

Author:	Kristine Barteck	First Approval:	Kristine Barteck
Date Issued:	05/16/2023	Second Approval:	John Schoechert
Next Review Date:	05/15/2024	Third Approval:	Brian Caldwell
Gap Document Required?	Yes		

Electronic approvals documented in EDMS.

RESCUE & MEDICAL

I. Rescue Operations

Rescue operations shall be conducted only by properly trained (HAZWOPER, First Aid, Confined Space, etc.) personnel under the authority of the Plant Incident Commander.

II. Injury Management

The Plant Incident Commander shall implement the Injury Management Plan (located in the Plant Employee Manual, Chapter 35).

A. Use of Ambulance Services

1. "Normal Business Hours"

Place call the plant control room (4531 or 4535) or the administrative assistant (4507) to have an ambulance called (911). Give the control room or the administrative assistant a brief description of injury and location of the victim to relay to dispatch operator.

2. "After Normal Business Hours"

Chief Operator / Plant Incident Commander will be responsible for contacting outside emergency resources such as ambulance, fire, etc. (911).

If at all possible, a manager or supervisor should ride along in the ambulance or follow in their personal vehicle. An employee needing

emergency treatment will not be allowed to drive themselves to the hospital or doctor's office. The emergency room should be called beforehand and alerted to the seriousness of the victim's injuries so that no delays occur upon arrival at the hospital.

3. Rescue

In the event of a rescue where an individual has fallen and is suspended by a full body harness, the following protocol shall be followed:

- 911 shall be called for transport and medical evaluation
- Wisconsin Rapids Fire Department (WRFD) "rescue" should be utilized as back-up to the Port Edwards team.

III. Hazardous Waste Operations and Emergency Response (HAZWOPER)

Only HAZWOPER trained employees may respond to chemical releases within the plant boundaries. Non-HAZWOPER trained employees must react per the plant assembly/evacuation procedures.

All HAZWOPER responders working in the defined "Hot Zone" must work in pairs and have an equally qualified team of two responders working as a standby-rescue team.

References:

Change Log:

05.12.2023 Reviewed

Author:	Kristine Barteck	First Approval:	Kristine Barteck
Date Issued:	05/16/2023	Second Approval:	John Schoechert
Next Review Date:	05/15/2024	Third Approval:	Brian Caldwell
Gap Document Required?	Yes		

Electronic approvals documented in EDMS.

EMERGENCY PLANT SHUTDOWN

I. Emergency Procedures

- A. Whenever there is an imminent or actual emergency situation, the Incident Commander must immediately:
 - 1. Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and
 - 2. Notify appropriate State or local agencies with designated response roles if their help is needed. (refer to CMP – 02 Emergency Coordination for more details)
- B. Whenever there is a release, fire or explosion, the Incident Commander must immediately identify the character, exact source, amount and extent of any released materials
- C. Concurrently the Incident Commander must assess possible hazards to human health or the environment that may result from the release, fire or explosion.
- D. During an emergency, the Incident Commander must take all reasonable measures necessary to ensure that fires, explosions and releases do not occur, recur or spread at the facility. These measures must include, where applicable, stopping the processes and operations, containing releases or isolating vessels.

II. Chlorine Cell Room Emergency Shutdown Guidelines

It is impossible to write instructions for all emergencies. The following are general instructions that would apply to most cases. Standard Operating Instructions (SOP's) are available in print and on PE SharePoint. (Plant operating instructions should be referred to for more detail).

A. Nine-Step Shutdown

In the event of imminent danger requiring an immediate plant shutdown (i.e. only a few minutes to spare, such as when a tornado is sighted) the "Nine-Step Shutdown" procedure will be used. By following these steps (in their listed order), an emergency shutdown of the main plant can be accomplished by **one** control room operator and one field operator in 2-3 minutes. With this method the following steps are taken prior to seeking shelter:

1. Sound the "Emergency" horn on the plant emergency warning system.
2. Push the "Emergency Trip" button on the master rectifier panel.
3. Verify Polarizers are on.
4. Verify Nitrogen on to all Electrolyzers.
5. Verify disposal system/EVS systems functioning normally. Shut off NaOH to EVS if needed.
6. Isolate chlorine storages.
7. Set Second king valve (PIC 603-5) in manual (output 100% Open).
8. Set King valve PIC-0603-2 to manual 10% to allow pressure side to depressurize.
9. Verify Chlorine compressor isolation valves have closed, and compressor is going through its normal shutdown purge, post lube, and then shutdown nominally 5 minutes to complete and shut down compressor.

Should additional time be available for a more complete shutdown, follow the normal Main Plant Shutdown Checklist to further isolate the chlorine system.

Refer to Forms and Checklists for Emergency Shutdown:

PE 2040P – Main Plant Emergency Shutdown

PE 2514 – Post Emergency Shutdown Checklist

- B.** The main plant has now been shutdown and chlorine system isolated. Further individual system shutdowns and isolation may be required based on length of shutdown and reason for shutdown as directed by the Plant Incident Commander.

- C. Consistent with safety of employees, tanks and piping systems should continue to be monitored for leaks, ruptures, pressure buildups and unexplained changes in tank levels. The degree and frequency of monitoring will be determined by the Plant Incident Commander.

The objective of this monitoring is prevention of a "secondary incident" caused by releases (or additional releases) of substances from equipment. Operating log sheets will be used to document the readings and observations noted during the outage.

References:

CMP-02 Emergency Coordination and Communications
Cell Room Control Room Manual Section A.1
PE 2040P – Main Plant Emergency Shutdown
PE 2514 – Post Emergency Shutdown Checklist

NR 664.0052 Contingency Plans
NR 664.0056 Emergency Procedures
40 CFR 264.52 and 264.56

Change Log:

05.12.2023 Reviewed

Author:	Kristine Barteck	First Approval:	Kristine Barteck
Date Issued:	05/22/2023	Second Approval:	John Schoechert
Next Review Date:	05/21/2024	Third Approval:	Brian Caldwell
Gap Document Required?	Yes		

Electronic approvals documented in EDMS.

EMERGENCY PROCEDURES

I. Assessment of Possible Hazards to Human Health and the Environment

An assessment of the potential impact to human health/injury and of a chemical release or hazardous waste related release, fire, or explosion is a required part of CMP activities. The objective is to identify all **possible** impacts and **to notify the control room (at 4531 or by radio)** of both direct and indirect impacts immediately upon becoming aware of any incident.

The first essential element of the assessment is knowledge of the character, amount, and the actual extent of the injury, release, fire, or explosion.

Process upsets or abnormal conditions where a process or primary containment has failed and personnel may be exposed to unknown levels of hazardous material require extra protection and planning for a safe response.

The Chief Process Operator should be notified of all process upset conditions. Additional PPE, atmospheric monitoring, resources and a planned response should be implemented in alignment with the site safety procedures and emergency response plans to ensure the safety of all operators and staff responding to the upset.

The site Crisis Management Plan, Security Plan, Safety Manual and Standard Operating Procedures contain procedures for specific emergency response procedures to process upset conditions.

With the above information, an initial assessment of potential impact can begin. The following points need be considered and answered before the assessment is considered complete:

Human Health/Injury

- Nature of injury, status of individual and needed assistance.

Liquid and Solid Releases

- Considering the pathway and extent of the release (both on and off-site), have any personnel, plants, or animals been exposed? If so, what effects are possible?
- Did the incident generate any dust or mist? If so, considering the extent, pathway, and characteristics of airborne contaminants, what immediate and long-term impacts are possible for humans, plants and animals?
- Did any liquid, solid, dust or mist flow or settle into surface waters? Given the characteristics of the substance and the estimated amount that entered surface waters, what health and/or environmental impact is possible?
- For releases that contact the ground, what are the potential environmental and health impacts associated with soil contamination (vegetation damage, groundwater contamination, runoff from contaminated precipitation, etc.).
- For solids, does the material contain any water soluble or leachable hazardous constituents? If the constituents enter the ground or surface water, what impact will occur to health and/or the environment?
- Has the discharge spread beyond the facility boundaries? If so, do local response groups need to be called to prevent exposure to the public or to facilitate clean-up efforts?
- Does the ERCO TCMP (Toronto Crisis Management Plan) need to be initiated?
- Is any chemical agent being used or considered for incident response? If so, what potential effects could these agents have on human health or the environment?

Gas and Vapor Releases

- Based on the pathway and extent of the gas or vapor release, will human or other organisms be impacted?
- Will an area be affected to the extent that personnel should be advised to evacuate or be routed around the area?
- Will vegetation be damaged from the release?

NOTE: For Environmental “Release Reporting Procedures” and “Release Response Procedures” refer to the ERCO Worldwide Port Edwards Plant Environmental Manual (B1.0PED – Release Reporting Procedure & B1.1PED – Release Response Procedure)

Flammable Materials (In addition to above)

- Does a fire exist which would endanger personnel or wildlife?
- Has flammable or explosive material accumulated in such a way that a fire or explosion is possible? Should traffic be rerouted to protect personnel against the effects of a possible fire or explosion? What threats to the environment are possible and what can be done to minimize environmental damage in the event of a fire or explosion?
- Will a fire, a potential fire, or explosion release any toxic or irritating gas? (See Gas and Vapor Release above).
- Has a cloud of flammable gas or mist been discharged? Could one be potentially released? Could the cloud be ignited and impact personnel or the environment before it dissipates?

II. Fire or Explosion**A. General**

In general, personnel are to follow our overall plant philosophy of responsibility and authority – refer to CMP-2.

In the case of a fire, it is generally expected that the personnel present would handle most small fires immediately (all plant personnel are trained annually in the use of plant fire extinguishers). In the case of a larger fire, where assistance by outside agencies and emergency services would be needed, the call to these agencies would be made under the direction of the Plant Incident Commander. Refer to Port Edwards Safety Standard 39, Plant Fire Protection.

The decision whether to "assemble or assist" depends on the seriousness of the fire. Each employee, unless already on the scene and involved, should consult his supervisor, if in doubt, before going to assist.

B. Major Fire or Explosion

In the event of a major fire or explosion, the emergency horn should be sounded. Refer to CMP-2, Emergency Coordination and Communications.

C. On-Arrival Personnel Assignments

1. The highest-ranking Plant Incident Commander may assume control of any incident.
2. Production Supervisor on call or Production Manager
 - a. Assist with process activities.
 - b. Call in remaining supervision and required manpower including Operations HAZWOPER trained employees.
3. Plant Manager (or as assigned by the Plant Incident Commander)
 - a. Make a survey of damage.
 - b. Check to make sure all people are accounted for.
 - c. Arrange for transportation and materials required in combating or controlling the disaster.
 - d. Direct the movement of emergency vehicles entering the plant area in accordance with instructions from the Plant Incident Commander.
 - e. Check on plans to bring the situation under control to resume normal operation.
 - f. Call Vice President, Operations
 - g. If there has been a release of any type, ensure that the proper agencies (refer to B1.0PED) have been notified.
 - h. Be prepared to answer questions from the public.
 - i. Remain available in office.
 - j. Call medical providers to the plant if necessary.
 - k. Maintain record of personnel working in plant. Call in administrative help if required.
 - l. Notify families of injured as soon as possible in conjunction with Toronto Crisis Management Plan 5.2.3 – Serious Injury or Fatality Procedure & 5.2.4 – Notification of Next of Kin.
 - m. Notify coroner if necessary (same as “k”).
 - n. Arrange for religious rites for critically injured (same as “k”).
4. Maintenance Manager (or as assigned by the Plant Incident Commander)
 - a. Estimate damages and make plans to repair.

- b. Call in maintenance personnel as required including Maintenance HAZWOPER trained employees.
 - c. Contact purchasing/stores supervisor for required material.
 - d. Call in the Storeroom Clerk for dispersing material, tools, and supplies.
- 5. Technical Representative (or as assigned by Plant Incident Commander)
 - a. Assess impact of the emergency to the environment and report any to the Plant Incident Commander / Plant Manager.
 - b. Report to Incident Commander for assignments as required.
 - c. Call in technical personnel as required.
- 6. Manager, Safety & Security (or as assigned by Plant Incident Commander).
 - a. Assume role of Safety Officer reporting to the Plant Incident Commander / Plant Manager.
 - b. Ensure security of the plant during and after the incident.
 - c. Report to the Plant Manager / Incident Commander as required.
- 7. Plant Services Supervisor (or as assigned by Plant Incident Commander)
 - a. Mobilize Plant Emergency Response Team
 - b. Report to the Plant Manager / Incident Commander as required.
- 8. Commercial Manager
 - a. Report to the Plant Manager / Incident Commander for assignment as required.
- 9. Environmental Engineer (or as assigned by the Plant Incident Commander).
 - a. Survey environmental situation for required action.
 - b. Report to Plant Manager / Plant Incident Commander for assignment as required.
- 10. All Other Supervisors or Exempt Employees
 - a. Report to their respective supervisors for assignments as required.

D. Fire Hazard

1. General Information

This type of release will include such items as gasoline, fuel oil, lubricating oil, and mineral oil. None of the materials are acutely toxic, but precautions

must be taken to prevent ignition and contamination of the ground. In the Port Edwards Plant, the amount of gasoline is a small quantity, and a release should be readily contained in a small area by making a bank with sand, oil dry, or any other material. The fuel oil storage tank is totally contained and by stopping the pumps, the leak should stop. These materials also have the potential to be stream and soil polluting releases.

E. Air Polluting

1. Chlorine Gas or Liquid Release

a. Characteristics

Chlorine at atmospheric conditions is a greenish-yellow gas with a pungent and irritating odor. In the plant it is stored under pressure and reduced temperature to maintain it in the liquid state. At atmospheric conditions, it becomes a gas at -29°F. The vapors are 2½ times as heavy as air, and therefore it tends to accumulate in low places and is slow to diffuse into the air. Due to the low boiling point, any liquid release would immediately release considerable quantities of vapor. Gas or liquid is only very slightly soluble in water, and the application of water forms an acid that is quite corrosive and increases the boil off rate of the chlorine. Caustic soda solutions are the best absorbent media for disposal and control but should not be applied directly to liquid chlorine

Escaping liquid chlorine may collect in a pool and may actually form a running stream. Liquid chlorine will immediately cool to its boiling point (-29° F.) as it enters the atmosphere upon contact with any heat source – the air, the ground, or water. The heat will cause the chlorine to boil readily. Typically, the boiling-off rate will be relatively high initially and then decline as the heat source surrounding the liquid chlorine is cooled.

Since water in bulk provides a vast heat source for evaporating liquid chlorine, any liquid falling into a large body of water (lake,

river, stream, etc.) should be assumed to vaporize immediately and completely. For this reason, water should be prevented from coming in contact with a pool of liquid chlorine and liquid chlorine should be prevented from flowing into water drains.

If a vessel or pipe is leaking liquid chlorine appropriate emergency procedures should be instituted including the following:

- 1) Isolate the line or the vessel to stop any liquid chlorine going into it.
- 2) Reduce the pressure in the line or vessel by diversion to another line or vessel or to a chlorine scrubbing system if possible.
- 3) Contain released liquid chlorine to as small of an area as possible to allow it to heat up as slowly as possible and release its vapor as slowly as possible.
- 4) If a smaller container or cylinder is releasing liquid chlorine, turn the container or cylinder so that gas instead of liquid escape.
- 5) Move the container to an isolated spot to mitigate the consequences of the release.
- 6) Have trained personnel apply the proper Chlorine Institute Emergency Kit to the releasing vessel.

b. Possible Release Sources

- 1) Gas Release - Chlorine gas may be released from the vent stack, from the water seal pot due to unstable process operation or from the top of the scrubbing tower due to malfunction of this equipment. This would normally be controlled by chlorine operating personnel; however, maintenance personnel may be required.
- 2) Process Equipment and Lines - A failure of any vessel or line containing liquid chlorine would result in a gas release to the atmosphere, and liquid chlorine being carried to the surface or

CMP 09 – Emergency Procedures and Emergency Drills

process drainage system, depending on the amount of liquid released. It is probable that chlorine-operating personnel would control this situation; however, additional help may be required.

- 3) Storage Tanks or Tank Cars - A ruptured tank or tank car could result in a liquid chlorine release and contamination of a large area inside and outside of the plant area.

c. Action

1) Minor Release

- a) Act on the release immediately. Chlorine leaks only get worse with time. Stop source of the release if possible.
- b) Any release capable of contaminating the air in other plant locations - contact people in the area immediately so they are prepared with necessary safety equipment or to evacuate the area.
- c) Place all entrance gate controls in manual at the control board and if practical man the gates to control traffic.
- d) The Chief Operator will assume full charge of the emergency operations in the chlorine area until properly relieved.
- e) All persons essential for continued plant operations will immediately outfit themselves with the proper respirator protection as listed in Port Edwards Safety Standard #7. All persons not essential for plant operations will prepare to evacuate to a safe area (upwind) when instructed to do so by their supervisor.

2) Major Release

CMP 09 – Emergency Procedures and Emergency Drills

- a) Act on the release immediately. Chlorine releases only get worse with time. Stop the source of the release if possible.
- b) If a major release occurs, such as rupture of a storage tank, tank car, or liquid lines, all personnel in the immediate area will be notified by use of the internal plant telephone system, radios, or emergency horn and public address system. Place all gate controls in manual at the control board and man the gates if practical to control traffic. Notify security guards if on duty.
- c) In the event of a major release whereby persons in outlying areas adjacent to the plant may be endangered by air contamination, the Incident Commander will call 911 and ask for their assistance. The police department will be given the necessary information as to the seriousness of the release so that they can request additional help, if necessary, and block off roads and railroads, notify local residents, etc. First priority of warning should be for those downwind.
- d) All people in the plant will be immediately informed of the release, and those not responsible for plant operations will be immediately evacuated when instructed to do so by their supervisor.
- e) The Chief Operator, as Incident Commander will assume full charge of the emergency operations until properly relieved.
- f) All persons essential for continued plant operation will immediately outfit themselves with the proper respirator protection as listed in Port Edwards Safety Standard #7 – Respirator Protection.

- g) In the event of a serious release, all self-contained breathing equipment should be moved upwind of the release, to allow use as necessary.
- h) If, in the opinion of Chief Operator, additional help is needed, he will call in other operators or call 911 and inform them that additional supplies, respiratory equipment, etc. is required.

