implement any immediate corrective actions needed.

Incident Notice Form

RW LaPine Inc. should provide documentation and communication of lessons learned and reviews of similar operations to prevent a reoccurrence or to mitigate similar events. Items learned are reviewed and communicated. Changes to processes must be placed into effect to prevent reoccurrence or similar events.

In order to communicate incident information and lessons learned from incidents the Safety Manager should communicate the Incident Notice to all work sites. The incident should be discussed in the weekly safety meetings to all work site employees.

Corrective Actions Resulting from Incident Investigations

Investigations should result in corrective actions. Individuals should be assigned responsibilities relative to the corrective actions, and these actions should be tracked to closure.

Site Managers, Supervisors are held accountable for closing corrective actions. Corrective actions for safety improvement at each site are tracked by the Safety Manager to ensure timely follow up and completion.

Corrective actions are also used as needed for revisions to site specific safety plans and the Company Safety and Health Management Program.

Injury Classifications

Injuries shall be classified per the following:

First Aid – Dressing on a minor cut, removal of a splinter, typically treatment for household type injuries.

Lost Work Day Case (LWDC) – An injury that results in an employee being unfit to perform any work on any day after the occurrence of an occupational injury.

Number of Lost or Restricted Work Days – The number of days, other than the day of occupational injury and the day of return, missed from scheduled work due to being unfit for work or medically restricted to the point that the essential functions of a position cannot be worked.

Occupational Injury – An injury which results from a work-related activity.

Occupational Illness – Any abnormal condition or disorder caused by exposure to environmental factors while performing work that resulted in medical treatment by a physician for a skin disorder, respiratory condition, poisoning, hearing loss or other disease (frostbite, heatstroke, sunstroke, welding flash, diseases caused by parasites, etc.). Do not include minor treatments (first aid) for illnesses.

Recordable Medical Case (RMC) – An occupational injury more severe than first aid that requires advanced treatment (such as fractures, more than one stitch, prescription medication of more than one dose, unconsciousness, removal of foreign body embedded in eye (not flushing), admission to a hospital for more than observation purposes) and yet results in no lost work time beyond the day of injury

Restricted Work Day Case (RWDC) – An occupational injury which results in a person being unfit for essential functions of the regular job on any day after the injury but where there is no time lost beyond the day of injury. An example would include an injured associate is kept at work but not performing within the essential functions of their regular job.

Work or Work Related Activity – All incidents that occur in work related activities during work hours, field visits, etc. are reportable and are to be included if the occupational injury or illness is more serious than requiring simple first aid. Incidents occurring during off hours and incidents while in transit to or from locations that are not considered an employee's primary work are not reportable.

The following are examples of incidents that will not be considered as recordable:

- The injury or illness involves signs or symptoms that surface at work but result solely from a non-work-related event or exposure that occurs outside the work environment.
- The injury or illness results solely from voluntary participation in a wellness program or in flu shot, exercise class, racquetball, or baseball.
- The injury or illness is solely the result of an employee eating, drinking, or preparing food or drink for personal consumption (whether bought on the employer's premises or brought in). The injury or illness is solely the result of an employee doing personal tasks (unrelated to their employment) at the establishment outside of the employee's assigned working hours.
- The illness is the common cold or flu (Note: contagious diseases such as tuberculosis, brucellosis, hepatitis A, or plague are considered work-related if the employee is infected at work).

Training

RW LaPine Inc. shall train personnel in their responsibilities and incident investigation techniques. Personnel must be trained in their roles and responsibilities for incident response and incident investigation techniques. Training requirements relative to incident investigation and reporting are described below:

- Training frequency will be based on the specific area of responsibility but shall not exceed once every two years.
- Training requirements relative to incident investigation and reporting shall include:

  - Awareness
  - First Responder Responsibilities
  - The Initial Investigation at the Accident Scene
  - Managing the Accident Investigation

Injury/Illness Recordkeeping

Date: 1-15-2018

Purpose:

The purpose of this program is to define the requirements for recording job related injuries and illnesses for RW LaPine Inc.

Scope:

This policy shall cover all RW LaPine Inc. operations within the United States. Specific guidelines are available at the following website link: http://www.osha.gov/recordkeeping/index.html.

Key Responsibilities:

Office Manager/Safety Manager

- Shall ensure all job related injuries and illness are recorded properly in accordance with OSHA requirements.
- Shall ensure all required postings are conducted in accordance with recordkeeping guidelines.
- Shall maintain all required records.
- Shall determine the proper classification of job related injuries or illnesses based on OSHA recordkeeping guidelines.