2. Hydrochloric Acid Release

a. Characteristics

Hydrochloric Acid (HCl) is a clear, colorless liquid, highly corrosive to most metals. It is stored in rubber-lined tanks under slight pressure (1-3" WC). Due to its high vapor pressure, any leak will release large quantities of vapor, which are similar to chlorine.

b. Possible Release Sources

- 1) HCl fumes may be released from the exit gas vent stack due to unstable operation of the synthesis unit. Operator will normally correct the problem with no outside help.
- 2) Malfunction of the fume control system may be another source. Operators monitor the pressure and should be able to correct any problems before they get serious.
- 3) Process equipment or lines - A failure of any vessel or line carrying HCl will result in an acid release with approximately 5% to 10% of the release expected to be lost to the atmosphere.

c. Action

HCl releases must be acted on immediately. Stop the source of the release if possible and dike to contain the liquid. Water may be used to reduce the strength of the acid. Fumes should be handled in the same manner and with the same precautions as chlorine. Operators need to contact people in the area so they may evacuate or are prepared with the necessary safety equipment. After the material has been identified, it may be possible to neutralize the

release with water or other neutralizing agents (e.g. soda ash on an HCl release).

3. Sulfur Dioxide Release

a. Characteristics

Sulfur dioxide at atmospheric conditions is a colorless gas with a pungent and irritating odor. In the plant it is stored under pressure to maintain it in the liquid state. At atmospheric conditions it becomes a gas at 14°F. The vapors are 2¼ times as heavy as air, and therefore it tends to accumulate in low places and is slow to diffuse into the air. Due to the low boiling point, any liquid would immediately release considerable quantities of vapor. Gas or liquid sulfur dioxide is only very slightly soluble in water, and further, the application of water forms an acid that is quite corrosive therefore mixing with water should be avoided. Caustic soda solutions are the best absorbent media for neutralization and control but should not be applied directly to liquid SO₂.

b. Possible Release Sources

- 1) Gas Release - Sulfur dioxide gas may be released from a ton container or from a 150-pound cylinder due to malfunction of this equipment. Operating personnel would normally control this; however, maintenance personnel may be required.
- 2) Process Equipment and Lines - A failure of any vessel or line containing liquid sulfur dioxide would result in a gas release to the atmosphere, and liquid sulfur dioxide being carried to the surface or process drainage system, depending on the amount of liquid released. Waste Water Treatment Plant operators need to be notified when excessive amounts of plant chemicals have entered the waste water collection system (i.e. plant sumps). It is probable that operating

CMP 09 – Emergency Procedures and Emergency Drills

personnel would control this situation; however, additional help may be required.

c. Action

1) Minor Release

- a) Stop source of release if possible.
- b) Any release capable of contaminating the air in other plant locations - contact people in the area immediately so they are prepared with necessary safety equipment or to evacuate the area.
- c) Place truck gate control in manual at the control board.
- d) The Chief Operator as Incident Commander will assume full charge of emergency operations until properly relieved.
- e) All persons essential for continued plant operations will immediately outfit themselves with the proper respirator protection as listed in Port Edwards Safety Standard 07 – Respirator Protection. All persons not essential for plant operations will prepare to evacuate to a safe area (upwind) when instructed to do so by their supervisor.

2) Major Release

- a) Stop the source of the release if possible.
- b) If a major release occurs, such as rupture of a storage tank, tank car, or liquid lines, all personnel in the immediate area will be notified by use of the plant phone system, radios, or emergency horn. Place truck gate control in manual at the control board.
- c) In the event of a major release whereby persons in outlying areas adjacent to the plant may be endangered by air contamination, the Incident Commander will call 911 and ask for their assistance.

The police department will be given the necessary information as to the seriousness of the release so that they can request additional help, if necessary, block off roads, notify local residents, etc. First priority of warning should be for those downwind.

- d) All people in the plant will be immediately informed of the release, and those not responsible for plant operations will be immediately evacuated when instructed to do so by their supervisor.
- e) The Chief Operator as Incident Commander will assume full charge of the emergency operations until properly relieved.
- f) All persons essential for continued plant operation will immediately outfit themselves with the proper respirator protection as listed in Port Edwards Safety Standard 07 – Respirator Protection.
- g) In the event of a serious release, all self-contained breathing equipment should be moved upwind of the release, to allow use as necessary.
- h) If, in the opinion of the Plant Incident Commander, additional help is needed, he will call in other employees or call 911 and inform them that additional supplies, respiratory equipment, etc. is required.

4. Refrigerants Release

a. Actions

Refrigerants have acute effects of asphyxiation due to air displacement, as well as temporary anesthetic effects such as dizziness; headache and confusion and therefore require the use of SCBA when responding to a major release or leak.

b. References

Refer to Chlorine Manual II SOP A9.7.3.5.2 Interlock and Manual Actions for High Leak Rate Detection.

When high leak rate is detected, and liquefaction unit is shut down, an information pop-up on the DCS display will indicate to evacuate all personnel from liquefaction building. At the same time, liquefaction building horn will sound to alert anyone in the building to evacuate.

EMERGENCY DRILLS AND INCIDENTS

I. Pre-Emergency Planning and Emergency Drills

In the event of a Plant Emergency, immediate, safe, and proper action is vital. Planning and practicing drills is a requirement for emergency preparedness. It is a requirement of the Local and Federal Regulatory Agencies to identify the worst-case scenarios that may impact the site and surrounding community. These worst-case scenarios will be reviewed and trained on regularly. The site will have a 5-year emergency drill training plan.

II. Evaluation and Debrief of Emergency Drills and Incidents

After an emergency drill has been completed, management and employees should have a meeting to debrief and discuss how effective the plan was. If potential hazards or opportunities for improvement come to light during practice drills, the emergency plans will be revised and employees will be notified.

III. Documentation of Emergency Drills and Incidents

All emergency drills or simulations and the debrief should be documented and saved.

Documentation should include the following information:

- a. Title
- b. Location
- c. Coordinator
- d. Date and time
- e. Summary of the drill or simulation
- f. Summary of the evaluation, debrief and actions

All incidents are reported and documented in the company incident management reporting system. A debrief will be completed after a significant incident. An investigation will be completed on all significant incidents and root causes determined so that recommendations and corrective actions can be implemented to prevent future incidents. The incident reports are documented and shared with all plant and companywide personnel.

NOTE: Release Response and Reporting Procedures are located in the ERCO Worldwide Environmental Manual (B1.0PED – Release Reporting Procedure and B1.1PED – Release Response Procedure.

References:

OSHA 29CFR 1910.120 & 1910.38(c)(1)

[PESS 02 Personal Protective Equipment](#)

[PESS 07 Respiratory Protection](#)

[Crisis Management Plan / Emergency Response Plan Manual](#)

Change Log:

05.12.2023 Review and update

05.22.2023 [Update to upset conditions response and addition of emergency drills section](#)

Author:	Kristine Barteck	First Approval:	Kristine Barteck
Date Issued:	05/12/2023	Second Approval:	John Schoechert
Next Review Date:	05/11/2024	Third Approval:	Brian Caldwell
Gap Document Required?	Yes		

Electronic approvals documented in EDMS.

DECONTAMINATION

I. Decontamination

A. Introduction

At every incident involving hazardous materials there is a possibility that response personnel (including firefighters and first responders) and their equipment will become contaminated. The contaminant poses a threat, not only to the persons contaminated, but also to other personnel who may subsequently have contact with them or the equipment. The decontamination procedures also need to control the migration of contaminants, and to properly dispose of contaminated material.

B. Decontamination Station

Any containment area that contains a sump capable of pumping wash-down liquids to the environmental control plant is considered to be a decontamination station. This includes the load-shed pans, cell room basement level, and the containment in the environmental control plant area.

C. Decontamination Methods

1. The chemical hazards within the plant can all be decontaminated by diluting with water, combined with scrubbing or brushing the contaminated item.
2. For equipment that may be contaminated, the use of the water blaster may be needed to remove contaminated mud or dirt.

3. Disposable clothing may be disposed of in proper containers vs. completely removing the contaminant.
4. Emergency decontamination can occur under any plant emergency shower if the individual shows signs of acute chemical exposure.

D. Decontamination Team

The individual(s) appointed to the team should be briefed on the chemical contaminant, procedure needed for decontamination and the type of personal protective equipment needed.

1. The minimum PPE for the Decon Team would be; hardhat, chemical goggles, rubber gloves, disposable coveralls, and a half mask respirator if the chemical has an inhalation hazard.

E. Decontamination Procedures

1. Because tools, outer gloves, and boot covers collect the most contamination, the drop zone for tools occurs first; this may be in a container.
2. All equipment such as the payload, shovels, pumps, etc. used in a release cleanup must be decontaminated before they can be returned to regular service. In the case of most equipment, water blasting will provide good decontamination results.
3. Individual entry team members can assist each other, to remove the gross contamination from the outer garments, such as a level A or B suit. Following this procedure the decon team will step in to complete the final wash down of clothing, and assist in removing the outer clothing. Care must be taken when removing outer clothing so the individual does not come in contact with the dirty outer garments.
4. With level B protection, the SCBA backpack is taken off, held by a decon team member while the individual remains on air. After the level B protection garment is removed, the individual leaves face

piece on and disconnects from the backpack and then completes the decon of the face piece and hose, which is then removed last.

5. If the entrant's inner clothing has been contaminated, the clothing should be placed in a plastic bag for testing and possible disposal. The entrant should then shower using lots of soap and lukewarm water, then dries, dresses and reports for monitoring.

F. Monitoring

A thorough exam, which should include monitoring the entrant's vital signs, looking for indications of dehydration, rashes, stinging, tingling or skin discoloration will be conducted by qualified individuals.

G. Termination of Decontamination

After all decon of personnel and equipment has been completed, the following conditions must be met:

1. All wash-down water has been tested and disposed of per hazardous waste procedures.
2. All contaminated articles must be collected for disposal in approved drum containers.
3. All safety equipment must be inspected, repaired and returned to the ready condition, or replaced if beyond repair.

References:

OSHA 29 CFR 1910.120 & 1910.38

Change Log:

05.12.2023 Reviewed

Author:	Kristine Barteck	First Approval:	Kristine Barteck
Date Issued:	05/16/2023	Second Approval:	John Schoechert
Next Review Date:	05/15/2024	Third Approval:	Brian Caldwell
Gap Document Required?	Yes		

Electronic approvals documented in EDMS.

EMERGENCY EQUIPMENT

I. Emergency Communications

The Port Edwards plant is equipped with an internal assembly alarm and PA system to assemble plant personnel in the event of an emergency situation. The system consists of a control panel, microphone and speakers. In addition, it is also equipped with battery backup power supply that allows the system to continue to operate in the event of a power outage. The control panel is located in the control room. This system allows a siren to be activated from the control room. In addition, verbal messages can also be broadcasted using the PA system.

All operation department employees and several employees of all other departments have two-way radios, which can be used to communicate information to individuals or groups.

The Port Edwards Plant is equipped with telephones that are capable of making calls to individuals within the plant.

The type of emergency dictates which form of communication to use. The decision rests with the Plant Incident Commander.

Many emergency incidents do not require evacuation of large numbers of people. For example, solid hazardous waste discharges are by nature not an immediate threat to personnel, but can potentially harm the environment.

The emergency horn will not sound for these types of incidents. Rather, the plant phone system and two-way radios will be used to initiate and facilitate corrective action. The

plant PA also broadcasts over the plant radio channels with the exception of the rail switching channels 3 and 4.

II. Cellular Telephone

The control room cellular telephone is kept in its charger in the Chief Operator's office and is equipped with an external DC power supply and an internal battery pack. The cellular telephone is for use in case of loss of normal telephone service or in the event that communications with a remote location without telephone service is required.

III. Respirator Levels of Protection

The Plant Incident Commander will determine, through the use of air monitoring (conducted by plant operators or Plant Emergency Response Team Members using the teams gas monitors) and input from others, the level of respirator protection to be used by employees and contractors engaged in emergency response and exposed to hazardous substances that present an inhalation hazard or a potential inhalation hazard. **If the hazardous substance concentration level is unknown (cannot be monitored), a Self-Contained Breathing Apparatus (SCBA) must be worn by emergency responders at all levels (operations, technician or specialist).** The following information is provided to assist the Plant Incident Commander in determining what Respirator Level of protection should be used by responders:

Half-Mask Respirator w/ Mersorb Cartridges (Used for Chlorine & Mercury only)

Chlorine	1.0 – 5.0 ppm
Mercury	50ug/m ³ – 250ug/m ³ (0.05mg/m ³ – 0.250mg/m ³)

Half-Mask Respirator w/ Acid Gas Cartridges (Used for Chlorine, Sulfur Dioxide & Hydrochloric Acid)

Chlorine	1.0 – 5.0 ppm
Sulfur Dioxide	0.5 – 5.0 ppm
HCl	0.5 – 5.0 ppm

Full-Face Mask Respirator w/ Mersorb Cartridges (Used for Chlorine & Mercury only)

Chlorine	5.0 – 10.0 ppm
Mercury	250ug/m ³ – 1000ug/m ³ (0.250mg/m ³ – 1.000mg/m ³)

Full-Face Mask Respirator w/ Acid Gas cartridges (Used for Chlorine, Sulfur Dioxide & Hydrochloric Acid)

Chlorine	5.0 – 10.0 ppm
Sulfur Dioxide	5.0 – 10.0 ppm
HCl	5.0 – 10.0 ppm

Self-Contained Breathing Apparatus (SCBA) (Used for all gases and vapors)

Chlorine	Unknown or >10.0 ppm
Sulfur Dioxide	Unknown or >10.0 ppm
HCl	Unknown or >10.0 ppm
Hydrogen Sulfide	Unknown or “any amount measured”
Mercury	Unknown or >1000ug/m ³ (1.0mg/m ³)

NOTE: Additional information on respirator levels of protection can be found in Port Edwards Safety Standard #7 (Respirator Protection) – Appendices “A” and “F”.

IV. Self-Contained Breathing Apparatus Locations

Control Room

- Three (3) Air Hawk MMR, 1 Hour
- Two (2) Supplied Air Respirator with 10-minute escape bottle

CHLOREP/Emergency Response Trailer

- Four (4) Air Hawk MMR, 1 Hour

Hydro Building in MCC 14

- Two (2) Air Hawk MMR, 1 Hour

Switchgear Building

- Two (2) Air Hawk MMR, 1 Hour

Old Control Room

- Two (2) Air Hawk MMR, 1 Hour

Confined Space Rescue Trailer

- Two (2) Air Hawk MMR, 1 Hour

V. Fire Extinguishers, Fire Suppression and Fire Alarm Systems

The Port Edwards Plant is equipped with several models of fire extinguishers. These include 2 ½, 5, 20 and 30 pound portable dry chemical extinguishers, Ansul Model A-150-C wheeled dry chemical extinguishers, Ansul Model CD-10 and CD-20 portable CO₂

extinguishers. The location of each fire extinguisher can be found on a list in the Maintenance and E/I Department PM files.

The Port Edwards Liquefaction and Switchgear Areas are equipped with fire alarm detectors, pull stations, horns and strobe lights in the field. There is a fire alarm control panel for the systems located on the East wall off the control room. The exhaust fan motors shut down and alarm on the DCS when fire is detected within the buildings or smoke is detected in the Liquefaction Building Stairwell. Refer to the HVAC Operating Manual Liquefaction for details on this system.

VI. Fire Water Hydrants and Stations

The Port Edwards plant is equipped with fire control water hydrants at seven locations. Two of these hydrants supply riverwater under pressure from the main riverwater pumping system and five of them supply water under pressure supplied from Port Edwards's water mains. Refer to CMP-03 Drawing D-EE06005-27-230000 – Safety Map for locations.

The location of each hydrant is listed below:

Riverwater Hydrants and Stations

- South end of the maintenance building
- On rectifier road across from the HCl #1 storage tanks (Hydrant)

City Water Hydrants and Stations

- Outside the utility building, south wall
- Cell room basement, SW corner
- Cell room basement, NE corner
- West of Evaporator Building (Hydrant)
- West of Product HCL Storage (Hydrant)

VII. Internal Assembly Alarms

The Port Edwards plant is equipped with an internal assembly alarm and PA system to assemble plant personnel in the event of an emergency situation. The system consists of a control panel, microphone and speakers. In addition, it is also equipped with two battery backup power supplies that allow the system to continue to operate in the event of a power outage. The control panel is located in the control room. The speakers are distributed throughout the plant as indicated on the attached schematic at the end of this chapter (DWG. EE06005-27-220027). This system allows a siren to be activated from the control room. In addition, verbal messages can also be broadcasted using the PA system.

For Hazardous Waste Contingency Plan implementation, the primary purpose of the assembly horn is to quickly assemble all available incident response personnel. The decision whether to use this signal rests with the Plant Incident Commander.

If the assembly alarm is sounded, production personnel assemble in the control room, which is at least 100 feet from the nearest hazardous waste management point and separated from hazardous waste management activities by a 6" cinder block wall. Maintenance, Plant Services and Technical personnel assemble in the office area of the maintenance shop. This area is separated from the nearest hazardous waste accumulation point by a 6" cinder block wall. All other personnel assemble in the main parking roadway upwind of release area.

Personnel accounting is accomplished at each assembly point.

VIII. Telephone System

The Port Edwards Plant is equipped with several telephones that are capable of making calls outside the plant. These telephones would be capable of summoning emergency assistance from local police departments, fire departments or state or local emergency response teams. The phones are typical touch-tone telephones. Exterior phones are equipped with a weatherproof box.

IX. Chlorine and Other Area Monitors

Twenty-nine (29) Chlorine Transmitters provide remote detection of chlorine gas. Units are located in the storage, loading and production areas of the facility.

Eleven (11) Sulfur Dioxide Transmitters provide remote detection of sulfur dioxide gas. Units are located in the storage, loading and production areas of the facility.

Three (3) HCl Transmitters provides remote detection of HCl gas. Units are located in the storage, loading and production areas of the facility.

Four (4) hand-held chlorine monitors are available for chlorine gas detection in an emergency situation.

Five (5) MSA 5 gas hand-held monitors are available to detect oxygen, CO, H₂S, flammable or sulfur dioxide gas in an emergency situation.

X. Emergency Building Ventilation

The Cell Room, HCL 1 and HCL 2 have ventilation systems for response to Hydrogen alarms.

Liquefaction has an engineered ventilation system for response to a chlorine or refrigerant alarm.

The control room has an engineered ventilation system to maintain positive pressure for personnel protection.

The Switchgear Building has an engineered ventilation system controlled by the ambient temperature in the switchgear building.

XI. Mercury Detection Equipment

Two handheld units are available in the laboratory for mercury detection during routine work and in emergency situations. The units are Jeromes from Arizona Instruments or Ametek.

The Jerome Instruments Corp. Model 431-X Gold Film Mercury Vapor Analyzers are a portable hand-held instrument that are capable of measuring mercury vapor concentrations in the range from 0.001 to 1 mg/m³.

XII. Containment Equipment / Materials

A minimum of one box of New Pig Corporation 5" x 10' hazardous materials PIG absorbent dikes and two boxes of hazardous materials Pig Pulp are available in the warehouse for containment of any liquid release.