Supervisors

- Shall ensure that all job related injuries and illness are reported promptly to the Safety Manager and Office Manager.

Employees

- Shall promptly report any actual or suspected job related injury or illness.

Procedure:

If RW LaPine Inc. is required to keep records of fatalities, injuries, and illnesses it must record each fatality, injury and illness that:

- is work-related; and
- is a new case; and
- meets one or more of the general recording criteria.

RW LaPine Inc. must enter each recordable injury or illness on an OSHA 300 Log and 301 Incident Report, or other equivalent form, within seven (7) calendar days of receiving information that a recordable injury or illness has occurred.

The OSHA 300A Summary will be signed by a company official. The RW LaPine Inc. executive must certify that he or she has examined the OSHA 300 Log and that he or she reasonably believes, based on his or her knowledge of the process by which the information was recorded, that the annual summary is correct and complete.

Posting:

RW LaPine Inc. must post a copy of the annual summary in each establishment in a conspicuous place or places where notices to employees are customarily posted. RW LaPine Inc. must ensure that the posted annual summary is not altered, defaced or covered by other material.

The annual summary must be posted no later than February 1st of the year following the year covered by the records and the posting kept in place until April 30th.

RW LaPine Inc. must save the OSHA 300 Log, the privacy case list (if one exists), the annual summary and the OSHA 301 Incident Report forms for five (5) years following the end of the calendar year that these records cover.

Safety & Health Program

5140 East ML Avenue
Kalamazoo, Michigan 49048

Dated: 12-09-2005

Revised: 01-08-2016

SAFETY & HEALTH POLICY

Safety is everyone's responsibility. It is the desire of R.W. LaPine, Inc. to help provide a safe working environment for all employees.

To accomplish this, management will provide reasonable safeguards to help insure safe working conditions and support the safe and efficient development of all work activities.

The need also exists for recognizing that no job is so important and no order is so urgent that we cannot take time to perform our work safely.

Employees are expected to use the safety equipment provided. Rules of conduct and rules of safety shall be observed. Safety equipment shall not be destroyed or abused.

The joint cooperation of employees and management in observance of the policy will help provide safe working conditions, help reduce work-related accidents and will be to the mutual advantage of all.

Therefore, I ask your cooperation and support to help make all our jobs safe.

Kirk LaPine
President

GOALS AND OBJECTIVES

GOAL: It is the goal of R.W. LaPine, Inc. to provide a safe and healthful work environment for each of its workers. Each employee in this company, from top management to field personnel, shall strive for zero job site injuries and illnesses.

OBJECTIVES:

- To reduce work accidents and illnesses.
- To control costs, through the reduction/elimination of lost time work accidents.
- To increase employee safety awareness by encouraging their participation in recognizing hazards and reporting those hazards.
- To encourage safety outside the workplace.
- To determine the cause(s) of any accident as quickly as possible and eliminate any identified hazard(s) whenever possible.
- Meet or exceed all compliance requirements of state and federal safety standards.
- Plan all work to minimize personal injury, property damage, and loss of productive time.
- Establish and conduct educational programs such as safety training, and toolbox talks.
- Maintain accurate and timely accident/loss reports, including OSHA logs.

MANAGEMENT INVOLVEMENT

Management at R.W. LaPine, Inc. will provide workers a safe and healthful work environment. We believe that safety is an integral part of doing the job right.

Methods of Involvement:

- Management when in the facility, on jobsites, or on service assignments will be concerned of and vigilant for potential safety hazards.

- Management will set an example by wearing required protective equipment and following all safety and health rules and procedures.

- Management will be accessible to all employees by having an open door policy allowing any employee the opportunity to speak with them concerning safety and health issues, without fear of reprisals.

- Management will be accountable for the safety and health issues concerning all employees.

- Management will have Tailgate Safety Talks with employees on a weekly basis. And any identified hazards on jobsites; service calls will also be addressed.

EMPLOYEE INVOLVEMENT

R.W. LaPine, Inc. feels that employee involvement is essential to the success of the safety and health program. For this reason we foster employee participation in the safety and health program in the following ways;

Methods of Involvement:

- Employee training in:
    - Right-To-Know/Federal Hazard Communication
    - Personal Protective Equipment
    - Hazard Identification and Risk Assessment
    - Other safety related topics

- Having a Hazard Reporting System

- Employees are protected from any discrimination or discharge resulting from a request for information regarding hazardous chemicals under the Right-To-Know Law, and by making known to management potential hazards or hazardous conditions.

SAFETY AND HEALTH RESPONSIBILITIES

ROLE OF:

PRESIDENT:	Establish and provide the leadership and resources for carrying out the stated company Safety and Health Policy.
PROJECT MANAGERS/ SUPERVISORS:	Maintain a safe and healthy working environment within their respective areas within the facility and on the job-site.
SAFETY MANAGER:	Ensure that appropriate safety and health rules are developed, communicated, and understood.
EMPLOYEES:	Exercise care in the course of their work to prevent injuries to themselves and to their fellow workers.
VISITORS, VENDORS, & CONTRACTORS	Comply with all safety and health regulations while on our premises and work-sites.

Management Responsibilities:

- Provide the leadership and positive direction essential in maintaining the safety and health policy as a major priority in all operations.
- Make sure that employees know and are encouraged to report hazards along with safety & health suggestions. That they are protected from harassment, and that their ideas are needed, and when helpful and feasible, are adopted.
- Ensure that prompt corrective action is taken whenever and wherever hazards are recognized or unsafe acts are observed.
- Provide necessary safety and health equipment following the guidelines of the Personal Protective Equipment Program.
- Ensure that all injured persons, regardless of how minor the injury, receive prompt and appropriate medical treatment.
- Encourage employee participation in establishing company safe work practices.
- Conduct pre-job/pre-task planning for every new job or task.

Safety Manager Responsibilities:

- Maintain safety and health program as outlined in this manual. Provide employee training as needed and recommended by MIOSHA along with presenting toolbox talks.
- Assist in Job Safety Analysis of new job sites and operations.
- Develop a complete inventory of hazards and potential hazards and plan a program of prevention and control.
- Conduct on site Safety Audits of shop and field worksites to insure safety compliance.
- Oversee investigation of or investigate employee reports of hazards and respond to employee safety and health suggestions.
- Assist Supervisors in investigating accidents and incidents such as property damage and near miss cases.

Employee Responsibilities:

- Learn and understand the rules, follow them and avoid short cuts.
- Be individually responsible to keep yourself, fellow workers, and equipment free from mishaps.
- If any doubt exists about the safety and/or health of doing a job, stop and get instructions before continuing the work.
- Report all accidents, near misses, as well as unsafe conditions, immediately to your supervisor or project manager.
- Attend and participate in all required safety training sessions.
- Do not report to work under the influence of alcohol or drugs or have them in your possession.

ACCOUNTABILITY

In order for a safety program to be effective, there must be a means developed for holding employees accountable for their unsafe work habits or conditions.

If an accident occurs and if it has been determined that the accident could have been avoided, the means of holding the employee(s) accountable should be made more severe after each consecutive offense.

First Incident: Employee will receive a verbal warning.

Second Incident: Employee will receive a verbal and written warning with a copy of the written warning becoming a part of the employee's file.

Third Incident: Employee will receive one day off of work with no pay.

Fourth Incident: Possible termination of employment.

Note: Serious offenses may result in immediate termination.

The purpose of holding employees accountable is to help employees conform to company policy and safe work practices. It is not designed to end employment and therefore all employees should be given the opportunity to start over with a clean record periodically.

COMPREHENSIVE HAZARD IDENTIFICATION

Hazard identification will be achieved in the following ways;

- Hazards observed and reported by employees
- Hazards observed by management, Jobsite Safety Analysis and by Jobsite Inspections.
- A chemical hazard analysis has been completed on all chemicals used by R.W. LaPine, Inc. Procedures for handling chemicals have been developed and implemented through a Right-To-Know, Federal Hazard Communication Program.
- A hazard assessment has been made for the Personal Protective Equipment Program. The assessment indicated the required PPE to be used for all operations.

EMPLOYEE REPORTS OF HAZARDS

Every employee is expected to watch for possible hazards to employee safety and health and to report any noticed hazards immediately. Reports should be made verbally to their Jobsite Supervisor or Project Manager.

No employee, at any level, shall discipline or harass any other employee because of reports of hazards made. Any employee found to have discriminated against another employee for this reason shall be disciplined.

Remember, all employees are needed to help keep worksites safe and healthful.

JOBSITE INSPECTION

A thorough inspection must be made by the Safety Manager or Jobsite Supervisor prior to work being performed by R.W. LaPine, Inc. Housekeeping, stairway lighting, guarding of all floor openings, work methods, equipment, tools, etc. should be examined to discover hazardous conditions.

Special attention should be paid to things or conditions that have caused injury or illness on other jobsites. Any unsafe or hazardous condition shall be immediately corrected and reported to R.W. LaPine, Inc. Safety Manager.