XIII. Payloader and Skid Steer

The Payloader is typically kept in the brine containment area for transferring treated muds dumpsters from the filter discharge bin to the staging area in the brine containment area. However, it could also be used to convey large quantities of released hazardous waste solids to containers or to build earthen dikes in the event of a liquid release outside the containment area.

The Skid Steer is typically kept in the hydro building or west warehouse and can be used for the same tasks as listed above. The Skid Steer has fork, bucket and sweeper attachments.

XIV. Brine Mud Solids Dumpster

A minimum of one empty muds solids dumpster is located within the dumpster staging area in the brine containment area. Additional dumpsters are available from Waste Management or other suppliers as needed.

The dumpsters are mobile open-top carbon steel containers with the following specifications:

Capacity:	2,900 Gallons minimum with 2 feet freeboard
Design Temperature:	200 degrees Fahrenheit
Construction Type and Material:	3/16" carbon steel plate
Minimum Allowable Thickness:	1/8"

The muds solids dumpsters would be used as containers to hold large amounts of recovered muds solids should a release occur.

XV. Emergency Equipment (Located in the Emergency Response Trailer – West Warehouse)

General guidelines are as follows:

1. Each operator should secure his/her personal equipment:
 - a) Half-mask & full-face respirators
 - b) Gloves
 - c) Eye protection (safety glasses & goggles)
 - d) Explosion proof flashlight (if dark) and wrenches

2. Safety Tote #1 should have the following equipment:
 - a) Pack of large rubber gloves
 - b) Pack of X-large rubber gloves
 - c) 2 pair winter monkey grip gloves
 - d) 2 pair of green rubber gloves
 - e) Pack of leather gloves
 - f) Box of nimble fingers
 - g) 2 containers of hand cleaner
 - h) Respirator cleaning wipes
 - i) Eye glass cleaner
 - j) 2 red chemical overcoats: 1-XXL, 1-XL
 - k) 3 high visibility reflective vests
 - l) Safety glasses
 - m) 2-XXL rubber over boots
 - n) 1 chemical visor
 - o) Pack of blue wipes
 - p) Ear plugs

3. Safety Tote #2 should have the following equipment:

- a) Green safety hood
 - b) Caution tape: 1-Yellow, 4-Red
 - c) Assorted placards: 1789-1017-1814-1824
 - d) Pack of blue wipes
 - e) 6 tubes of nutty putty
 - f) Black spray paint
 - g) Silver spray paint
 - h) Gallon Zip-Loc bags
 - i) Small brush
 - j) Mosquito spray
 - k) Red tags
 - l) Acetone
 - m) 4 duct tape
 - n) Garbage bags
4. Caustic supplies should include the following equipment:
- a) 4 eye bolts, 2 square nuts, 2 hex nuts
 - b) 1-1" valve with plug and chain
 - c) 2-2" valves with plug and chain
 - d) 2" pipe nipple
 - e) 2-3 hole gaskets
 - f) 2 seal pins with chains
 - g) 1 rigged quick inspect housing
 - h) Tool pouch with rope
 - i) Pail of stainless nuts and bolts
 - j) 2-165# Oseco rupture disks with gaskets
 - k) 5 each NaOH/KOH MSDS's
 - l) Pack of seals
 - m) 16 each NaOH/KOH placards
 - n) Product tags for KOH/NaOH

- o) Zip ties
5. HCl supplies should include the following equipment:
- a) 4 graphite 3 1/8" Zook rupture disks/quick inspect gaskets
 - b) 6 graphite 4 3/4" Zook rupture disks
 - c) 2-3 hole gaskets
 - d) 1 top hat gasket
 - e) 1 surge protector
 - f) 2 sets of segment washers
 - g) Pale of stainless nuts and bolts
 - h) Tool pouch with rope
 - i) 5 HCl MSDS's
 - j) Chunk of gum rubber gasket
 - k) Pack of seals
 - l) 16-1789 placards
 - m) Bag of rags
 - n) White Tyvek tags/product tags
 - o) Rupture disk housing/baffle
6. Emergency Response Equipment has a regularly scheduled PM on the following basis:
- | <u>Equipment</u> | <u>Number</u> | <u>Frequency</u> |
|---|---------------|----------------------|
| 1. Self Contained Breathing Apparatus (S.C.B.A) | (4) | Monthly |
| 2. 5 Gas Meter | (2) | Monthly |
| 3. Level A Suits | (6) | Annual |
| 4. Level B Suits | (6) | Inventory |
| 5. Splash Suits | (6) | Inventory |
| 6. A Kit | (1) | Annual |
| 7. B Kit | (1) | Annual |
| 8. C Kit | (2) | Annual |
| 9. Emergency Kit Gaskets | (4) | 4 Years or When Used |
| 10. Liquid Transfer Pump | (1) | Annual |
| 11. Mag Patch | (1) | Annual |

XVI. Miscellaneous Equipment

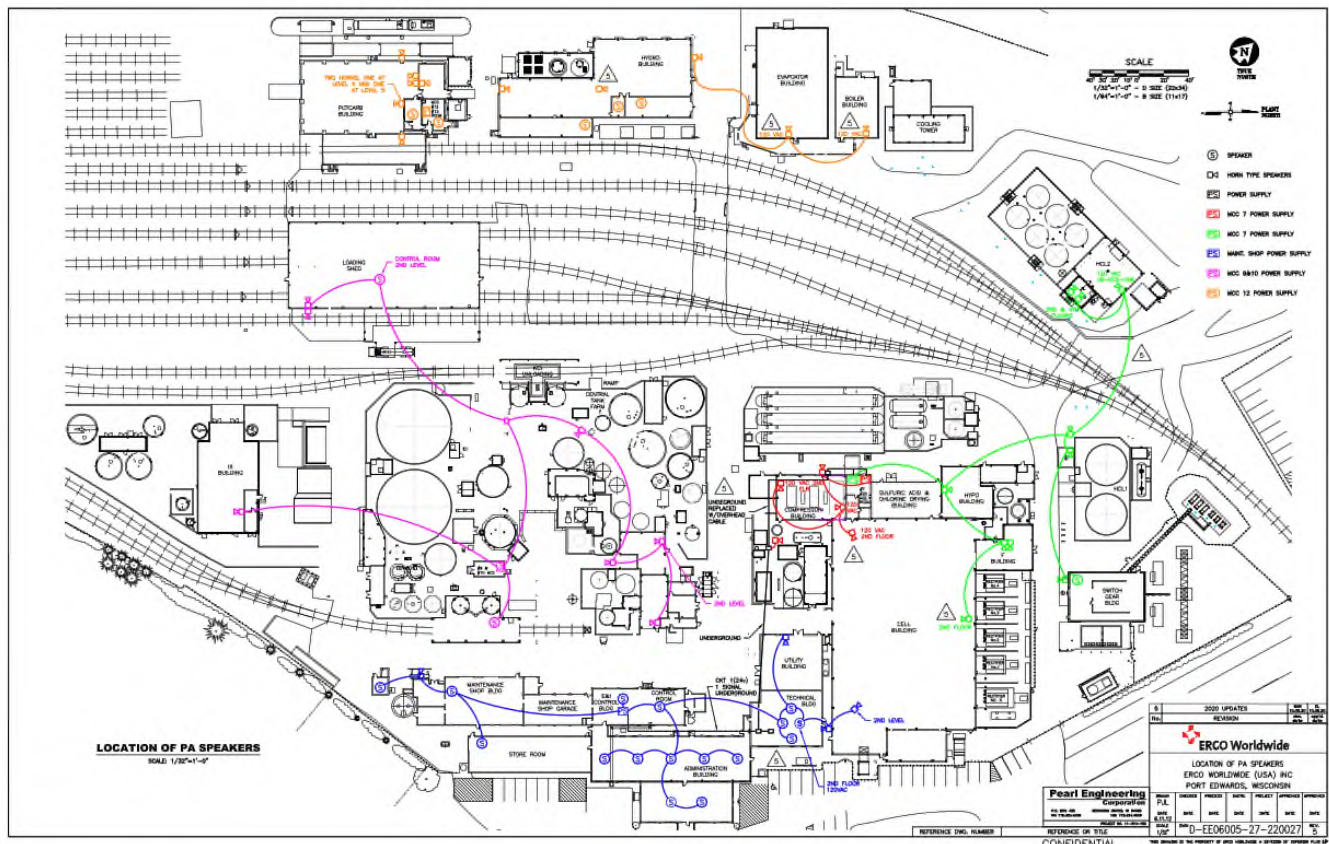
Name	Minimum Quantity	Description	Capability	Locations
Shovels	2	Hand shovels, flat or spade with approx. 4-foot handle.	Manually convey solids to containers	Maintenance warehouse
Drums	20	55-gallon steel drums with locking lids.	Container for wastes	South side of potcarb storage building.
Barrel Liners	1 Case	Polyethylene liners to fit 55-gallon drums.	Helps prevent barrel leakage.	Operations warehouse
MSA Gas Mask, Type Advantage 3000	1 per employee	Full-face respirator.	Respiratory protection against acid gases, organic and formaldehyde vapors and dusts and mists having a time weighted average not less than 0.05 mg/m3 of 2 million particles.ft3. Mersorb cartridge – for chlorine (5.0 to 10.0 ppm and mercury (500 to 2500 ug/m3)	Employee assigned storage location. Extras in storeroom.
Emergency Response Team Trailer	1	Portable enclosed trailer with SCBA's, level A, B, and C suits for HAZMAT response, boots, gloves, tape, and various tools for HAZMAT emergency response.	Equipment used by technician level emergency HAZMAT responders for transportation emergency events as well as in-plant events.	West Warehouse; Stored at various locations in and outside of the plant.
Rubber Boots	6	Ankle High Rubber Boots	Feet protection	Storeroom
Confined Space Rescue Team Trailer	1	Portable enclosed trailer with SCBAs, rescue tripod, ropes, fall protection harnesses and lanyards	Equipment used to rescue an individual from a confined space	Parked near active confined space work.
Rubber Gloves	1 dozen	Gauntlet length neoprene gloves.	Hand protection	Storeroom
Emergency Spill Pallet	1	Plastic container with absorbent, soda ash, absorbent socks, hose, roll of plastic, sump pumps, empty sand bags, and power cords	Material used for diking, containing and transferring spilled chemicals	Former retort storage building.
Rubber Gloves	6 dozen	Pioneer Ind. Rubber cat #410034 Pylox gloves.	Hand protection	Storeroom
MSA 420 Half Mask Respirators	1 per employee	MSA Mersorb Cartridge for mercury/chlorine use. MSA GME-P100 Cartridge for chlorine use only.	Mercury and chlorine respiratory protection	Possession of each employee and storeroom
Tyvek Suits	24	Tyvek exposure suits	Protection skin and clothing from chemical exposure	Storeroom

APPENDIX A

For location of PA Speakers refer to Site Layout Drawing D-EE06005-27-220027.

File Name: D-EE06005-27-220027 Location of PA Speakers

Location: S:\PSI\Drawings\2 Series - Layouts, Plot Plans, Undergrounds\27 General Plant - Plant Site Plan



Resources:

OSHA 29 CFR 1910.120 & 1910.38

Change Log:

05.12.2023 Review and update

Author:	Kristine Barteck	First Approval:	Kristine Barteck
Date Issued:	05/16/2023	Second Approval:	John Schoechert
Next Review Date:	05/15/2024	Third Approval:	Brian Caldwell
Gap Document Required?	Yes		

Electronic approvals documented in EDMS.

OFF–SITE RAIL OR TRUCK INCIDENT

This information will be located in the ERCO TERP Manual. Electronic copies are located on the companywide logistics SharePoint site. Paper copies of the ERCO TERP Manual are located in the Administrative Assistant’s office and the Plant Services Supervisor’s office.

EMERGENCY RESPONSE – TRANSPORTATION INCIDENT

ERCO WORLDWIDE TRANSPORTATION EMERGENCY RESPONSE PLAN (TERP)

We recognize that, in the event of a transportation incident involving chemical products that are transported in and out of ERCO Worldwide’s facilities, there may be a need for a response to a transportation emergency. ERCO Worldwide will make every reasonable effort to ensure such incidents are handled with full concern for the safety of the public; the environment; the responders (3rd party service providers and local responders) and our employees.

Response from ERCO Worldwide will be in accordance with the guidelines set out in the Transportation Emergency Response Plan (TERP). The TERP Planning Team (TPT) serves only as a planning body to provide direction, ownership and evaluation of TERP documents and activities. Refer to the ERCO Worldwide Transportation Emergency Response Plan on the Corporate Logistics Department Intranet Site.

The Technical Advisor (TA) will act as the ERCO Worldwide representative at the emergency site and provide support to the local emergency services by providing technical advice on the product involved.

The Homebase Coordinator (HC) is an ERCO Worldwide employee with the overall responsibility to ensure an incident is dealt with efficiently to a close and keeps the Toronto Crisis Management Team updated on the incident. The HC will coordinate the response to the transportation emergency site and provide support to the Technical Advisor.

The Emergency Response Team (ERT) as part of the Chlorine Emergency Plan (CHLOREP) will be a resource for mitigating a release or transportation incident.

The Toronto Crisis Management Team will Provide support to the Homebase Coordinator and the Technical Advisor. The Toronto Transportation Incident Manager will act as liaison between the emergency site, the crisis management team, and where applicable, ERCO's designated spill contractor, and transportation suppliers.

TERP – PORT EDWARDS SITE CONTACTS

Site Emergency Number 1-866-855-6947				
PE Site Contacts	Title	Role	Office	Mobile
Greg Armstrong	Plant Service Supervisor	TA/TPT/ERT	715-887-4538	715-315-4589
Chris Martin	Technical Supervisor	TA	715-887-4588	715-213-6118
Mark Schneider	Senior Operations Specialist	TA	715-887-4541	715-590-3660
Brian Caldwell	Plant Manager	HC	715-887-4576	715-590-3223
Kris Barteck	Safety & Security Manager	HC	715-887-4542	715-590-3226
John Schoechert	Production Manager	HC	715-887-4565	715-315-8657
John Seebruck	Chief Production Operator	ERT	715-887-4531	715-315-0179

References:

Transportation Emergency Response Plan (TERP)

Change Log:

05.12.2023



**Port Edwards Plant
Crisis Management Plan
CMP 13 – Safety Data Sheet (SDS) Section**

Author:	Kristine Barteck	First Approval:	Kristine Barteck
Date Issued:	05/16/2023	Second Approval:	John Schoechert
Next Review Date:	05/15/2024	Third Approval:	Brian Caldwell
Gap Document Required?	Yes		

Electronic approvals documented in EDMS.

SAFETY DATA SHEETS (SDS) SECTION

I. Access to SDS's

- A. As part of ERCO's overall safety and health program, a Hazard Communication Program (HazCom) has been established to comply with the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and NR 630.22 (2)(a)5f.
- B. Employee Access to SDS':
 - 1. The HazCom Administrator for the site has the responsibility to ensure employees at that site receive appropriate instruction on accessing SDS'.
 - 2. The objective of the Hazard Communication Program is to prevent occupational injuries and illnesses related to chemical exposure by educating employees about workplace chemical hazards. Employees having any questions about this program should contact their immediate supervisor or the HazCom Administrator for their location.

II. SDS System

The SDS System is found on the ERCO Worldwide Safety SharePoint Site and is maintained by each site. The application organizes the plant SDS' into a simple, searchable database that users can access 24 hours a day, 7 days a week.

The SDS application is accessed by going to the plant Intranet (SharePoint) homepage and click on the "ERCO SDS" or "Supplier SDS" link on the Health Safety and Environment

Department page. You can also click on Port Edwards and click on the "SDS System Link". This will take you to the home page of the SDS application.

Click on a link for the SDS or type in the name of the chemical or the name of the chemicals manufacturer / supplier in the "Search" space at the upper left corner of the page.

A list of SDS' will appear if one is available from this database. Choose which SDS you would like to see and click on the SDS Icon next to the SDS' name. The SDS will appear on the screen as a pdf document.

Print out the SDS if you would like to take a copy of the SDS with you. If not, read information from the SDS that you are interested in. When finished, click the "X" in the top right corner of your screen to leave the application.

If you have any problems with the application, contact the plant SDS administrator at the site.