Jobsite hazardous conditions resulting from work performed by others, and are under the responsibility of the General Contractor, is of serious concern to R.W. LaPine, Inc.
It is absolutely essential that where R.W. LaPine, Inc. does not have the responsibility or authority to eliminate unsafe conditions at the jobsite, that the Jobsite Supervisor **must** report these conditions in writing to the General Contractor's Safety Coordinator. A copy must also be given to R.W. LaPine, Inc. Safety Manager.

ACCIDENT AND NEAR MISS INVESTIGATION

ACCIDENTS:

Employees are to contact their immediate Supervisor, or Project Manager if they sustain a work related injury. In serious accidents Management, and the Safety Manager will conduct an immediate investigation to determine route cause. And will take immediate action to eliminate or remove any identified hazard that contributed to the accident.

NEAR MISS:

Employees that may be involved in a near miss type accident should also contact their immediate Supervisor, or Project Manager immediately. Near miss accidents **must** not go unreported. This information could protect you or your fellow employee from harm in the future.

INVESTIGATIONS:

Investigations in work related accidents and near misses are **not** to place blame, but to uncover the hazard or potential hazard involved no matter the severity. Once the hazard is identified it shall be either eliminated or controlled.

The Project Manager, Supervisor and Safety Manager shall:

- Start the investigation as soon as possible after the accident/incident occurs.
- Prepare mentally to be impartial throughout the investigation.
- Interview the victim(s) alone as soon as possible after they are out of danger.
- Interview all other witnesses individually (one at a time, away from other witnesses).
- Get as much detail as possible from victim(s) and witnesses.
- Carefully inspect the scene for evidence. Take photographs or videotape where appropriate.
- Study all possible causes. Consider the possibility that both unsafe acts and/or unsafe conditions may have contributed to the accident/incident.
- Try to reconstruct the accident/incident and describe it in the report
- Write a narrative style report. Include:

    - Date, time and location of accident/incident;
    - A detailed description of the accident/incident;
    - If applicable, the number of workers injured, type of injuries, weather conditions, lighting, substance abuse, fatigue, etc.;
    - All obvious contributing factors; and
    - Strategy for preventing recurrence.

INVESTIGATIONS, Continued:

- If more than one Supervisor conducted an investigation, compare draft reports and work out the details so that all investigators agree on the final report.
- Implement recurrence prevention strategies immediately.

INJURY REPORTING PROCEDURE

All injuries, **NO MATTER HOW SLIGHT**, shall receive first aid treatment on the job. First aid is available for all employees. Report to your supervisor for treatment or direction.

Drivers are to immediately report all vehicle accidents to their supervisor.

All employees shall cooperate by providing the necessary information to complete the injury reports required by MIOSHA, state workers compensation, company insurance carrier, and the client.

Client's medical facilities can be used only in a life-threatening situation. Their medical facilities should not be used for general first aid cases.

All employees who incur a personal injury on the job shall be required to be drug tested as soon as possible after the injury occurs. This is a mandatory requirement of our workers compensation carrier.

It is also mandatory that an employee shall be drug tested after all motor vehicle accidents.

All jobsites will have trained individuals in First Aid and CPR that is current.

Supervisors shall complete the investigation report form. One copy must be filed at the main office and one copy to be retained in the field office.

TAILGATE SAFETY TALKS

On a weekly basis supervisors or the safety manager will facilitate tailgate safety talks with their employees. At the same time, any reported hazards will be discussed so that all employees will be made aware. All attendance shall be documented.

Trenching, Shoring, Excavating Program

R.W. LaPine Inc.
MECHANICAL CONTRACTORS

Date: 06/24/2019

INDEX

Purpose

Excavating is one of the most hazardous construction operations. The fatality rate for excavations is twice that of construction as a whole, and cave-ins are the number one hazard. The purpose of this training program is to protect employees from safety hazards that may be encountered during work in trenches and excavations.

Scope

RW LaPine Inc. is required to participate as a contract employer at client locations with trenching and excavation work; however, RW LaPine Inc. may not initiate trenching operations. When work is performed on a non- owned or operated site, the operator's program shall take precedence; however, this document covers RW LaPine Inc. employees for basic awareness purposes that addresses all items and shall be used when an operator's program doesn't exist.

Definitions

Accepted engineering practices means the standards of practice required by a registered professional engineer.

Aluminum Hydraulic Shoring means a manufactured shoring system consisting of aluminum hydraulic cylinders (crossbraces) used with vertical rails (uprights) or horizontal rails (wales).

Bell-bottom pier hole means a type of shaft or footing excavation, the bottom of which is made larger than the cross section above to form a belled shape.