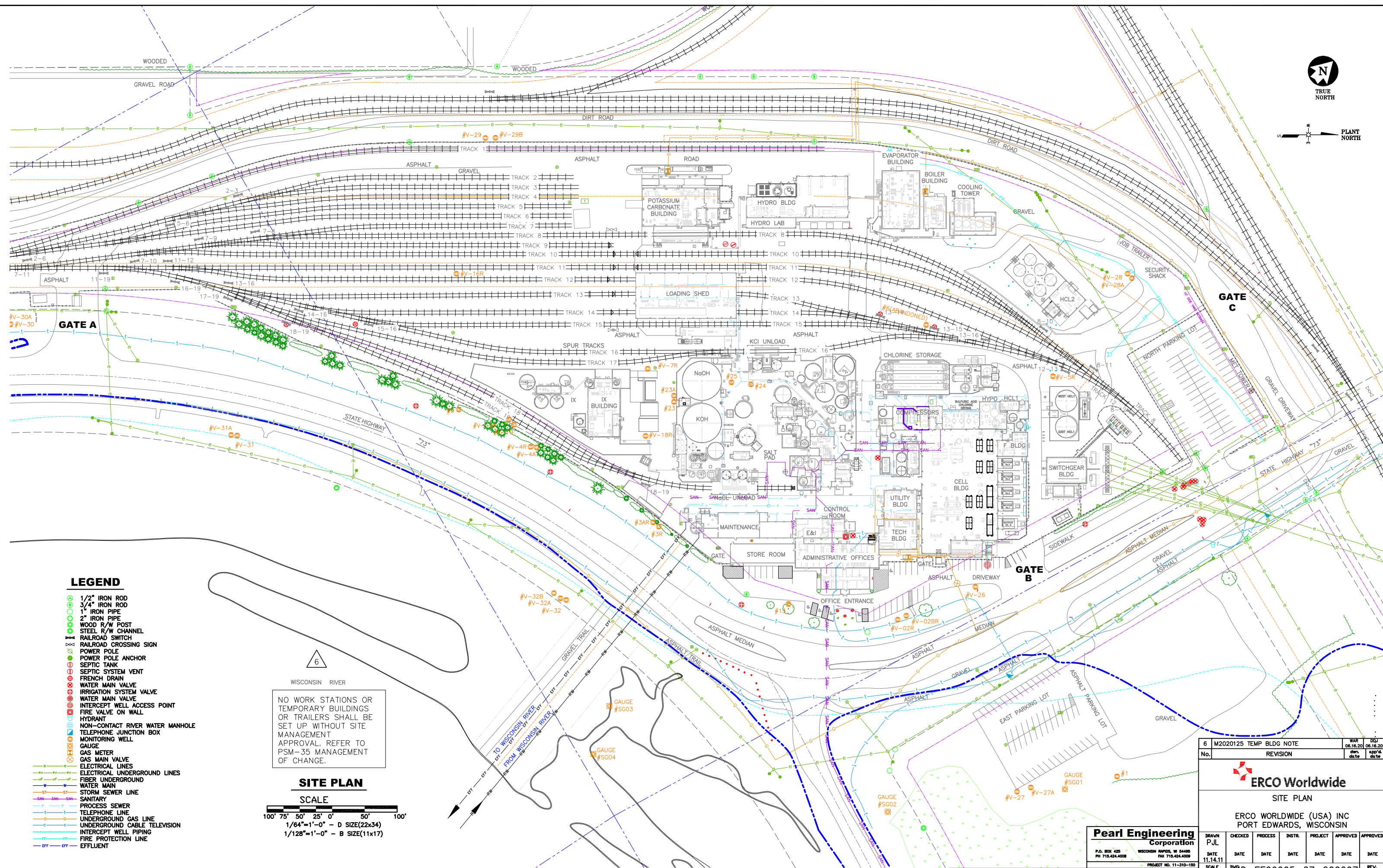
REFERENCES:

CFR 29 1910.1200
NR 630.22 (2)(a)5f

CHANGE LOG:

11.20.18 – MOC M2018224

05/13/2021 – Annual Review



LEGEND

- 1/2" IRON ROD
- 3/4" IRON ROD
- 1" IRON PIPE
- 2" IRON PIPE
- WOOD R/W POST
- STEEL R/W CHANNEL
- RAILROAD SWITCH
- RAILROAD CROSSING SIGN
- POWER POLE
- POWER POLE ANCHOR
- SEPTIC TANK
- SEPTIC SYSTEM VENT
- FRENCH DRAIN
- WATER MAIN VALVE
- IRRIGATION SYSTEM VALVE
- WATER MAIN VALVE
- INTERCEPT WELL ACCESS POINT
- FIRE VALVE ON WALL
- HYDRANT
- NON-CONTACT RIVER WATER MANHOLE
- TELEPHONE JUNCTION BOX
- MONITORING WELL
- GAUGE
- GAS METER
- GAS MAIN VALVE
- ELECTRICAL LINES
- ELECTRICAL UNDERGROUND LINES
- FIBER UNDERGROUND
- WATER MAIN
- STORM SEWER LINE
- SANITARY
- PROCESS SEWER
- TELEPHONE LINE
- UNDERGROUND GAS LINE
- UNDERGROUND CABLE TELEVISION
- INTERCEPT WELL PIPING
- FIRE PROTECTION LINE
- EFFLUENT

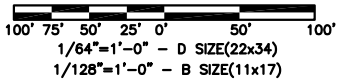


WISCONSIN RIVER

NO WORK STATIONS OR
TEMPORARY BUILDINGS
OR TRAILERS SHALL BE
SET UP WITHOUT SITE
MANAGEMENT
APPROVAL. REFER TO
PSM-35 MANAGEMENT
OF CHANGE.

SITE PLAN

SCALE



1/64"=1'-0" - D SIZE(22x34)
1/128"=1'-0" - B SIZE(11x17)

GATE C

GATE B

ERCO Worldwide

SITE PLAN

ERCO WORLDWIDE (USA) INC
PORT EDWARDS, WISCONSIN

Pearl Engineering Corporation
P.O. BOX 425 WISCONSIN RAPIDS, WI 54486
PH 715.424.4008 FAX 715.424.4009
PROJECT NO. 11-310-150

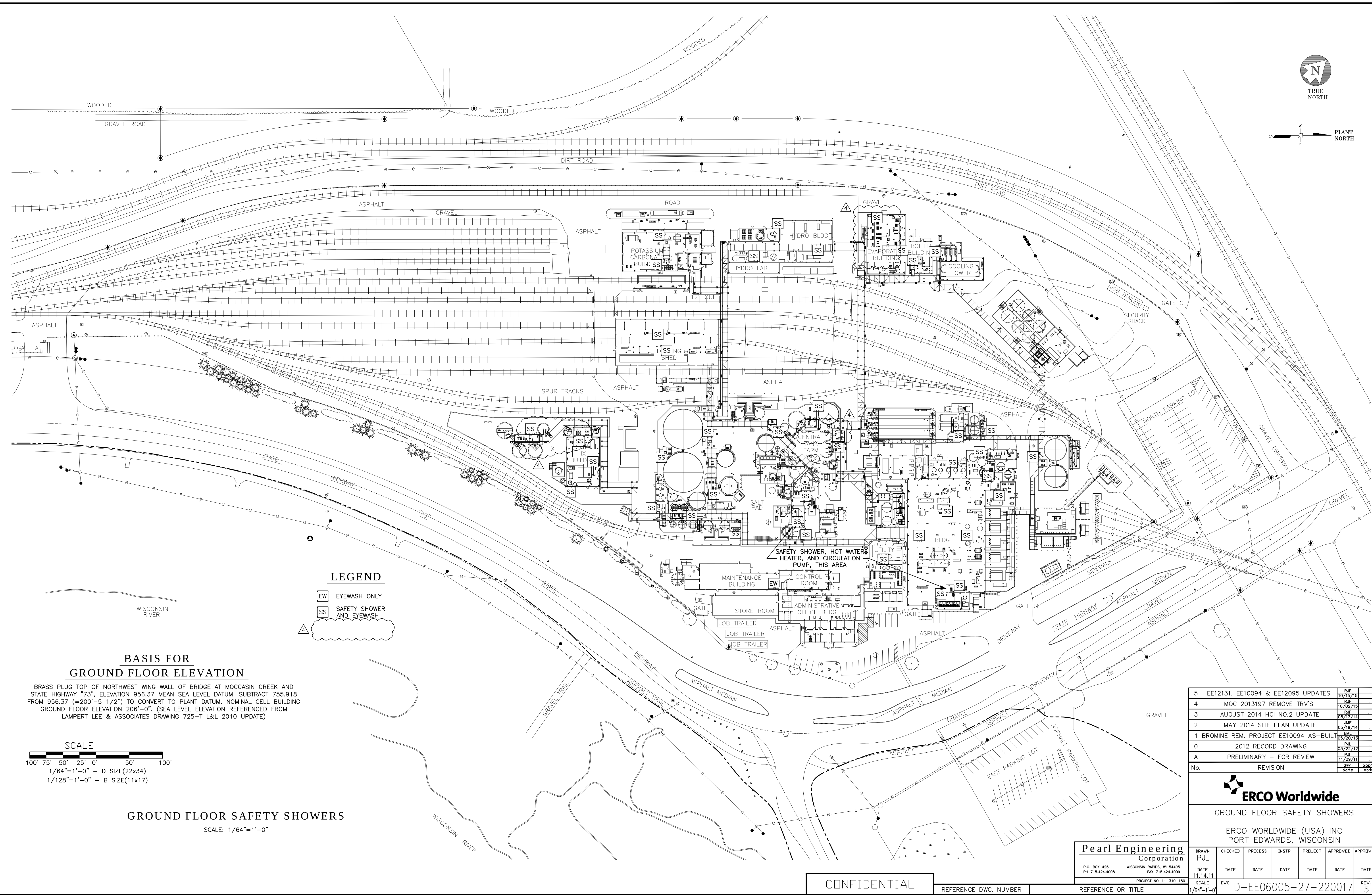
6	M2020125 TEMP BLDG NOTE	WAR	DOJ
No.	REVISION	date	date
DRAWN P.J.L.			
CHECKED	PROCESS	INSTR.	PROJECT
DATE	DATE	DATE	DATE
11.14.11			
SCALE	DWG	REV.	REV.
1/64"=1'-0"	D-EE06005-27-220007	6	

REFERENCE DWG. NUMBER

REFERENCE OR TITLE

CONFIDENTIAL

THIS DRAWING IS THE PROPERTY OF ERCO WORLDWIDE, A DIVISION OF SUPERIOR PLUS LP AND MUST NOT BE REPRODUCED OR USED IN ANY MANNER WITHOUT WRITTEN PERMISSION



**BASIS FOR
GROUND FLOOR ELEVATION**

BRASS PLUG TOP OF NORTHWEST WING WALL OF BRIDGE AT MOCCASIN CREEK AND
STATE HIGHWAY "73", ELEVATION 956.37 MEAN SEA LEVEL DATUM. SUBTRACT 755.918
FROM 956.37 (=200'-5 1/2") TO CONVERT TO PLANT DATUM. NOMINAL CELL BUILDING
GROUND FLOOR ELEVATION 206'-0". (SEA LEVEL ELEVATION REFERENCED FROM
LAMPERT LEE & ASSOCIATES DRAWING 725-T L&L 2010 UPDATE)

SCALE

100' 75' 50' 25' 0' 50' 100'
1/64"=1'-0" - D SIZE(22x34)
1/128"=1'-0" - B SIZE(11x17)

GROUND FLOOR SAFETY SHOWERS

SCALE: 1/64"=1'-0"

LEGEND

- EW EYEWASH ONLY
- SS SAFETY SHOWER AND EYEWASH

CONFIDENTIAL

REFERENCE DWG. NUMBER

Pearl Engineering Corporation
P.O. BOX 425 WISCONSIN RAPIDS, WI 54495
PH 715.424.4008 FAX 715.424.4009
PROJECT NO. 11-310-150

5	EE12131, EE10094 & EE12095 UPDATES	R/F	10/15/15	
4	MOC 2013197 REMOVE TRV'S	R/F	10/02/15	
3	AUGUST 2014 HCI NO.2 UPDATE	R/F	08/13/14	
2	MAY 2014 SITE PLAN UPDATE	MS	05/19/14	
1	BROMINE REM. PROJECT EE10094 AS-BUILT	ENL	05/20/13	
0	2012 RECORD DRAWING	P.L.	03/22/12	
A	PRELIMINARY - FOR REVIEW	P.L.	11/28/11	
No.	REVISION	dwn.	app'd.	
		date	date	

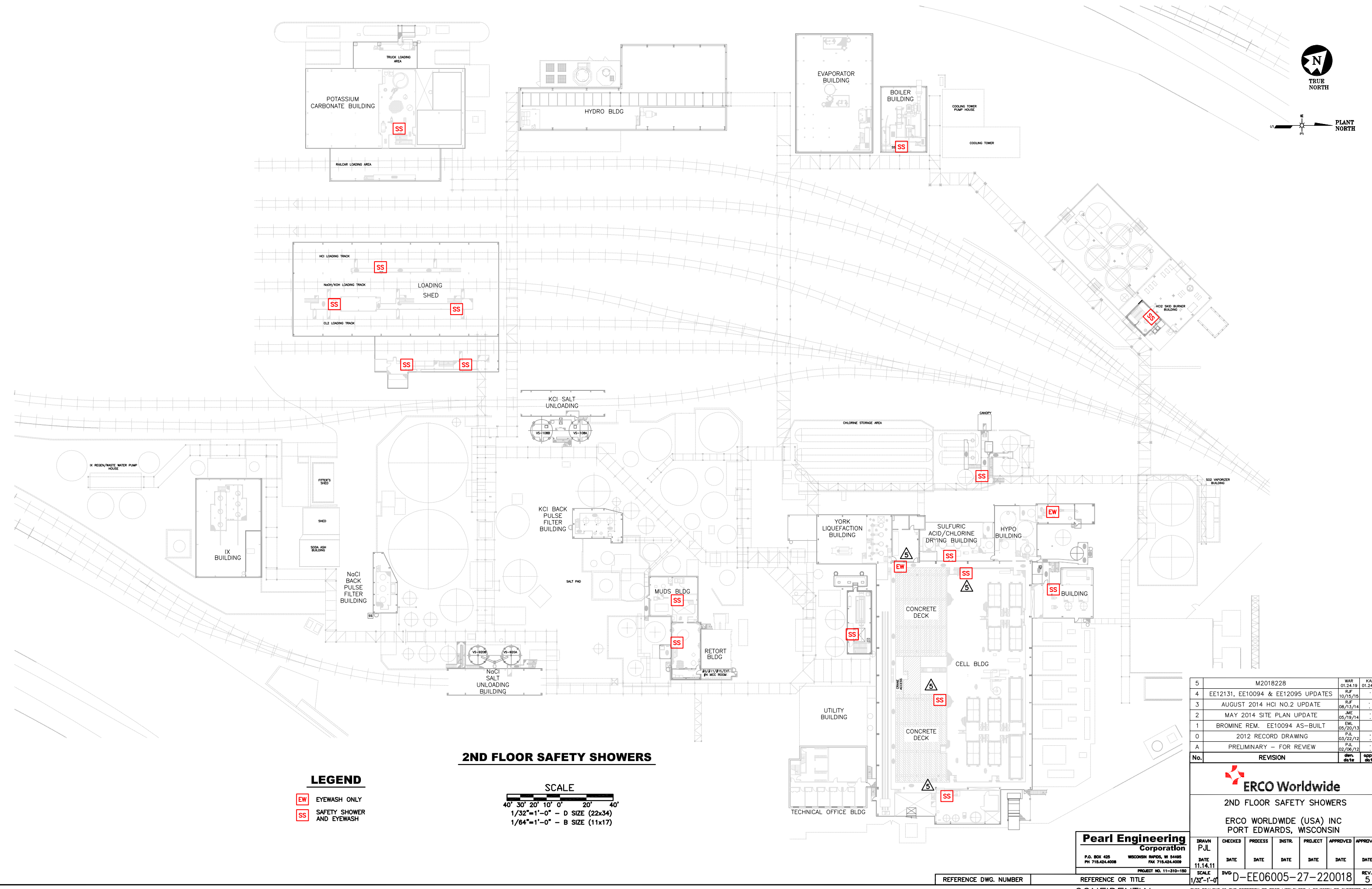
ERCO Worldwide

GROUND FLOOR SAFETY SHOWERS

ERCO WORLDWIDE (USA) INC
PORT EDWARDS, WISCONSIN

DRAWN	CHECKED	PROCESS	INSTR.	PROJECT	APPROVED	APPROVED
PJL						
DATE	DATE	DATE	DATE	DATE	DATE	DATE
11.14.11						
SCALE	DWG	REV				
1/64"-1'-0"	D-EE06005-27-220017	5				

THIS DRAWING IS THE PROPERTY OF ERCO WORLDWIDE A DIVISION OF SUPERIOR PLUS LP
AND MUST NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT WRITTEN PERMISSION



2ND FLOOR SAFETY SHOWERS

LEGEND

- EW** EYEWASH ONLY
- SS** SAFETY SHOWER AND EYEWASH

SCALE
40' 30' 20' 10' 0' 20' 40'
1/32"=1'-0" - D SIZE (22x34)
1/64"=1'-0" - B SIZE (11x17)

5	M2018228	WAR	KAB
4	EE12131, EE10094 & EE12095 UPDATES	R/JF	10/15/15
3	AUGUST 2014 HCI NO.2 UPDATE	TRF	08/13/14
2	MAY 2014 SITE PLAN UPDATE	JME	05/19/14
1	BROMINE REM. EE10094 AS-BUILT	EM	05/20/13
0	2012 RECORD DRAWING	P.L.	03/22/12
A	PRELIMINARY - FOR REVIEW	P.L.	02/06/12
No.	REVISION	den. date	app'd date



2ND FLOOR SAFETY SHOWERS

ERCO WORLDWIDE (USA) INC
PORT EDWARDS, WISCONSIN

Pearl Engineering Corporation
P.O. BOX 425 WISCONSIN RAPIDS, WI 54480
PH 715.424.4008 FAX 715.424.4009
PROJECT NO. 11-310-150

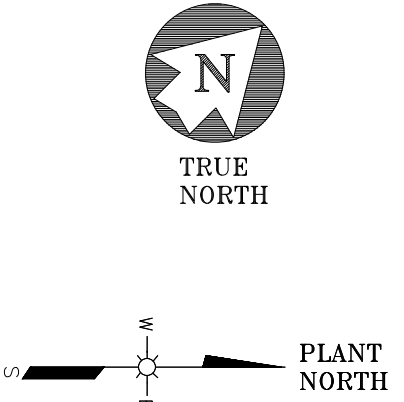
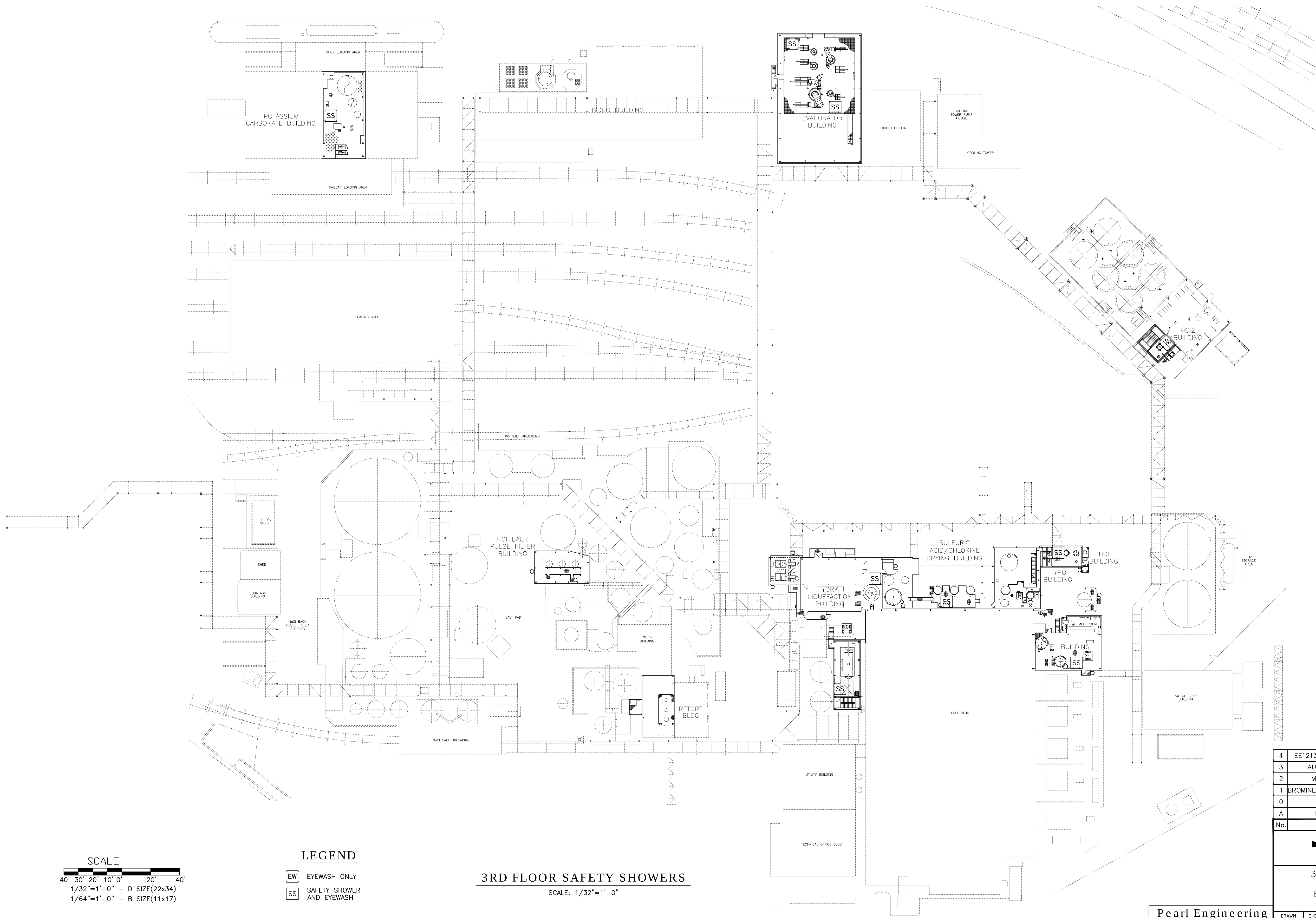
DRAWN	CHECKED	PROCESS	INSTR.	PROJECT	APPROVED	APPROVED
PJL						
DATE	DATE	DATE	DATE	DATE	DATE	DATE
11.14.11						
SCALE	BY	REV.				
1/32"=1'-0"	D-EE06005-27-220018	5				

REFERENCE DWG. NUMBER

REFERENCE OR TITLE

CONFIDENTIAL

THIS DRAWING IS THE PROPERTY OF ERCO WORLDWIDE A DIVISION OF SUPERIOR PLUS LP AND MUST NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT WRITTEN PERMISSION



SCALE
40' 30' 20' 10' 0' 20' 40'
1/32"=1'-0" - D SIZE(22x34)
1/64"=1'-0" - B SIZE(11x17)

LEGEND
EW EYEWASH ONLY
SS SAFETY SHOWER
AND EYEWASH

3RD FLOOR SAFETY SHOWERS
SCALE: 1/32"=1'-0"

4	EE12131, EE10094 & EE12095 UPDATES	R/F	10/15/15	-
3	AUGUST 2014 HCl NO.2 UPDATE	R/F	08/13/14	-
2	MAY 2014 SITE PLAN UPDATE	INC	05/19/14	-
1	BROMINE REM. PROJECT EE10094 AS-BUILT	ENL	05/20/13	-
0	2012 RECORD DRAWING	P.L.	03/22/12	-
A	PRELIMINARY - FOR REVIEW	P.L.	02/09/12	-
No.	REVISION	dwn.	app'd.	
		date	date	



3RD FLOOR SAFETY SHOWERS

ERCO WORLDWIDE (USA) INC
PORT EDWARDS, WISCONSIN

Pearl Engineering Corporation
P.O. BOX 425 WISCONSIN RAPIDS, WI 54495
PH 715.424.4008 FAX 715.424.4009
PROJECT NO. 11-310-150

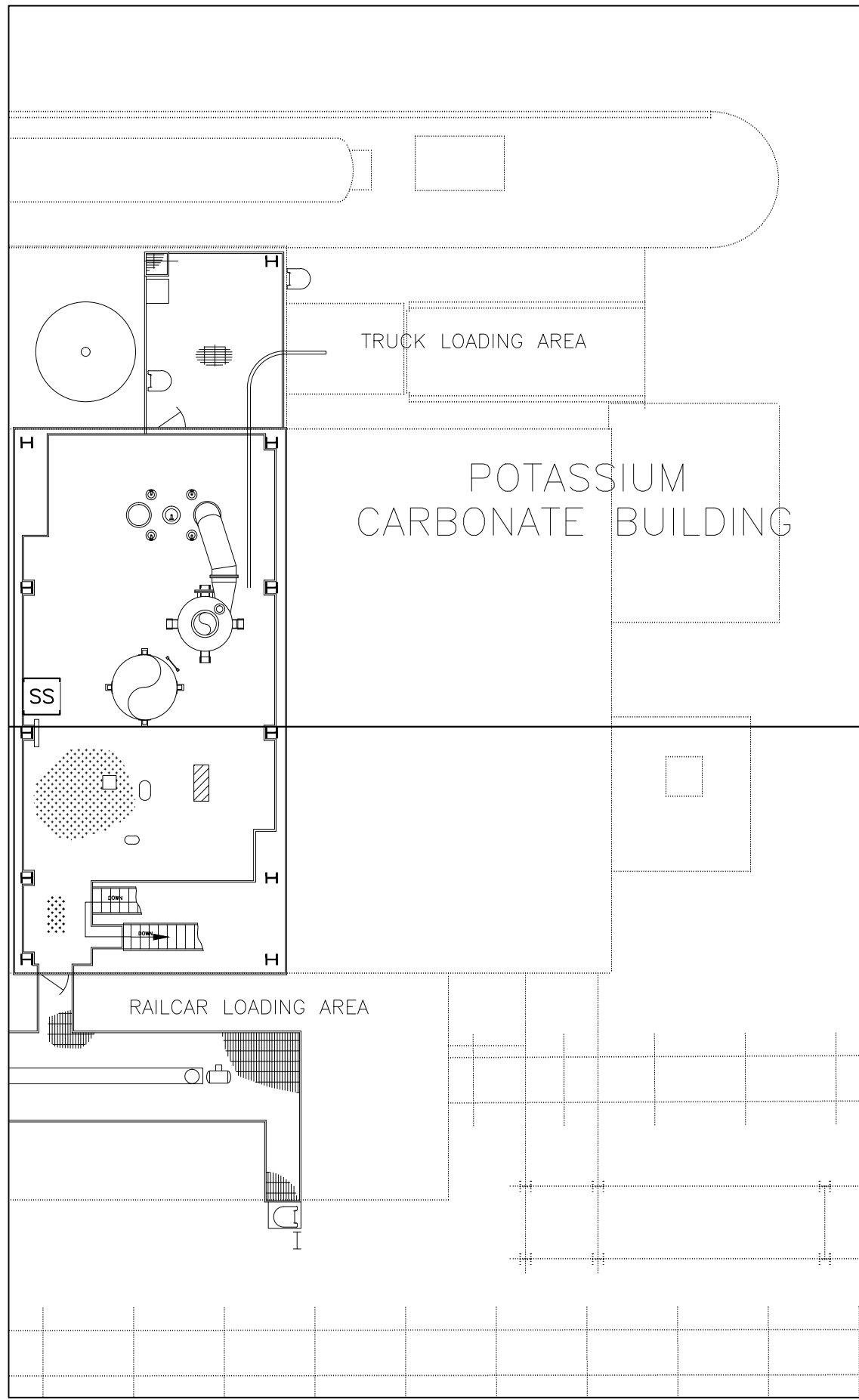
DRAWN	CHECKED	PROCESS	INSTR.	PROJECT	APPROVED	APPROVED
PJL						
DATE	DATE	DATE	DATE	DATE	DATE	DATE
11.14.11						
SCALE	DWG					REV.
1/32"=1'-0"	D-EE06005-27-220019					4

CONFIDENTIAL

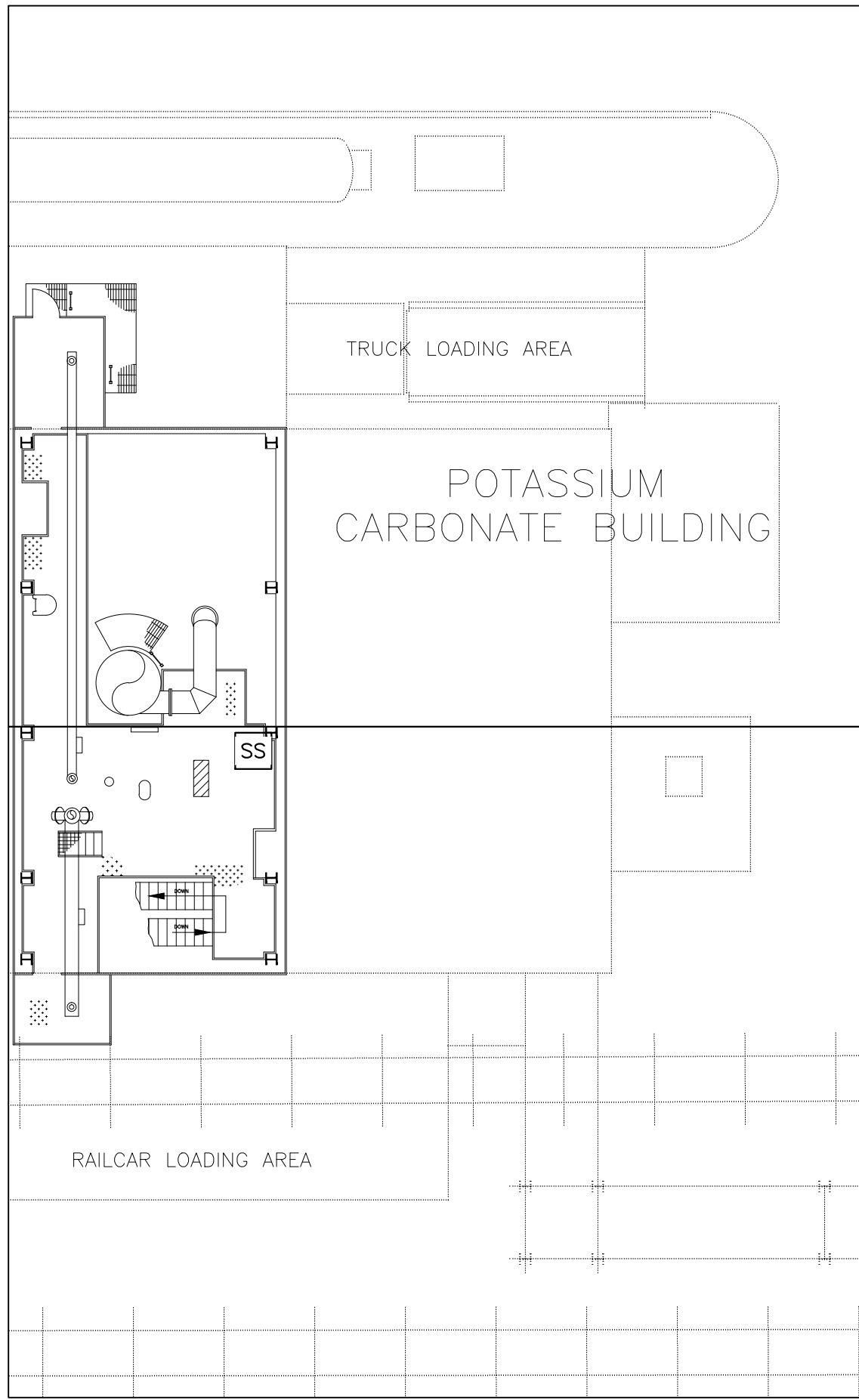
REFERENCE DWG. NUMBER

REFERENCE OR TITLE

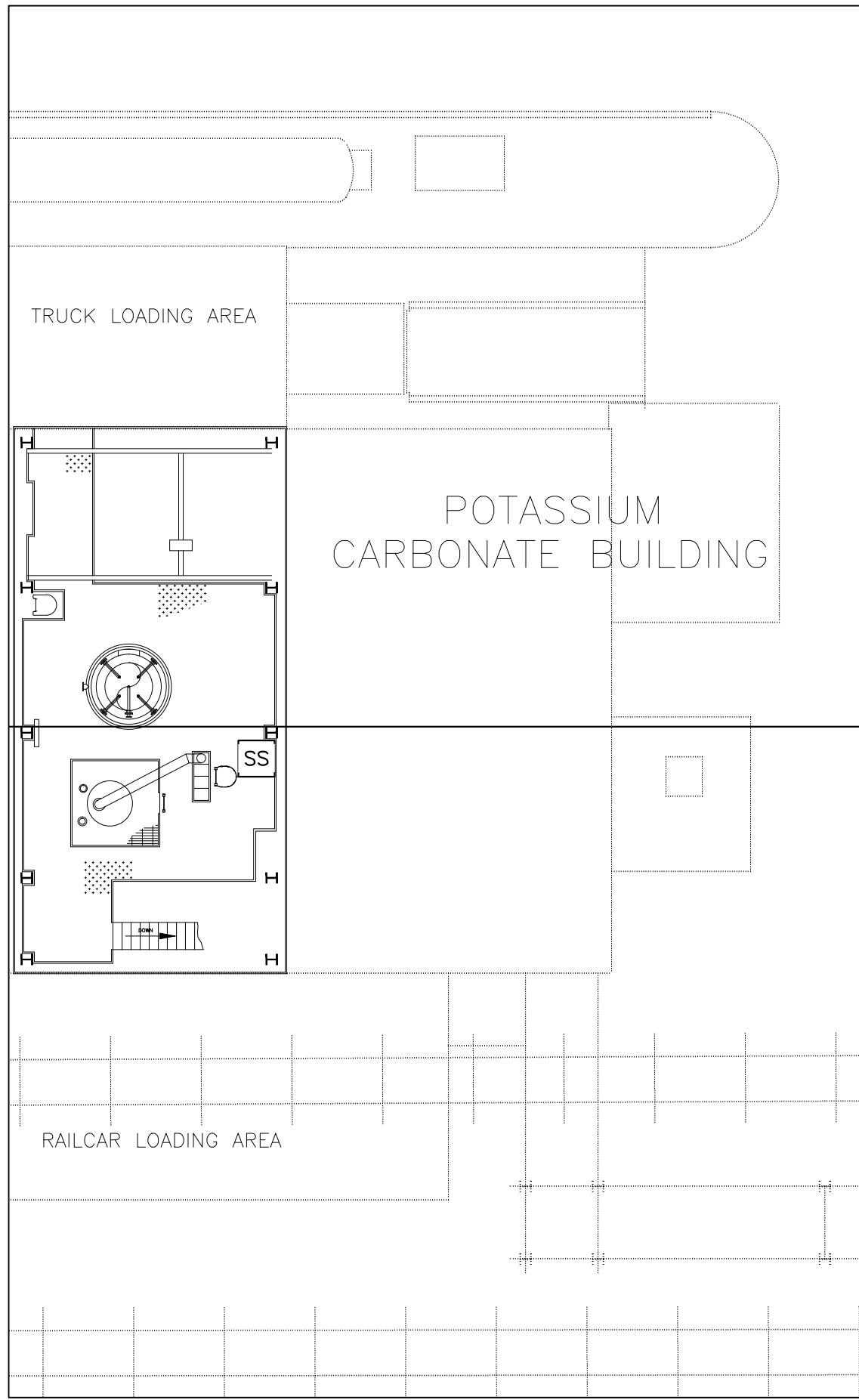
THIS DRAWING IS THE PROPERTY OF ERCO WORLDWIDE A DIVISION OF SUPERIOR PLUS LP AND MUST NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT WRITTEN PERMISSION



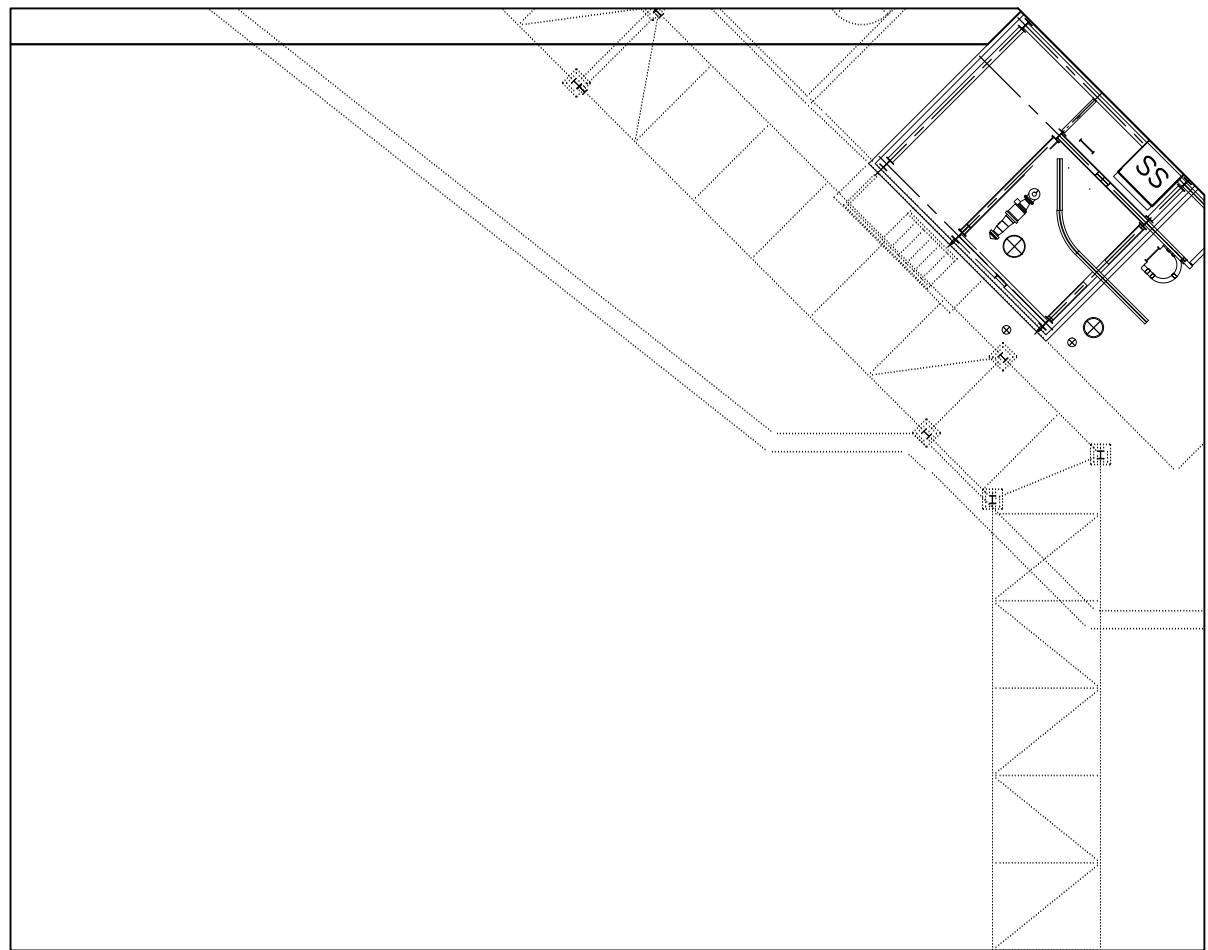
SITE PLAN BLOCK 3600 SUB-BLOCK 60
SCALE: 1/16"=1'-0"