Benching (Benching system) is a method of protecting employees from cave-ins by excavating the sides of an excavation to form one or more horizontal steps, usually with vertical or near-vertical surfaces between levels.

Cave-in means the movement of soil or rock into an excavation, or the loss of soil from under a trench shield or support system, in amounts large enough to trap, bury, or injure and immobilize a person.

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

Cross braces mean the horizontal members of a shoring system installed from side to side of the excavation. The cross braces bear against either uprights or Wales.

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

Faces or sides mean the vertical or inclined earth surfaces formed as a result of excavation work.

Failure means the movement or damage of a structural member or connection that makes it unable to support loads.

Hazardous atmosphere means an atmosphere that is explosive, flammable, poisonous, corrosive, oxidizing, irritating, oxygen deficient, toxic, or otherwise harmful, which may cause death, illness, or injury.

Safety Coordinator means the individual at RW LaPine Inc. responsible for developing and implementing this program, conducting unannounced work site inspections, and ensuring that the departments comply with the program requirements.

Kickout means the accidental movement or failure of a cross brace.

Protective system means a method of protecting employees from cave-ins, from material that could fall or roll from an excavation face into an excavation, or from the collapse of adjacent structures. Protective systems include support systems, sloping and benching systems, shield systems, and other systems that provide the necessary protection.

Ramp means an inclined walking or working surface that is used to gain access to one point from another. A ramp may be constructed from earth or from structural materials such as steel or wood.

Sheeting means the members of a shoring system that retain the earth in position and in turn are supported by other members of the shoring system.

Shield(Shield system) means a structure used in an excavation to withstand cave-ins and which will protect employees working within the shield system. Shields can be permanent structures or portable units moved along as work progresses. Shields used in trenches are usually referred to as "trench boxes" or "trench shields."

Shoring (Shoring system) means a structure that is built or put in place to support the sides of an excavation to prevent cave-ins.

Sides - See "Faces."

Sloping (Sloping system) means sloping the sides of the excavation away from the excavation to protect employees from cave-ins. The required slope will vary with soil type, weather, and surface or near surface loads that may affect the soil in the area of the trench (such as adjacent buildings, vehicles near the edge of the trench and so forth).

Stable rock means natural solid mineral material that can be excavated with vertical sides that will remain intact while exposed.

Structural ramp means a ramp built of steel or wood, usually used for vehicle access. Ramps made of soil or rock are not considered structural ramps.

Support system means a structure such as underpinning, bracing, or shoring, which provides support to an adjacent structure, underground installation, or the sides of an excavation.

Tabulated data means tables and charts approved by a registered professional engineer and used to design and construct a protective system.

Trench (Trench excavation) means a narrow excavation (in relation to its length) made below the surface of the ground.

Uprights mean the vertical members of a trench shoring system placed in contact with the earth and usually positioned so that individual members do not contact each other. Uprights placed so that individual members are closely spaced, in contact with or interconnected to each other, are often called "sheeting."

Wales mean horizontal members of a shoring system placed in the direction of the excavation face whose sides bear against the vertical members of the shoring system or earth (the uprights or sheeting).

Key Responsibilities

Management shall determine if this program is required for regulatory compliance within his/her region. If this program is deemed necessary, then management shall determine which employees within his/her region is required to receive this training. Management shall select a training facility or use an in-house qualified trainer to supply the training. Only trained personnel can be involved in working in trenches or excavations.

Procedures

Competent Person Duties – The Safety Manager or their designee shall have the following duties:

Protective Systems or Equipment

- Monitoring water removal equipment and operations.
- Removal of workers if conditions dictate.
- Atmospheric testing.
- Inspecting excavations subject to runoff from heavy rains to determine need for diversion ditches, dikes, or other suitable protection.
- Determining cave-in potential to assess need for shoring or other protective system.
- Examining damaged material or equipment used for protective systems to determine its suitability for continued use.
- Classifying soil and rock deposits, by both visual analysis and by testing, to determine appropriate protection; re-classifying, if necessary, based on changing conditions.
- Determining the appropriate slope of an excavation to prevent collapse due to surcharge loads from stored material or equipment, operating equipment, adjacent structures, or traffic, and assuring that such slope is achieved.

Inspecting Trench and Protective Systems

- Inspections prior to entry and authorizing immediate removal of employees from the hazardous area where evidence of possible cave-in, failure of protective systems, hazardous atmospheres, or other hazardous conditions exists.

Unsafe Access/Egress

- Determining structural ramps that are used solely by employees as a means of access or egress. Structural ramps used for access or egress of equipment must be designed by a competent person qualified in structural design.

Utilities and Pre-work Site Inspection

The location of underground installations shall be determined before excavation.

When utility companies or owners cannot respond to a request to locate underground utility installations within 24 hours, or cannot establish exact locations of these installations, RW LaPine Inc. may proceed, provided it does so with caution and provided detection equipment or other acceptable means to locate utility installations are used.

Excavation shall be done in a manner that does not endanger the underground installations or the employees engaged in the work. Utilities left in place shall be protected by barricades, shoring, suspension or other means as necessary to protect employees.

Protection of the Public

Barricades, walkways, lighting and posting shall be provided as necessary for the protection of the public prior to the start of excavation operations.

Guardrails, fences, or barricades shall be provided on excavations adjacent to walkways, driveways and other pedestrian or vehicle thoroughfares. Warning lights or other illumination shall be maintained if necessary for the safety of the public and employees from sunset to sunrise.

Wells, holes, pits, shafts and all similar hazardous excavations shall be effectively barricaded or covered and posted as necessary to prevent unauthorized access. All temporary excavations of this type shall be backfilled as soon as possible.

Protection Against Falls

Walkways or crossings shall be protected by standard guardrails or railings shall be provided where employees and the general public are permitted to cross over excavations. Where workers in the excavation may pass under these walkways or bridges, a standard guardrail and toe board shall be used.

Protection of Workers in Excavations

Access and Means of Egress

Stairs, ladders or ramps shall be provided where employees are required to enter trench excavations over 4 feet deep. The maximum distance of lateral travel (e.g., along the length of the trench) required to reach the means of egress shall not exceed 25 feet.

Structural Ramps

Structural ramps used solely by employees as a means of access or egress from excavations shall be designed by a competent person. Structural ramps used for access or egress of equipment shall be designed by a person qualified in structural design, and shall be constructed in accordance with the design.

Ramps and runways constructed of two or more structural members shall have the structural members connected together to prevent movement or displacement.

Structural members used for ramps and runways shall be of uniform thickness.

Cleats or other appropriate means used to connect runway structural members shall be attached to the bottom of the runway or shall be attached in a manner to prevent tripping.

Structural ramps used in place of steps shall be provided with cleats or other surface treatments on the top surface to prevent slipping.

Ladders

When portable ladders are used, the ladder side rails shall extend a minimum of 3 feet above the upper surface of the excavation.

Ladders shall have nonconductive side rails if work will be performed near exposed energized equipment or systems.

Two or more ladders, or a double-cleated ladder, will be provided where 25 or more employees will be conducting work in an excavation where ladders serve as the primary means of egress, or where ladders serve two-way traffic.

Ladders will be inspected prior to use for signs of damage or defects. Damaged ladders will be removed from service and marked with "Do Not Use" until repaired.

Ladders shall be used only on stable and level surfaces unless secured. Ladders placed in any location where they can be displaced by workplace activities or traffic shall be secured, or barricades shall be used to keep these activities away from the ladder.

Non-self-supporting ladders shall be positioned so that the foot of the ladder is one-quarter of the working length away from the support.

Employees shall not be allowed to carry any object or load while on the ladder that could cause them to lose their balance and fall.

Exposure to Vehicular Traffic

Employees exposed to vehicular traffic shall be provided with, and shall wear vests or other suitable garments marked with or made of reflectorized or high-visibility material. Warning vests worn by flagmen shall be red or orange, and shall be of reflectorized material if worn duringnight work.

Employee Exposure to Falling Loads

No employee shall be permitted underneath loads (or where loads may fall) handled by lifting or digging equipment. Employees shall be required to stand away from any vehicle being loaded or unloaded to avoid being struck by any spillage or falling materials. Operators may remain in the cabs of vehicles being loaded or unloaded when the vehicles provide adequate protection for the operator during loading and unloading operations.

Warning System for Mobile Equipment

A warning system shall be used when mobile equipment is operated adjacent to the edge of an excavation if the operator does not have a clear and direct view of the edge of the excavation. The warning system shall consist of barricades, hand or mechanical signals, or stop logs. If possible, the grade should be away from the excavation.

Hazardous Atmospheres

The atmosphere shall be tested for air contaminants (oxygen, flammable gases, etc.) in excavations over 4 feet deep if a hazardous atmosphere exists or could reasonably be expected to exist. A hazardous atmosphere could be expected, for example, in excavations in landfill areas, in excavations in areas where hazardous substances are stored nearby, or in excavations near or containing gas pipelines.