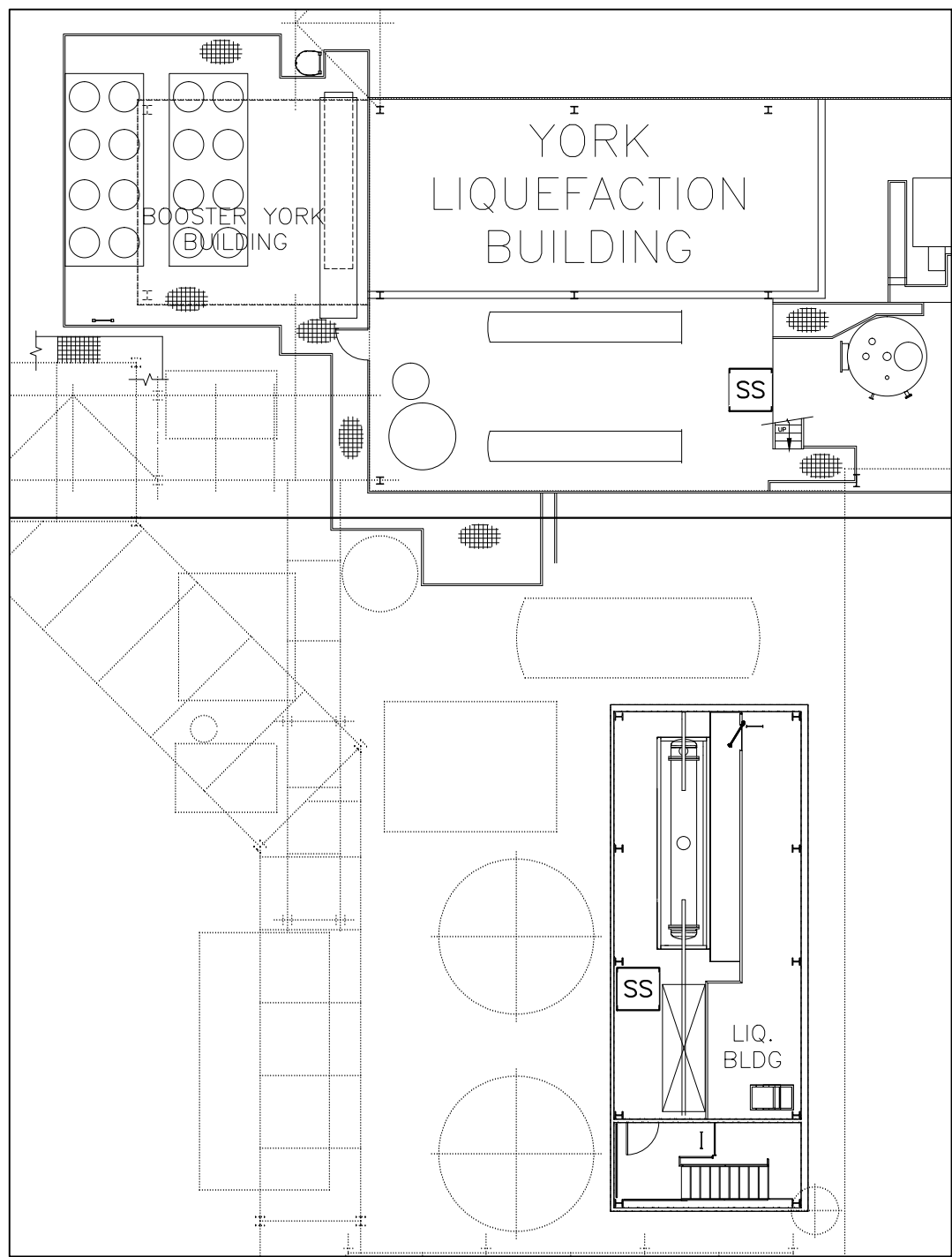
SITE PLAN BLOCK 3600 SUB-BLOCK 70
SCALE: 1/16"=1'-0"



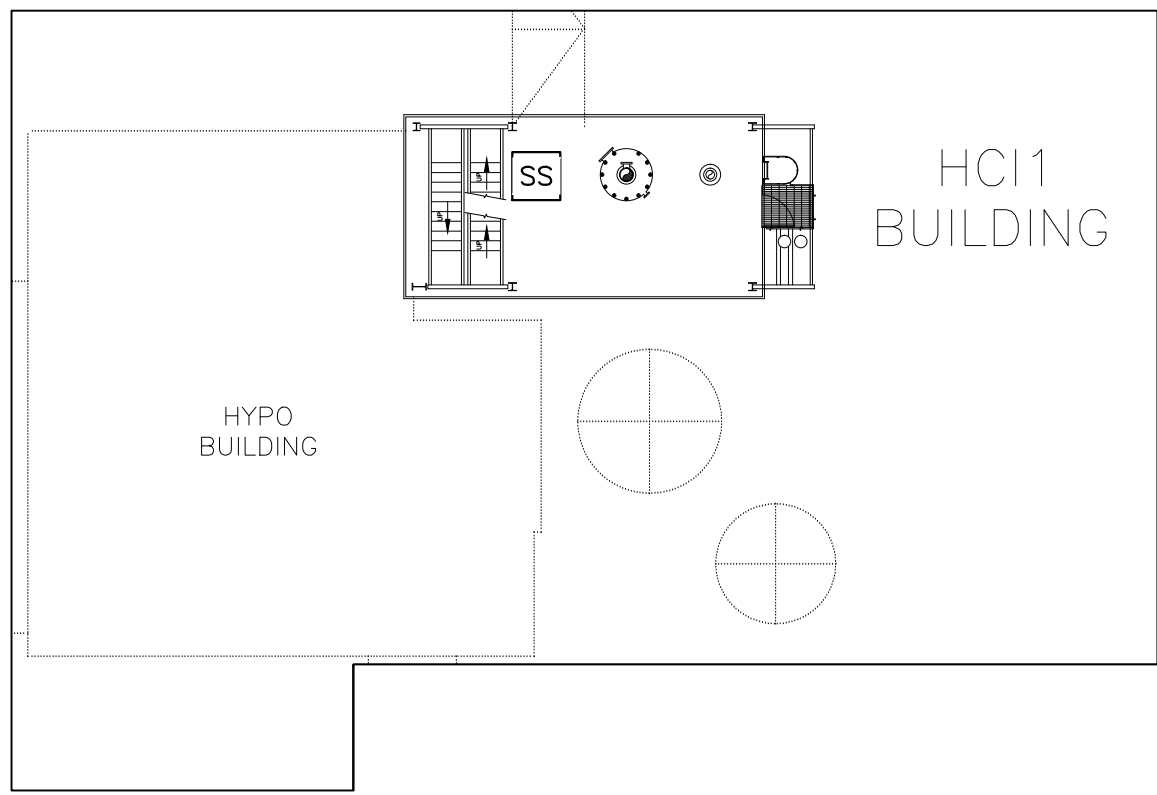
SITE PLAN BLOCK 3600 SUB-BLOCK 80
SCALE: 1/16"=1'-0"



SITE PLAN BLOCK 3700 SUB-BLOCKS 61, 71, 81 & 91
SCALE: 1/16"=1'-0"

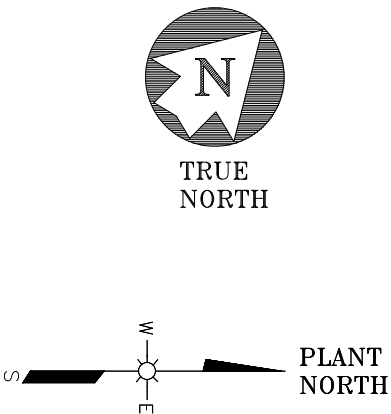


SITE PLAN BLOCK 4100 SUB-BLOCK 61 & 65
SCALE: 1/16"=1'-0"



SITE PLAN BLOCK 4100 SUB-BLOCK 70
SCALE: 1/16"=1'-0"

4TH, 5TH, 6TH AND 7TH FLOORS SAFETY SHOWERS
SCALE: 1/16"=1'-0"



LEGEND

- EW EYEWASH ONLY
SS SAFETY SHOWER AND EYEWASH



3	EE12131, EE10094 & EE12095 UPDATES	R/F	10/15/15	-
2	MAY 2014 SITE PLAN UPDATE	ME	05/19/14	-
1	BROMINE REM. PROJECT EE10094 AS-BUILT	EM	05/20/13	-
0	2012 RECORD DRAWING	PL	03/22/12	-
A	PRELIMINARY - FOR REVIEW	PL	02/06/12	-
No.	REVISION	dwn.	app'd.	
		date	date	



4TH, 5TH AND 6TH FLOOR SAFETY SHOWERS

ERCO WORLDWIDE (USA) INC
PORT EDWARDS, WISCONSIN

Pearl Engineering Corporation	
P.O. BOX 425 PH 715.424.4008	WISCONSIN RAPIDS, WI 54485 FAX 715.424.4009
PROJECT NO. 11-310-150	
SCALE 1/16"=1'-0"	DWG D-EE06005-27-220020

DRAWN	CHECKED	PROCESS	INSTR.	PROJECT	APPROVED	APPROVED
PJL						
DATE	DATE	DATE	DATE	DATE	DATE	DATE
11.14.11						
SCALE 1/16"=1'-0"	DWG D-EE06005-27-220020	REV. 3				

CONFIDENTIAL

REFERENCE DWG. NUMBER

REFERENCE OR TITLE

THIS DRAWING IS THE PROPERTY OF ERCO WORLDWIDE A DIVISION OF SUPERIOR PLUS LP AND MUST NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT WRITTEN PERMISSION



ERCO Worldwide

ERCO WORLDWIDE (USA) INC
PORT EDWARDS, WISCONSIN

DRAWN PJL	CHECKED	PROCESS	INSTR.	PROJECT	APPROVED	APPROVE
DATE 11.14.11	DATE	DATE	DATE	DATE	DATE	DATE
SCALE NONE	DWG. D-EE06005-27-220023					REV. 5

REFERENCE DWG. NUMBER	REFERENCE OR TITLE
-----------------------	--------------------

THIS DRAWING IS THE PROPERTY OF ERCO WORLDWIDE A DIVISION OF SUPERIOR PLUS LP
AND MUST NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT WRITTEN PERMISSION

SCALE

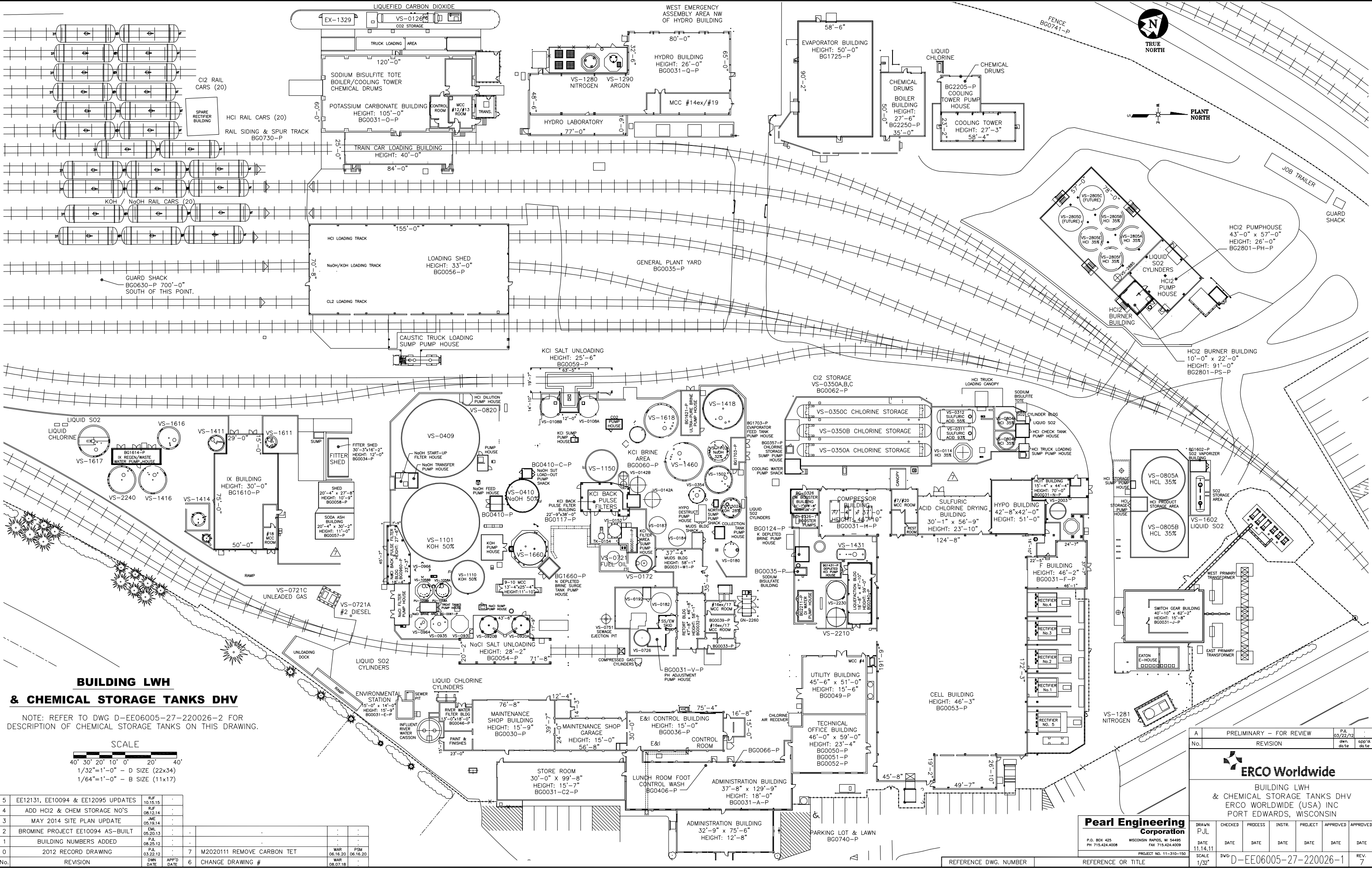
100' 75' 50' 25' 0' 25' 50' 75' 100'

1/64" = 1'-0" - D SIZE (22x34)

1/128" = 1'-0" - B SIZE (11x17)

GROUND FLOOR FIRE PROTECTION AND HYDRANTS

SCALE: 1/64"=1'-0"



**BUILDING LWH
& CHEMICAL STORAGE TANKS DHV**

NOTE: REFER TO DWG D-EE06005-27-220026-2 FOR DESCRIPTION OF CHEMICAL STORAGE TANKS ON THIS DRAWING.

SCALE

40' 30' 20' 10' 0' 20' 40'

1/32"=1'-0" - D SIZE (22x34)

1/64"=1'-0" - B SIZE (11x17)

5	EE12131, EE10094 & EE12095 UPDATES	R/JF	10.15.15	-	
4	ADD HCI2 & CHEM STORAGE NO'S	R/JF	08.12.14	-	
3	MAY 2014 SITE PLAN UPDATE	JME	05.19.14	-	
2	BROMINE PROJECT EE10094 AS-BUILT	DM	05.20.13	-	
1	BUILDING NUMBERS ADDED	P/L	08.25.12	-	
0	2012 RECORD DRAWING	P/L	03.22.12	-	
No.	REVISION	DWN	DATE	APP'D DATE	
6	CHANGE DRAWING #	WAR	06.16.20	PM	06.16.20
		WAR	06.07.18		

Pearl Engineering Corporation

P.O. BOX 425
WISCONSIN RAPIDS, WI 54495
PH 715.424.4008 FAX 715.424.4009

PROJECT NO. 11-310-150

DATE 11.14.11

SCALE 1/32"

DATE	DATE	DATE	DATE	DATE	DATE	DATE
DATE	DATE	DATE	DATE	DATE	DATE	DATE

ERCO Worldwide

BUILDING LWH
& CHEMICAL STORAGE TANKS DHV
ERCO WORLDWIDE (USA) INC
PORT EDWARDS, WISCONSIN

REFERENCE DWG. NUMBER

REFERENCE OR TITLE

CONFIDENTIAL

D-EE06005-27-220026-1

7

7

THIS DRAWING IS THE PROPERTY OF ERCO WORLDWIDE, A DIVISION OF SUPERIOR PLUS LP AND MUST NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT WRITTEN PERMISSION.

MAXIMUM CHEMICAL STORAGE

TAG	VESSEL #	DESCRIPTION	CAP. GALS OR AS LISTED	DIAMETER	HEIGHT
1	VS-1101	50% KOH	625,000	60'-0"	30'-0"
2	VS-1110	50% KOH	100,000	25'-0"	30'-0"
3	VS-1502A	28% KOH	32,000	14'-0"	30'-0"
4	VS-0409	50% NaOH	625,000	60'-0"	30'-0"
5	VS-0410	50% NaOH	100,000	25'-0"	30'-0"
6	VS-1702	32% NaOH	30,000	14'-0"	27'-3"
7	VS-0350 A/B/C	LIQUEFIED CHLORINE	60,000 EA	12'-0"	94'-0" L
8	4 CYLINDERS	LIQUEFIED CHLORINE	1-TON EA	-	-
9	VS-0311	93% SULFURIC ACID	15,000	10'-0"	25'-0"
10	VS-0312	55% SULFURIC ACID	15,000	10'-0"	25'-0"
11	VS-0805 A/B	35% HCl	250,000 EA	33'-0"	40'-0"
12	VS-0804 A/B	35% HCl	15,000 EA	11'-10"	18'-3"
13	VS-0114	35% HCl	15,000	12'-0"	18'-0"
14	VS-2805 A/B/E/F	35% HCl	70,000 EA	17'-0"	41'-6"
15	VS-1602	LIQUEFIED SO2	6,150	6'-4"	24'-0" L
16	6 CYLINDERS	LIQUEFIED SO2	1-TON	2'-6"	6'-10"
17	10 CYLINDERS	LIQUEFIED SO2	150# CYLINDERS	-	-
18	VS-0126	LIQUEFIED CARBON DIOXIDE	14,000	7'-0"	48'-6" L
19	VS-1280	NITROGEN	6,000	10'-0"	32'-8"
20	VS-1281	NITROGEN	3,000	8'-0"	19'-0"
21	VS-1290	ARGON	900	4'-9"	11'-4"
22	VS-0721	FUEL OIL	10,000	10'-0"	17'-0"
23	VS-0721A	#2 DIESEL FUEL	450	3'-8"	5'-0"
24	VS-0721C	UNLEADED GASOLINE	250	3'-0"	5'-0"
25	TRAIN CARS	Cl2	20 CARS	-	-
26	TRAIN CARS	HCl	20 CARS	-	-
27	TRAIN CARS	KOH/NaOH	40 CARS	-	-
29	BULK TOTE	SODIUM BISULFITE SOLUTION 40%	330	-	-
30	COMPRESSED GAS	GENERAL CYLINDER STORAGE	(20)150# CYLINDERS	-	-
31	8 DRUMS	BOILER/COOLING TOWER CHEMICALS	55 GALS EA	-	-

NOTE FOR CHEMICAL STORAGE TANKS:
REFER TO DRAWING D-EE06005-27-220026-1 FOR LOCATION OF TANKS LISTED IN THIS TABLE

REFERENCE DWG. NUMBER

Pearl Engineering Corporation

P.O. BOX 425
PH 715.424.4008

WISCONSIN RAPIDS, WI 54485
FAX 715.424.4009

PROJECT NO. 11-310-150

REFERENCE OR TITLE

1

M2020111 REMOVED 28 CARBON TET

WAR
06.18.20

PSM
06.18.20

0

NEW DWG W/TABLE FROM DWG 220029

WAR
07.18.18

-

No.

REVISION

den.
date

app'd
date



MAXIMUM CHEMICAL STORAGE TABLE
ERCO WORLDWIDE (USA) INC
PORT EDWARDS, WISCONSIN

DRAWN WAR	CHECKED	PROCESS	INSTR.	PROJECT	APPROVED	APPROVED
DATE 7.18.18	DATE	DATE	DATE	DATE	DATE	DATE
SCALE 1/32"	DWG D-EE06005-27-220026-2	REV. 1				

CONFIDENTIAL

THIS DRAWING IS THE PROPERTY OF ERCO WORLDWIDE, A DIVISION OF SUPERIOR PLUS LP AND MUST NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT WRITTEN PERMISSION.

AREA MONITORS

MONITOR NUMBER	SENSOR TYPE	DESCRIPTION	P&ID
AI-0223-27	H2 AREA MONITOR	CELL ROOM HYDROGEN COOLER UPPER	04-115098
AI-0223-28	H2 AREA MONITOR	CELL ROOM HYDROGEN COOLER LOWER	04-115098
AI-0223-31	H2 AREA MONITOR	CATHOLYTE RECEIVERS	07-114210
AI-0340-61A	CI2 AREA MONITOR	LIQUEFACTION BUILDING	03-104793-5
AI-0340-61B	CI2 AREA MONITOR	LIQUEFACTION BUILDING	03-104793-5
AI-0340-62	REFRIGERANT MONITOR	LIQUEFACTION BUILDING (1) SAMPLE POINT ON EACH LEVEL	03-104793-5
AI-0340-69	CL2 AREA MONITOR	LIQUEFACTION BLDG (2) BY LIQ. PIG & LIQ. CL2 SAMPLE STATION	
AI-0346-1	CI2 AREA MONITOR	LIQUEFACTION BUILDING SUPPLY AIR DUCT (HVAC)	03-125300
AI-0346-2	REFRIGERANT MONITOR	LIQUEFACTION BUILDING SUPPLY AIR DUCT (HVAC) & STACK	03-125300
AI-0346-3	SO2 AREA MONITOR	LIQUEFACTION BUILDING SUPPLY AIR DUCT (HVAC)	03-125300
AI-0354-4	SO2 AREA MONITOR	EAST OF HYPO DESTRUCT CYLINDER	03-112587
AI-0354-5	SO2 AREA MONITOR	NORTH OF HYPO DESTRUCT	03-112587
AI-0361-1	O2 AREA MONITOR	LIQUEFACTION SOUTH EAST SIDE OF DOUBLE DOOR	
AI-0362-1	O2 AREA MONITOR	LIQUEFACTION NORTH BY SUMP	
AN-0415-A-P	MIL-RAM	WASTE MANAGEMENT BUILDING H2S	
AN-0415-B-P	A-TOX-15-BM	EFFLUENT BUILDING H2S	
AN-0415-D-P	MIL-RAM	MAINTENANCE SHOP H2S MONITOR	
AI-0420-25	H2 AREA MONITOR	CELL ROOM EAST SUMP	
AI-0420-29	H2 AREA MONITOR	F BUILDING SUMP	
AI-0420-30	H2 AREA MONITOR	HC11 BUILDING	
AI-0420-31	H2 AREA MONITOR	EAST CELL ROOM BASEMENT CATHOLYTE RECEIVER AREA	07-114210
AI-0610-1	CI2 AREA MONITOR	WASTE LIQUIDS PRE-TREAT TANK (TOP OF TANK)	28-104807-2
AI-0610-2	CI2 AREA MONITOR	NORTH OF HCI STORAGE TANKS	30-104281
AI-0610-3	CI2 AREA MONITOR	HC11 PLANT (5TH FLOOR)	30-104280-1
AI-0610-4	CI2 AREA MONITOR	HYPO TANKS (SOUTH OF WEST HYPO TANK)	03-104798-1
AI-0610-5	CI2 AREA MONITOR	MAIN CHLORINE SCRUBBING TOWER (TOWER OUTLET LINE)	03-104798-1
AI-0610-6	CI2 AREA MONITOR	WEAK ACID DECHLORINATOR (10' EAST)	03-104791-1
AI-0610-7	CI2 AREA MONITOR	CHLORINE SEAL	03-104792
AI-0610-8	CI2 AREA MONITOR	THERMAL DECOMPOSITION UNIT	03-125801
AI-0610-9	CI2 AREA MONITOR	CHLORINE DRYING AREA (SECOND LEVEL, EAST OF STRONG TOWER)	03-104791-2
AI-0610-10	CI2 AREA MONITOR	CHLORINE COMPRESSORS (BETWEEN C & D COMPRESSORS)	03-125200-4
AI-0610-11	CI2 AREA MONITOR	SOUTHEAST CELL ROOM BSMT (FORMER HG FUME SCRUBBER AREA)	03-115111
AI-0610-12	CI2 AREA MONITOR	TRUCK SCALE (NORTH SIDE OF HEMCO RAMP)	07-115001
AI-0610-13	CI2 AREA MONITOR	NORTH LOAD SHED (NORTH END OF UPPER WALKWAY)	03-104799
AI-0610-14	CI2 AREA MONITOR	SOUTH LOAD SHED (SOUTH END OF UPPER WALKWAY)	03-104799
AI-0610-15	CI2 AREA MONITOR	CHLORINE STORAGE TANKS (SOUTH END BETWEEN A & B STORAGE)	03-104794
AI-0610-16	CI2 AREA MONITOR	EAST CELL ROOM BASEMENT (NORTHEAST CORNER)	03-115111
AI-0610-17	CI2 AREA MONITOR	STRAINER BUILDING (OUTSIDE WEST WALL)	27-111953-4
AI-0610-18	CI2 AREA MONITOR	STRAINER BUILDING (INSIDE WEST WALL)	27-111953-4
AI-0610-19	HCI AREA MONITOR	NORTH OF HCI1 STORAGE	30-104281
AI-0610-21	CL2 AREA MONITOR	UTILITY BUILDING (OUTSIDE SOUTHEAST WALL)	03-115111
AI-0610-22	SO2 AREA MONITOR	SO2 TRUCK UNLOADING	01-115088-1
AI-0610-81	CL2 AREA MONITOR	COMPRESSOR BUILDING GRADE LEVEL	03-125200-1
AI-1057-5	SO2 AREA MONITOR	N BRINE	01-114228
AI-1058-3	SO2 AREA MONITOR	BROMINE TREAT TANKS	28-118468
AI-1460-4	SO2 AREA MONITOR	K BRINE	06-114209
AI-1602-9	SO2 AREA MONITOR	SO2 VAPORIZER	01-115088-1
AI-1602-10	SO2 AREA MONITOR	SO2 STORAGE	01-115088-1
AI-2002-1	CI2 AREA MONITOR	EVS STACK	03-115110-1
AI-2002-3	CI2 AREA MONITOR	EVS STACK (2ND SENSOR)	03-115110-1
AI-2006-1	CI2 AREA MONITOR	COOLING TOWER	27-115102-1
AI-2006-2	CI2 AREA MONITOR	COOLING TOWER PUMP HOUSE	27-115102-3
AI-2006-3	CI2 AREA MONITOR	WEST BOILER HOUSE BUILDING	27-115100-6
AI-2006-4	H2 AREA MONITOR	CELL ROOM ROOF WEST	04-115098
AI-2006-5	H2 AREA MONITOR	CELL ROOM ROOF CENTER	04-115098
AI-2006-6	H2 AREA MONITOR	CELL ROOM ROOF EAST	04-115098
AI-2250-1	H2 AREA MONITOR	WEST BOILER HOUSE	27-115100-4
AI-2801-17	H2 AREA MONITOR	HC12 BURNER BUILDING	31-119101-1
AI-2801-18	CI2 AREA MONITOR	HC12 BURNER BUILDING	31-118483
AI-2805-2	SO2 AREA MONITOR	HC12 STORAGES	31-118484-1
AI-2805-3	HCI AREA MONITOR	HC12 STORAGES	31-118484-1
AI-2805-20	HCI AREA MONITOR	HC12 STORAGES	31-118484-1
AI-2880-14	CI2 AREA MONITOR	HC12 PUMPHOUSE	31-118480
AI-2886-1	H2 AREA MONITOR	HC12 PUMPHOUSE	31-119101-1

NOTE FOR AREA MONITORS:

REFER TO DRAWING D-EE06005-27-220028 FOR LOCATION OF AREA MONITORS LISTED IN THIS TABLE

PAGES (35-41 OF 358)	CHLORINE SYSTEM MANUAL
D-EE06005-08-115282	AREA MONITORS LOCATION PLAN
REFERENCE DWG. NUMBER	REFERENCE OR TITLE

Pearl Engineering Corporation

P.O. BOX 425
PH 715.424.4008

WISCONSIN RAPIDS, WI 54485
FAX 715.424.4009

PROJECT NO. 11-310-150

7	EE12131C AI-0610-8 & AI-0610-81	WAR 10.28.20	CMM 10.28.20
6	M2018252 AI-0340-69 CL2 SAMPLING	WAR 11.04.19	DDJ 11.04.19
No.	REVISION	des. date	app'd date

**ERCO Worldwide**

AREA MONITORS TABLE
ERCO WORLDWIDE (USA) INC
PORT EDWARDS, WISCONSIN

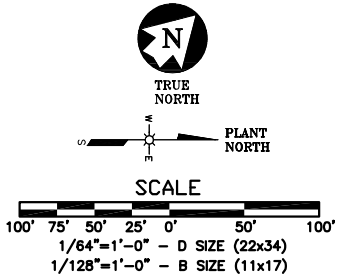
DRAWN P.J.L.	CHECKED	PROCESS	INSTR.	PROJECT	APPROVED	APPROVED
DATE 6.11.12	DATE	DATE	DATE	DATE	DATE	DATE
SCALE 1/32"	DWG. D-EE06005-27-220029					REV. 7

CONFIDENTIAL

THIS DRAWING IS THE PROPERTY OF ERCO WORLDWIDE, A DIVISION OF SUPERIOR PLUS LP AND MUST NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT WRITTEN PERMISSION.

LEGEND

- 1. HAZARDOUS WASTE BARRELS (D009)
- 2. ENVIRONMENTAL CONTROL PLANT
- 3. WASTE DUMPSTER STORAGE
- 4. BRINE MUDS, SATURATOR INSOLUBLE
- 5. FLAMMABLE SOLVENT – "F"
- 6. SAFETY KLEEN SOLVENT (D001)
- 7. TRASH DUMPSTER
- 8. RECYCLE CONTAINER



WISCONSIN RIVER

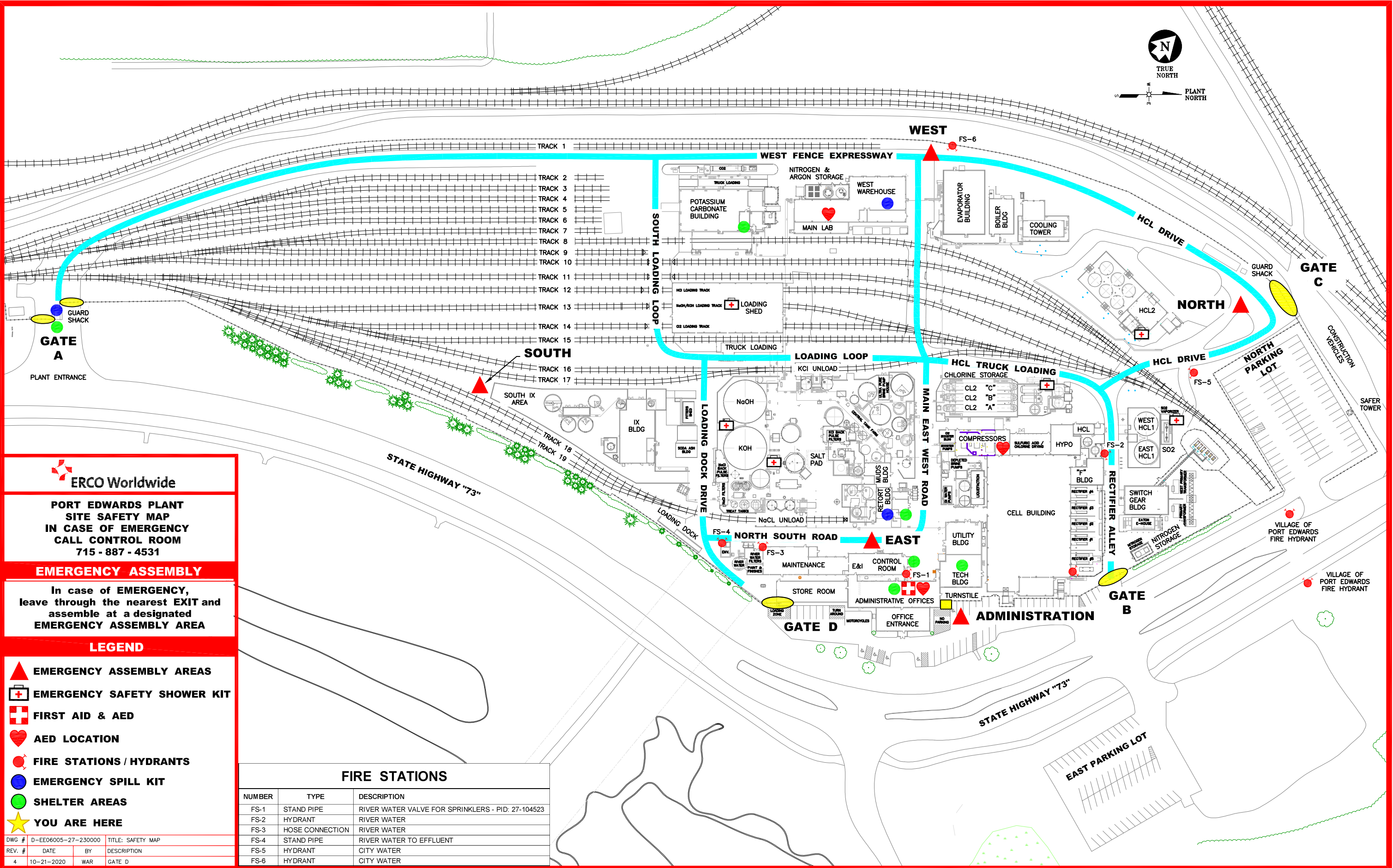
0	M2018224 CRISIS MANAGEMENT PLAN				WAR 08.02.18	KAB 08.02.18
No.	REVISION				des 08.18	app'd 08.18
ERCO Worldwide						
WASTE MANAGEMENT ERCO WORLDWIDE (USA) INC PORT EDWARDS, WISCONSIN						
DRAWN WAR DATE 08.02.18	CHECKED	PROCESS	INSTR.	PROJECT	APPROVED	APPROVED
SCALE 1/64"-1'-0"	DWG	DATE	DATE	DATE	DATE	DATE
D-EE06005-27-220034						REV. 0

REFERENCE DWG. NUMBER REFERENCE OR TITLE

CONFIDENTIAL

THIS DRAWING IS THE PROPERTY OF ERCO WORLDWIDE A DIVISION OF SUPERIOR PLUS LP AND MUST NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT WRITTEN PERMISSION

PORT EDWARDS PLANT - SITE SAFETY MAP



Author:	Lauren Lueneburg	First Approval:	Lauren Lueneburg
Date Issued:	3/1/2023	Second Approval:	Brian Cadwell
Next Review Date:	3/1/2027		

Purpose

To ensure that explicit instructions and responsibilities are defined for reporting an environmental incident.

Scope

This procedure applies to any environmental incident originating within the plant boundary. This procedure defines what an environmental incident is and describes the environmental incident reporting procedures.

Responsibilities

Plant Incident Commander – Individual responsible for completing all initial regulatory reporting and notification requirements. The Plant Incident Commander responsibilities are assigned to the Chief Operator during nights, weekends and holidays. Responsibility may transfer to the Supervisor-on-Call when that person arrives on site. During normal working hours, responsibility may transfer to the Environmental Manager or a member of the plant staff.

Plant Manager, Production Manager, and Person-on-Call – will provide assistance as appropriate and could take over as Plant Incident Commander.

Environmental Manager and Technical Manager – will provide assistance as appropriate for the clean-up of any spills, will conduct investigations of chemical releases, and will also be responsible for written environmental reporting. The Environmental Manager will become the Plant Incident Commander for spills or releases during normal business hours.

All ERCO Employees – are required to immediately report spills or releases upon discovery to the Chief Operator, and to render assistance as appropriate.

Contractors and Vendors – are required to immediately report spills or releases upon discovery to any ERCO employee, and to render assistance as requested.

Definitions

CSB: Chemical Safety Board

NRC: National Response Center

Plant Boundary: ERCO property at the Port Edwards Plant.

Release: Any instance where chemicals, in any quantity, exit their primary containment. This includes leaks, overflows, non-routine and/or unauthorized spilling, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing of any chemical. This includes any releases to the environment, such as releases to the air, surface water, storm drains, groundwater and unpaved ground. In addition, it also includes releases to secondary containment and paved ground.



Port Edwards Environmental Manual

B1.OPED - Release Reporting Procedure

Reportable Release: A chemical release that is required to be reported to any governmental agency as defined by this procedure and the regulations.