Adequate precautions shall be taken to prevent employee exposure to atmospheres containing less than 19.5 percent oxygen and other hazardous atmospheres. These precautions include providing proper respiratory protection or forced ventilation of the workspace.

Forced ventilation will be provided where necessary to ensure the atmosphere is safe.

When controls are used that are intended to reduce the level of atmospheric contaminants to acceptable levels, continuous air monitoring will be performed. The device used for atmospheric monitoring shall be equipped with an audible and visual alarm.

Atmospheric testing will be performed using a properly calibrated direct reading gas monitor. Direct reading gas detector tubes or other acceptable means may also be used to test potentially toxic atmospheres.

Personal Protective Equipment

All employees working in trenches or excavations shall wear approved hard-hats and safety toed boots.

Employees exposed to flying fragments, dust, or other materials produced by drilling, sawing, sanding, grinding and similar operations shall wear approved safety glasses and/or a faceshield.

Employees exposed to hazards produced by, or performing, welding, cutting, or brazing operations shall wear approved spectacles or a welding faceshield or helmet.

Employees entering bell-bottom pier holes or other similar deep and confined footing excavations shall wear a harness with a lifeline securely attached to it. The lifeline shall be separate from any line used to handle materials and shall be individually attended at all times while the employee wearing the lifeline is in the excavation.

Employees shall wear approved gloves or other suitable hand protection.

Employees using, or working in the immediate vicinity of, hammer drills, masonry saws, jackhammers or similar high noise producing equipment shall wear suitable hearing protection.

Each employee at the edge of an excavation 6 feet or more deep shall be protected from falling. Fall protection shall be provided by guardrail systems, fences or barricades.

Emergency rescue equipment, such as breathing apparatus, a safety harness and line, etc. shall be readily available where hazardous atmospheric conditions exist or may develop during work in an excavation. This equipment shall be attended when in use. Only personnel that have received approved training and have appropriate equipment shall attempt retrieval that would require entry into a hazardous atmosphere.

Protection from Hazards Associated with Water Accumulation

Employees shall not work in excavations that contain or are accumulating water unless precautions have been taken to protect employees against the hazards posed by water accumulation. The precautions taken must include inspection by a competent person before work begins, special support or shield systems to protect from cave-ins, water removal to control the level of accumulating water or use of safety harnesses and lifelines.

If water is controlled or prevented from accumulating by the use of water removal equipment, the water removal equipment and operation shall be monitored by a competent person trained in the use of the equipment.

If excavation work interrupts the natural drainage of surface water (such as streams), diversion ditches, dikes, or other suitable means shall be used to prevent surface water from entering the excavation. Precautions shall also be taken to provide adequate drainage of the area adjacent to the excavation.

The competent person shall inform workers of the precautions or procedures that are to be followed if water accumulates or is accumulating in an excavation.

Stability of Adjacent Structures

The competent person will determine if the excavation work could affect the stability of adjoining buildings, walls, sidewalks or other structures.

Support systems (such as shoring, bracing, or underpinning) shall be used to assure the stability of structures and the protection of employees where excavation operations could affect the stability of adjoining buildings, walls, or other structures.

Excavation below the level of the base or footing of any foundation or retaining wall that could be reasonably expected to pose a hazard to employees shall not be permitted.

Protection of Employees from Falling Objects and Loose Rocks or Soil

Adequate protection shall be provided to protect employees from loose rock or soil that could pose a hazard by falling or rolling from an excavation face. Such protection shall consist of:

- Scaling to remove loose material;
- Installation of protective barricades, such as wire mesh or timber, at appropriate intervals on the face of the slope to stop and contain falling material; or
- Benching sufficient to contain falling material.

Excavation personnel shall not be permitted to work above one another where the danger of falling rock or earth exists.

Employees shall be protected from excavated materials, equipment or other materials that could pose a hazard by falling or rolling into excavations.

Protection shall be provided by keeping such materials or equipment at least 2 feet from the edge of excavations, by the use of restraining devices that are sufficient to prevent materials or equipment from falling or rolling into excavations, or by a combination of both.

Materials and equipment may, as determined by the competent person, need to be stored further than 2 feet from the edge of the excavation if a hazardous loading condition is created on the face of the excavation.

Materials piled, grouped or stacked near the edge of an excavation must be stable and self-supporting.

Using the following categories, soil is classified into different types, which determine the kind of cave-in protection required. Only a competent and trained person can determine the soil type by using these classifications.