WDNR: Wisconsin Department of Natural Resources

Environmental Procedure

1.0 Internal and External Verbal Reporting

- 1.1 All chemical releases are to be immediately reported to the Chief Operator.
- 1.2 The Chief Operator becomes the Plant Incident Commander and holds that position until properly relieved.
- 1.3 After a chemical release has been reported to the Plant Incident Commander, it needs to be determined if the release must be reported to federal, state, and local governmental agencies.
- 1.4 Evaluate the release to determine if quantities have been released to the environment in excess of the federal limits. Use Table 1 below to make that determination. If the release of a listed chemical exceeds the reportable quantity in any 24-hour period, then the release must be reported to federal, state, and local government as detailed below in Section 3. The verbal report must be made within 15 minutes of the discovery of the release. Utilize the guidance attached as Attachment 1 for gathering information prior to making the notification. Do not delay making the verbal report in order to gather all of the information listed on the form. Any verbal report to a governmental agency should be accompanied by a confirmation number or e-mail confirmation.
- 1.5 A release which results in a fatality, or serious injury which requires inpatient hospitalization, or substantial property damage greater than \$1,000,000 must be reported to the Chemical Safety Board (CSB). The NRC must be notified first if the release is federally reportable. The CSB must be contacted within 30 minutes of contacting the NRC. The CSB notification requirement can be satisfied by calling the phone number listed or by sending an e-mail to report@csb.gov and providing the NRC identification number for the incident. It is possible that a CSB notification may be required even though NRC notification was not required and vice versa. In that event, a report as described in Section 4 must be filed with the CSB within eight hours of the incident.
- 1.6 If the release does not trigger federal reporting requirements, then evaluate the release to determine if it is reportable under Wisconsin regulations.
 - 1.5.1 Wisconsin regulations define a reportable release as any chemical release in any quantity where the chemical enters the environment.
 - 1.5.2 Wisconsin regulations define the environment to mean the air, water, or soil anywhere within the state.
 - 1.5.3 The only de-minimus reporting exemptions are for releases of oil that are less than 5 gallons, or releases of fuel of less than 1 gallon on to pervious ground. All other releases to the environment must be reported. Any amount to the river is reportable to the NRC.
 - 1.5.4 Chemical releases to containment, pavement, or where the chemical does not enter the environment do not need to be reported to any governmental agency.
- 1.7 Chemical releases to secondary containment structures or to pavement must be reported internally to the Chief Operator.
- 1.7 All chemical releases must be cleaned-up, regardless if they are reportable.

- 1.8 All chemical releases, even those that are not reportable to any governmental agency, will be investigated by the Environmental Manager in accordance with ERCO policies and procedures.
- 1.9 It is possible that all release related information will not be immediately available. In those instances, the Plant Incident Commander will have to make a decision regarding whether to report the incident. Note that there is no penalty for reporting what turns out to be a non-reportable incident. However, it is a serious violation to significantly delay or not report a chemical release that must be reported. The Plant Incident Commander is advised to err on the side of caution and report chemical releases to the various agencies whenever there is a doubt about the reportability of the incident.
- 1.10 The Plant Manager will be notified immediately or as soon as possible of any releases.
- 1.11 The Manager, Environmental Affairs will be verbally notified of the release within 4 hours of a reportable or potentially reportable incident.
- 1.12 [Technical/Environmental Manager](#) is responsible for notifying, within one business day, the Senior Director, Health, Safety & Environment and advise the Management Committee via e-mail.

2.0 Reportable Quantities

A release must be reported to federal, state, and local authorities if it exceeds the quantities listed in Table 1.

If a substance not listed in Table 1 is released to the environment, the Environmental Manager can be contacted to advise on reportability.

Table 1: Reportable Quantities and Potential Sources (Basis: 24 hours) *

Substance	Quantity (24-hour basis)
Carbon Tetrachloride (CCl ₄)	10 Lbs.

Chlorine (Cl₂)	10 Lb.
F003 (Spent non-halogenated solvents and paint waste)	100 Lb.
Ferric Chloride (FeCl₂)	1000 Lb.
Gasoline	1 gallon
Hexachlorobenzene (C₆Cl₆) (D032)	1 Lb.
Hydrochloric Acid (HCl)	5,000 Lbs. (500 gallons @ 22 degrees Be')
Hydrogen Sulfide (H₂S)	100 Lb.
Mercury (Hg)	1 Lb. (Category including D009 Mercury Contaminated Waste); Effluent: 15 ppb for 24 hours @ 8 MGD or 34.3 ppb for 24 hours @ 3.5 MGD)
Mercuric Sulfide	1 Lb.
Oil (includes diesel fuel and oils)	5 gallons
Paint Solvents (Used)	1 Lb.
Potassium Hydroxide (Caustic Potash, KOH)	1000 Lbs. (158 gallons @ 50%, 182 gallons @ 45%)
Sodium Bisulfite (NaHSO₃)	5,000 Lb.
Sodium Hydroxide (Caustic Soda, NaOH)	1000 Lb. (156 gallons @ 50%; 490 gallons @ 20%)
Sodium Hypochlorite (NaOCl)	100 Lb.
Sulfur Dioxide (SO₂)	500 Lbs.
Sulfuric Acid (H₂SO₄)	1,000 Lb. (66 gallons @ 98%; 70 gallons @ 93%; 150 gallons @ 55%)

* Source: 40 CFR 302.4

Example Calculation – Potential Scrubbing Tower Chlorine Emissions from Liquefaction Tail Gas

Basis:

- Scrubbing Tower Scrubbing Efficiency = 0%
- Liquefaction Efficiency = 99.00%
- Current Efficiency = 100%
- 265 KA Operating Rate. All cells online.
- All tail gas to scrubbing tower
- Cl₂ Reportable Quantity = 10 lbs/24 hours.
- Chlorine to Liquefaction = 222 ton/day (per Faraday's Law)
222 ton/day x 2,000 lb/ton x 1 day x 1,440 min/day = 308.3 lb./min
- Chlorine to Scrubbing Tower =
308.3 lb./min. x 0.01 (liq. eff.) = 3.08 lb./min.
- Chlorine Emission =
3.08 lb./min. @ 0% scrubbing efficiency
- Time to Exceed Superfund Limits (under assumed conditions)
10 lbs. x 1 min / 3.08 lbs = 3.25 min



Port Edwards Environmental Manual B1.OPED - Release Reporting Procedure

Comments:

- Scrubbing Efficiency is never 0% unless there is complete loss of circulation.
- Actual Liquefaction Efficiency is 99.0 to 99.5%.
- Tail Gas is generally sent to the HCl plant.
- Actual Current Efficiency is <100%.

Example Calculation – lbs Cl₂ Released from a known Quantity of Wastewater

- Available (avl.) Chlorine Determination
For a 100-ml sample (wastewater) titrated w/ 0.1N sodium thiosulfate:
Gpl avl. Cl₂ = #ml sodium thiosulfate titrated X 0.0355
- “Lbs. Chlorine Released” Determination
 Δ = avl. Cl₂ in wastewater before release – avl. Cl₂ in wastewater after release

 $(\Delta \text{ gpl avl. Cl}_2) \times (\text{gallons wastewater involved}) \times (3.78\text{L/gal}) \times (1 \text{ lb} / 453.6 \text{ g}) = \text{\#lbs. Cl}_2 \text{ released}$

 $(\text{\#ml avl. Cl}_2 \text{ before} - \text{\#ml avl. Cl}_2 \text{ after}) \times (0.0355) \times (3.78 / 453.6) \times (\text{gals. wastewater}) = \text{\#lbs. Cl}_2 \text{ released}$

 $(\text{\#ml avl. Cl}_2 \text{ before} - \text{\#ml avl. Cl}_2 \text{ after}) \times (0.000296) \times (\text{gals. wastewater}) = \text{\#lbs. Cl}_2 \text{ released}$

3.0 Verbal Report Contact Information

3.1 When it has been determined that the release exceeds federal reporting thresholds as detailed in Table 1 above, then each of the following must be contacted:

National Response Center (NRC)	800-424-8802
Chemical Safety Board (CSB) (if required, see Section 1.5)	202-261-7600 or report@csb.gov
WDNR Emergency Hotline	(800) 943-0003
Wood County LEPC	421-8700
Plant Manager	715-887-4576 (Plant) 715-590-3223 (Cell)
Manager, Environmental Affairs	416-234-7468 (Office) 437-425-4368 (Cell)

3.2 When it has been determined that the release must be reported to the CSB, then each of the following must be contacted.

Chemical Safety Board (CSB)	202-261-7600 or report@csb.gov
Plant Manager	715-887-4576 (Plant)

Manager, Environmental Affairs

416-234-7468 (Office)

437-425-4368 (Cell)

3.3 If the release only needs to be reported to the Wisconsin Department of Natural Resources, then each of the following must be contacted.

WDNR Emergency Hotline

(800) 943-0003

Plant Manager

715-887-4565 (Plant)

715-590-3223 (Cell)

Manager, Environmental Affairs

416-234-7468 (Office)

437-425-4368 (Cell)

3.4 A confirmation number or e-mail acknowledgment should be received whenever a verbal report is made to a regulatory agency. If an e-mail acknowledgement is not received immediately, the Environmental Manager will follow-up with an e-mail to the enforcement officer outlining the discussion and agreed next steps.

4.0 Written Report

4.1 If notice was made to the CSB but not the NRC, then a report must be submitted to the CSB within 8 hours of the incident. Contents of the report are identified in Attachment II – CSB Report.

Modifications or revisions may be made to the information submitted to the CSB without penalty up to 30 days from the incident. Also, an owner may submit a revised report to the CSB within 60 additional days if the submitter explains why the revised report could not have been submitted within the first 30 days.

4.2 A written report will be issued to the WDNR within 5 days of a reportable incident. Contents of the report are identified in Attachment III - Hazardous Substances Release Report – WDNR Written.

4.3 The Technical/Environmental Manager shall ensure that the written report is reviewed by the Senior Director, Health, Safety & Environment and, if necessary, by legal counsel, prior to issuance to government authorities as per [HSE 114 Procedure – Government Communications Procedure](#).

5.0 Incident Investigation

An environmental incident investigation shall be conducted on all incidents using the environmental incident reporting form in the electronic "Environmental Reports" database. Please refer to Environmental Procedure B1.4CW for details on conducting and documenting an incident investigation.



Port Edwards Environmental Manual B1.0PED - Release Reporting Procedure

Reference

40 CFR Part 1604

Attachment I: B1.0 Release Verbal Report



B1.0 Release Verbal
Report.docx

Attachment II: B1.0 Release CSB Report



B1.0 Release CSB
Report.docx

Attachment III: B1.0 WDNR Written Report



B1.0 Release WDNR
Written Report.docx

Author:	Lauren Lueneburg	First Approval:	Lauren Lueneburg
Date Issued:	11/27/2023	Second Approval:	Brian Caldwell
Next Review Date:	11/27/2027		

Purpose

This procedure describes emergency response activities for incidents in which there has been a chemical release to the environment.

Scope

This procedure provides the required steps to be taken in instances of non-authorized chemical releases to the environment within the Port Edwards Plant boundary. This procedure is a supplement to the Crisis Management Plan and is not meant to replace it.

Responsibilities

Plant Incident Commander (formerly Emergency Coordinator) – Individual responsible for initial verbal reporting requirements and coordinating plant response to the emergency. Incident Commander responsibilities are assigned to the Chief Operator during nights, weekends and holidays. Responsibility transfers to the Supervisor-on-Call when that person arrives on site. During normal working hours, responsibility transfers to the Environmental Engineer or a member of the plant staff.

Safety & Security Manager – is responsible for safety and security issues and will advise the Incident Commander during all incidents.

Plant Manager, Production Manager, and Person-on-Call – will provide assistance as appropriate and could take over as Plant Incident Commander.

Environmental Manager – will provide assistance as appropriate for the clean-up of any releases, will conduct investigations of chemical releases, and will also be responsible for written environmental reporting.

All ERCO Employees – are required to immediately report releases upon discovery to the Chief Operator, and to render assistance as appropriate.

Contractors and Vendors – are required to immediately report releases upon discovery to any ERCO employee, and to render assistance as requested.

Definitions

Crisis Management Plan (CMP): The Crisis Management Plan is the guiding document for all emergency incidents.

DOT: Department of Transportation

EPA: United States Environmental Protection Agency

Immediately: Within 15 minutes of the discovery of a spill or release

NRC: National Response Center (1-800-424-8802)



Port Edwards Environmental Manual

B1.1PED - Release Response Procedure

Village of Port Edwards WWTP: Municipal wastewater treatment plant (715-887-4210)

WDNR: Wisconsin Department of Natural Resources

WDNR Emergency Release Hot Line (1-800-943-0003)

LEPC: Local Emergency Planning Committee (715-421-8700)

Outfall: The end of pipe discharge located at the shoreline of the river or wetland

Plant Incident Commander: (formerly Emergency Coordinator) Individual responsible for completing all reporting and notification requirements. Plant Incident Commander responsibilities are assigned to the Chief Operator during nights, weekends and holidays. Responsibility transfers to the Supervisor-on-Call when that person arrives on site. During normal working hours, responsibility transfers to the Environmental Engineer or a member of the plant staff.

Learning Value Incident: An event that is not reportable externally by environmental regulations but in which there is value in reporting internally and taking action to improve preventative systems in order to prevent future reportable incidents. Examples include events where there was a failure of a protective system intended to prevent environmental impact or comply with a regulatory requirement, but other layers of protection were still in place, or the amount released was below that required for external reporting. Events may also be reported due to environmental hazards or spill potential prior to their occurrence.

Near Miss Incident: A situation that under slightly different circumstances could have resulted in a chemical release or other potential environmental violation.

Release: Any non-routine and/or unauthorized spilling, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment. This would include any releases to the air, surface water, storm drains, or to paved or unpaved ground.

Reportable Release: Any chemical release (see Release definition above) occurring at the Port Edwards Plant must be reported (internally) to the Chief Operator/Plant Incident Commander.

Reportable Incident: A chemical release (see Release definition above) that is required to be reported to any governmental agency as defined by this procedure and the regulations.

Plant Boundary: ERCO property at the Port Edwards Plant

Environmental Procedure

1.0 Initial / Immediate Response

- 1.1 Any immediate safety issues such as fire or potential explosion, or any other safety-related issue must be dealt with first. Evacuate the area if needed.
- 1.2 When a release is discovered, contain the release, and stop the leak, if it can be done safely.
- 1.3 Immediately notify the Chief Operator of the release. If there are multiple people present at a release, then one person should contact the Chief Operator while others respond to the release.
- 1.4 The Chief Operator becomes the Plant Incident Commander and will continue in that role until properly relieved.
- 1.5 The Plant Incident Commander will mobilize whatever resources are needed to address the release, including addressing any safety issues.



Port Edwards Environmental Manual

B1.1PED - Release Response Procedure

- 1.6 The Plant Incident Commander will follow Environmental Procedure B1.0PED Release Reporting Procedure, including initial notification of the National Response Center, WDNR Release Hotline, and LEPC, as appropriate.
- 1.7 The Environmental Manager will collect all necessary information and follow Environmental Procedure B1.0PED Release Reporting Procedure for any follow-up reporting.
- 1.8 As appropriate, outstanding safety issues must be addressed prior to addressing any environmental concern.
- 1.9 Be aware of fire and explosion hazards, even after an initial fire has been extinguished.

2.0 Follow-up Response and Clean Up

- 2.1 After any immediate safety concerns have been mitigated, then the chemical release situation may be addressed.
- 2.2 Stop the leak.
- 2.3 Contain the released material and prevent any released material from contaminating additional areas.
- 2.4 Every effort must be made to prevent the released material from leaving plant property.
- 2.5 Once the source of the release has been stopped and the material has been contained, then the clean-up may begin.
- 2.6 Utilize whatever resources are at hand, with guidance being provided by those familiar with the hazards of the released chemical.
- 2.7 Remove all liquid and hold for proper disposal.
- 2.8 Containerize all solids, including pigs, rags/towels, oil dry, or other materials used to contain the release.
- 2.9 Note Environmental Procedure ENV 305A Contaminated Soil Management and Site Remediation Procedure if any soils are involved.
- 2.10 It may be necessary to tarp the area prior to actual soil removal to comply with Environmental Procedures ENV 305A and ENV 305B.
- 2.11 As appropriate, post clean-up samples of the cleaned area may be taken to document the level of clean-up.
- 2.12 Follow procedures in B1.0PED Release Reporting Procedure.
- 2.13 Follow procedures in B2.7PED Waste Management Procedure for waste disposal.
- 2.14 Soil disturbance notifications can be made as time permits. Notifications according to the APSA, Environmental Procedure B4.2PED will not delay actions to be taken in response to a release or other emergency.

3.0 Investigations

- 3.1 There are five types of environmental release incidents:

- Recognized Environmental Event Incidents - A release with environmental impact. This may include a release with the potential to cause a fire or an explosion, or environmental contamination over an extended area, or with the potential to impact third parties or the community.
- High Learning Value Incident – A release that may have potential environmental impact, but no community impact. Contained by secondary layer of protection, or potential for release into environment beyond the affected area, or actual release into the environment beyond the affected area.
- Learning Value Incident – A minor leak or drip with no potential for environmental impact beyond the minor leak or drip itself, nor any potential for community impact. Release from primary containment, contained by secondary layer or protection.
- Near Miss Incident – Potential for release out of primary containment, but no release occurred. Contained by primary layer of protection.
- Administrative Incident – A contravention of an administrative regulatory requirement or a potential for a contravention. Potential for Administrative Monetary Penalty or other government attention.

All unauthorized chemical releases will be investigated according to Environmental Procedure B1.4CW Environmental Incident Investigation Procedure.

- 3.2 Incident investigations will utilize the Environmental Incident Reporting forms available on the Environmental Reports Database.
- 3.3 Chemical releases that are not reportable to a governmental agency will be investigated as “High Learning Value” incidents.
- 3.4 The results of all investigations will be shared with personnel from corporate, other plants, and the Port Edwards Plant.
- 3.5 The Environmental Manager will ensure that all Environmental Release Investigations occur for all environmental incidents.
- 3.6 Every effort will be made to issue the final environmental incident report within 28 days of the incident.

4.0 Examples

Note that all chemical releases are reportable internally. The Chief Operator and others will determine whether regulatory agencies need to be contacted. It is the responsibility of the individual discovering the chemical release to notify the Chief Operator immediately of the situation.

4.1 Release of several gallons of diesel fuel to pavement at the fuel dispenser

- 4.1.1 Be sure the dispenser is no longer releasing fuel. Activate the emergency fuel shut off if needed.
- 4.1.2 Apply pigs or pads from the release response kit to prevent the fuel from leaving the pavement.
- 4.1.3 Block any nearby storm drains.
- 4.1.4 Notify or get someone else to notify the Chief Operator. This can be done at the same time as any of the action items listed above. The Chief Operator will need to know what