- Grain sizes are usually classified into four types: gravel, sand, silt, clay. Gravel is the least stable, and clay is the most stable.
- Saturation is the amount of water that the soil is currently holding. Complete saturation is much less stable than soil that is only slightly damp. However, soil with no water content is unstable.
- Cohesiveness is a test that determines how well the soil sticks together. The more it sticks together, the more stable the trench walls will be. The field test usually consists of rolling the soil in your hand into the shape of a worm and observing how and when it separates.
- Unconfined compressive strength determines how much weight per square foot the soil can withstand. This will determine how easily the soil will shear and cave in

Soil Types

Soil classifications must be determined by testing and protective systems designed according to soil classifications.

- The most stable type of soil is Type A. It is dense and heavy and consists primarily of clay.
- Type B has a medium level of stability and is made of soils such as silt, sandy loam, and medium clay.
- The least stable soil is Type C, which consists of gravel, loamy sand, and soft clay.

Timber shoring or aluminum hydraulic shoring must be determined according to the appendixes A & C of 29 CFR 1926 (Excavations).

The devices should be used while in good repair and maintenance. If damaged they must be inspected.

Employees should be protected from hazards of falling, rolling or sliding materials or equipment. Shields should not be subjected to excessive forces and will be installed to protect employees from lateral loads. Employees are restricted from being in the shield when installing or removing. The shield must be designed to resist calculated trench forces.

Daily Inspection

The competent person shall conduct daily inspections of excavations, adjacent areas, and protective systems for evidence of a situation that could result in possible cave-ins, failure of protective systems, hazardous atmospheres or other hazardous conditions. An inspection shall be conducted by the competent person prior to the start of work and as needed throughout the shift. Inspections shall also be made after every rainstorm or other hazard increasing occurrence. These inspections are only required when the trench will be or is occupied by employees.

Where the competent person finds evidence of a situation that could result in a possible cave-in, failure of protective systems, hazardous atmosphere, or other hazardous conditions, exposed employees shall be immediately removed from the hazardous area until precautions have been taken to assure their safety. There shall be a written log of all inspections conducted. This log shall include the date, work site location, results of the inspection, and a summary of any action taken to correct existing hazards.

Training

All personnel involved in trenching or excavation work shall be trained in the requirements of this program and regulatory requirements.

Training shall be performed before the employee is assigned duties in excavations.

Retraining will be performed whenever work site inspections conducted by the competent person or Health Safety Officer indicate that an employee does not have the necessary knowledge or skills to safely work in or around excavations.

Training records shall include the date(s) of the training program, the instructor(s) of the training program, a copy of the written material presented, and the names of the employee(s) to whom the training was given.

RW LaPine **EXCAVATION CHECKLIST**

(To be completed by a Competent Person)

SITE LOCATION:			
DATE:	TIME:	COMPETENT PERSON:	
SOIL CLASSIFICATION:	EXCAVATION DEPTH:	EXCAVATION WIDTH:	
TYPE OF PROTECTIVE SYSTEM USED:			

Indicate for each item: YES - NO - or N/A for not applicable

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

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

RW LaPine Inc.

DAILY TRENCHING LOG

DATE:	SIGNATURE:
WEATHER:	PROJECT:

Was One Call System (811) contacted: Yes_____ No _____

Protective system: Trench shield (box)_____ Wood shoring _____
Sloping_____ Other _____

Purpose of trenching: Drainage_____ Water _____
Sewer_____ Gas_____
Other _____

Were visual soil tests made: Yes_____ No _____
If yes, what type?

Type of Soil: Stable Rock_____Type A_____Type B_____Type C _____

Surface encumbrances: Yes_____ No _____
If yes, what type?

Water conditions: Wet_____ Dry_____ Submerged _____

Hazardous atmosphere exists: Yes_____ No _____
(If yes, follow confined space entry procedures policy; complete confined Space Entry Permit; monitor for toxic gas(es))

Is trenching or excavation exposed to public vehicular traffic (exhaust emission): Yes_____No _____
(If yes, refer to confined space entry procedures; complete Confined Space Entry Permit; monitor for toxic gas(es))

Measurements of trench: Depth_____Length_____ Width _____

Is ladder within 25 feet of all workers: Yes_____ No _____

Is excavated material stored two feet or more from edge of excavation: Yes_____No_____

Are employees exposed to public vehicular traffic: Yes_____ No_____
(If yes, warning vests required)

Are other utilities protected: Yes_____ No _____
(Water, sewer, gas or other structures)

Are sewer or natural gas lines exposed: Yes_____ No _____

Periodic Inspection (changing conditions): Yes_____ No _____

Did employees receive training in excavating: Yes_____ No _____

Any Corrective Actions and Remarks: