
HEALTH AND SAFETY PROGRAM 200 – SAFE WORK PERMIT

1.0 PURPOSE

Westlake, Plaquemine Complex, has developed this Safe Work Permit Program to eliminate potential accidents or injuries and to enhance employee protection.

To provide maximum personnel safety in the plant, any work performed in the operating areas must have the Department supervisor's approval before doing the work. Safe work permits are issued by Department Supervision or designee to the Permit Requestor after verifying that appropriate precautions have been taken.

2.0 SCOPE

The Safe Work Permit Program applies to the service and maintenance of process equipment and machinery, including hot work, hot taps, excavation, confined space entry, scaffold erection, etc., in operating areas. This program does not apply to operations personnel performing normal activities.

3.0 DEFINITIONS

- 3.1 Affected Employee** – Employees impacted by the performance of permitted work, which may include hot work
- 3.2 Authorized Employee** – Employees trained and authorized to perform permitted work in the plant
- 3.3 Competent Person** – One who is capable of identifying existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous, or dangerous to employees and who has authorization to take prompt corrective measures to eliminate them.
- 3.4 Craft Specific PPE** – PPE required to perform the specific permitted maintenance task and is determined by the personnel performing the task.
- 3.5 Equipment Owner** – The person assigned to an area/department that normally controls and or operates the equipment.
- 3.6 Energized** – electrically connected to a source of potential difference. See ESP 004.
- 3.7 Hot Tap** – see HSP-201 Hot Tap.
- 3.8 Hot work** – see HSP 203 Hot Work.
- 3.9 Normal Activity** – Any activity that is defined by standard operating procedure

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3.10 Marine Chemist – the holder of a valid certification card issued by the National Fire Protection Association (NFPA) in accordance with the "Rules for Certification of Marine Chemists." The Marine Chemist is qualified to determine whether inspections, alterations, or repairs of marine vessels, which may involve hazards covered by this program, can be undertaken safely.

3.11 Process Area – Area employed in production in which an action, operation, or treatment embracing chemical, industrial, manufacturing, or processing factors/methods is carried out utilizing substances that may contain or could lead to a potential flammable and/or combustible hazard(s).

3.12 Regular work – any servicing, opening, or maintenance of process equipment and machinery. Regular work does not involve any hot work, hot taps, excavations, and/or confined space entry.

3.13 Safe Work Permit – a multi-faceted safety planning tool to ensure that necessary safety precautions have been addressed prior to beginning work on-site

3.14 Unit Area PPE – PPE required by anyone entering the unit area and is designated by signs and/or line demarcations.

3.15 Permit Work Area PPE – PPE required by any employee performing the permitted work or any employee who comes in close proximity to the permitted work that they would be exposed to the hazards associated with the permitted work.

3.16 Vehicle – Any mobile equipment with an internal combustion engine or electric motor that does not meet the design specifications (hazardous location) for hazards present in the process area.

4.0 RESPONSIBILITIES

Westlake has provided a Safe Work Permit Program for employees and is responsible for training employees and notifying contractors of the Safe Work Permit Program. Specific responsibilities are listed below:

4.1 Health and Safety (H&S)

4.1.1 Train production and maintenance employees on the proper implementation of this program.

4.1.2 Notifies contractors of Westlake's Safe Work Permit Program during initial Safety Orientation.

4.1.3 Ensures that safe work permit procedures are reviewed at least every three

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years.

4.1.4 Maintains review records.

4.1.5 Audit Evergreen Contractor's compliance at least every three years.

4.2 Department Supervision

4.2.1 Learn, understand, and follow this program.

4.2.2 Issue appropriate safe work permits (e.g., hot work, hot tap, excavation, confined space).

4.2.3 Provide specific safe work details, unique to the job or area, to production employees or the Permit Recipient involved with the covered work.

4.2.4 Gives authorization for cutting or welding operations within the department.

4.2.5 Indicate the required personal protective equipment necessary for the Unit and permit work area on all permits (use PPE matrix when necessary).

4.2.6 Ensure safe work by reviewing drawings and consulting with personnel knowledgeable in the system.

4.2.7 Maintain an up-to-date list of Department Supervisor designees.

4.2.8 Advise contractors of where flammable materials are stored and where hazardous conditions exist.

4.3 Shipping Supervision

4.3.1 Learn, understand, and follow this program.

4.3.2 Maintain the U.S. Coast Guard's (USCG's) Welding and Hot Work Permit.

4.3.3 Follow all of the responsibilities for department supervision.

4.4 Area Operations Technician

4.4.1 Learn, understand, and follow this program.

4.4.2 Perform atmospheric monitoring.

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- 4.4.3 Review work area prior to issuing permit.
- 4.4.4 Complete applicable portions of the Safe Work Permit.
- 4.4.5 Consult with Department Supervision to identify proper safe work procedures.
- 4.4.6 Monitor work area to ensure permit requirements are being followed.
- 4.4.7 Review the safe work permit with Maintenance Crew Leaders and verify that all permit specifications have been met.
- 4.4.8 Review the work area after the job is complete to ensure the work area is clean and safe to be put back in service.

4.5 Maintenance Crew Leader

- 4.5.1 Learn, understand, and follow this program.
- 4.5.2 Consult with operations to identify proper safe work procedures.
- 4.5.3 Provide a copy of all permits to the maintenance crew before work commences.
- 4.5.4 Ensure that maintenance crews follow plant requirements, including specifications outlined in the Safe Work Permit.
- 4.5.5 Ensure the work area is clean and safe before turning it over to operations.

4.6 Contractors

- 4.6.1 Learn, understand, and follow this program.
- 4.6.2 Provide all pertinent information to Operations regarding the work to be performed.
- 4.6.3 Review and comply with all permit requirements.
- 4.6.4 Ensure the work area is clean and safe before turning it over to operations.

4.7 NFPA Certified Marine Chemist:

- 4.7.1 Learn, understand, and follow this program.

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- 4.7.2 Follow all responsibilities of Westlake area technicians.
- 4.7.3 Review and follow all requirements on the U.S. Coast Guard Welding and Hot Work Permit.
- 4.7.4 Complete and issue Westlake Hot Work Permits, Gas Free Certificates, and OSHA Forms 74 to marine dock employees as required.
- 4.7.5 Comply with all applicable NFPA and OSHA standards.

5.0 PROCEDURE

After checking to see that necessary precautions have been considered and that correct procedures will be followed, Department Supervision or his designee fills out a safe work permit and issues it to the personnel performing the work. A quick reference checklist to help explain how to properly fill out the permit is shown in Appendix C.

The safe work permit is a multi-faceted permit. This permit is primarily used for routine maintenance and repair work (regular work), process opening, hot work, power tools only or vehicle entry. If additional permits are required, they will be specified on the safe work permit.

Safe Work permits shall not be issued for any work requiring Management of Change (MOC) until the MOC has been approved to execute. (Example: The MOC has passed the analysis approval stage.)

5.1 Additional permits may include but not limited to:

- 5.1.2 Hot Tap – HSP 201
- 5.1.3 Excavation – HSP 318
- 5.1.4 Confined Space Entry – HSP 202
- 5.1.5 United States Coast Guard Hot Work Permit (marine loading dock)
- 5.1.6 Working on or Near Energized Equipment – Electrical Safety Procedure (ESP – 004)

5.2 Documenting PPE on the Permit

It is important to remember when filling out the permit the 4 different types of PPE classifications and documenting them correctly on the permit. They are as follows:

- 5.2.1 Plant Entry PPE

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5.2.2.1 Refers to basic PPE (hard hat, safety glasses (with side shields) and escape respirator) to enter the plant.

5.2.2.2 This is communicated during orientation, signs and verbally.

5.2.2.3 Plant Entry PPE does not have to be documented on the permit.

5.2.2 Area Specific PPE

5.2.2.4 Refers to specific PPE required when entering certain areas and sometimes entire units. Example – goggles for Caustic Chlorine and acid areas.

5.2.2.5 The area-specific PPE is communicated via site unit-specific orientations, signs, permits, and verbally.

5.2.2.6 Area-specific PPE will be documented on the Safe Work permit.

5.2.3 Process Specific PPE

5.2.3.1 Refers to specific required PPE when conducting tasks that potentially expose workers to process hazards (supplied air respirator when opening up a vinyl process).

5.2.3.2 Process-specific PPE is communicated in the site unit-specific orientation, permits, and verbally.

5.2.3.3 Process Specific PPE will be documented on the safe work permit.

5.2.4 Craft Specific PPE

5.2.4.1 Refers to specific PPE required by the contractor's specialized craft. [Examples - #8 lens for certain types of welding; full face air purifying respirator with organic vapor cartridges when applying certain coatings]

5.2.4.2 Contractors will dictate the PPE

5.2.4.3 This PPE will not be documented on the Safe Work

5.3 Issuing the Safe Work Permit:

5.3.1 Department Supervision or designee initiates all permits.

At a minimum, Department Supervision is responsible for the completion of the following sections with assistance from the Permit Requestor:

- < Date
- < Time Issued
- < Valid Until
- < Work Order (Optional)

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- < Permit Issued To
- < Description of Work
- < Equipment Name
- < Equipment Number
- < Equipment Service
- < Nature of Work
- < Personal Protective Equipment

5.3.2 If additional permits are required, they must be specified in the "Nature of Work" section.

5.3.3 If work tasks require Department Manager approval, this must be specified in the "Nature of Work" section.

5.3.4 Permits may be written for the duration of the Maintenance (work crew) shift. If the maintenance shift should overlap the Operations shift, the active permits must be communicated to the oncoming operation personnel. When the work is complete, the permit will be completed with a sign off by the oncoming Operations personnel.

5.3.5 After discussing all applicable requirements, the Department Supervisor or designee signs the permit and issues it to the Permit Requestor.

5.3.6 All other work tasks require the Permit Recipient to take the permit (all copies) to the Area Technician for completion in the area where the work is to be performed. Area Operations signature must be completed in the field only after all job details and job walkdown have been communicated and performed.

5.3.7 The Area Operations Technician continues the permit process by:

5.3.7.1 Reviewing the work location and ensuring that all necessary precautions have been taken with the exception of those specific tasks listed in:

5.3.7.1.1 Appendix D - Safe Work Permit Site Visitation Exemptions

5.3.7.2 Reviewing all sections previously completed by Department Supervision for agreement.

5.3.7.3 Completing the following permit sections:

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- < General Considerations
- < Hot Work Considerations
- < Atmospheric Monitoring
- < Comments

5.3.7.4 Signing the Area Operations Technician blank.

5.3.7.5 The Area Operations Technician must then conduct a pre-job meeting with the Permit Recipient. The following, at a minimum, must be covered during the Pre-Job Meeting:

- 5.3.7.5.1 A review of the permit with the Permit Recipient stated on the Safe Work Permit.
- 5.3.7.5.2 Review of the isolation points when LOTO is applied. This includes how zero energy was verified.
- 5.3.7.5.3 Identification of equipment or line to be worked on.
- 5.3.7.5.4 Identification of process opening points and or cut points if the process is to be opened or cut.
- 5.3.7.5.5 Identification of nearest eyewash/safety shower. Activate to verify operability.
- 5.3.7.5.6 Primary and secondary assembly points, location of wind socks, and evacuation routes.
- 5.3.7.5.7 Any operational information concerning valves and/or switches that the work crew would need to be aware of while working in the area.
- 5.3.7.5.8 Any specific hazards that the work crew could be potentially exposed to, such as hot surfaces or leaks in the area.
- 5.3.7.5.9 Any work in close proximity to the work area they could potentially expose workers to hazards and barriers in place to protect them.
- 5.3.7.5.10 Instructions on contacting Operations immediately in the event:
 - The Job Scope Changes
 - Change in conditions in the work area such

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as:

- A leak
- An unusual smell
- A loud noise
- Damage to any equipment
- Someone has been exposed to a chemical or injured.

5.3.7.5.11 Any other information that would ensure the safety of the work crew while working in the area.

5.3.7.6 The Permit Recipient must then sign in their blank.

5.3.7.7 The Permit Recipient is given two carbon copies (yellow and tan). The original (white) is maintained by Operations.

5.3.7.8 The Permit Recipient retains the yellow copy, gives the tan field copy to the personnel performing the work, and instructs them on the job safety aspects and permit requirements. The Permit Recipient must share all information shared by Operations at the Pre Job Meeting.

5.3.7.9 Each worker on the job is responsible for reading the permit and signing the back of the tan field copy, indicating their understanding and acceptance of the requirements.

5.3.7.10 The tan field copy of the permit must be in the possession of the workers at the job site at all times.

5.3.7.11 If the work activity requires the crew to move throughout the unit, contact will be made with the responsible Area Technician prior to starting work in each new area. The Technician responsible for the area will review the permit for concurrence and sign the Technician blank on the tan field copy at a minimum. Work tasks that require atmospheric monitoring (i.e., hot work) will require new permits for multiple work areas.

5.3.7.12 When the job is complete or the Safe Work Permit expires, the crew leader or his designee, with a copy of the tan field permit, locates the Area Technician, and both will review the job site for safety and cleanliness. The Maintenance or Contractor Representative and the Operations Representative sign the permit in the Permit Return section. Operations retains the tan field copy and returns it to the Control Room for retention.

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5.4 Re-Issuing Following Alarm Condition

- 5.4.1 During a Plant Alarm condition, all active permits become void. Following a Plant Wide All-Clear, the permits must be re-issued prior to work resuming.
- 5.4.2 Re-issuing a permit will be accomplished by the Outside Technician, who will review the work area and ensure the alarm condition has no impact on the work tasks. The Technician must initial and note the time in the "re-issue" blank of the Permit Authorization section.
- 5.4.3 If the original permit requires Manager Approval, re-issuing the permit will also require the Manager's review, initials, and time in the "re-issue" blank of the Permit Authorization section.
- 5.4.4 The Permit Recipient must also initial and note the time in the "re-issue" blank of the Permit Authorization section.

5.5 Regular Work

- 5.5.1 A safe work permit will be issued for all work performed in operating areas.
- 5.5.2 Regular work includes:
 - 5.5.2.1 Servicing or opening of equipment or piping; and
 - 5.5.2.2 Routine maintenance of process equipment and machinery.

5.6 Hot Work Permit

- 5.6.1 Hot work activities will be permitted using the designated sections of the safe work permit and follow the requirements of (HSP-203)

5.7 Process Piping, Equipment, and Vessel Opening

- 5.7.1 A safe work permit will be issued for all process-opening activities.
- 5.7.2 See the HSP-307" Safe Process Piping, Equipment & Vessel Opening Procedure" for specific details.

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5.8 Pipe Plugs

- 5.8.1 A safe work permit will be issued for all pipe plug work activities.
- 5.8.2 The use of pipe plugs for isolation requires the approval of the Area Manager.
- 5.8.3 See HSP-317 Control of Hazardous Energy (Lockout/Tagout) for special requirements regarding the use of pipe plugs.

5.9 Hot Tap

- 5.9.1 A hot tap permit will be issued in addition to the safe work permit for all hot tap activities (see HSP-201 Hot Tap Permit).

5.10 Confined Space Permit

- 5.10.1 A confined space permit will be issued in addition to the safe work permit for all confined space work.
- 5.10.2 Entry into a confined space will be by permit only. This requirement will include entry by operations personnel for inspections or analysis and any other inspection by maintenance, contract, or vendor representative(s).
- 5.10.3 The confined space permit is an authorization and approval in writing that specifies the location, classification (A, B, or C), and type of work to be done. It also certifies that all existing hazards have been evaluated and necessary personal protective measures have been taken by the qualified person. (See HSP-202 Confined Space Entry Program.)

5.11 Excavation Permit

- 5.11.1 In addition to the safe work permit, an excavation permit will be issued for each job requiring excavation (see Appendix B).
- 5.11.2 All excavation work must be conducted in accordance with HSP-318 "Excavation Safety."

5.12 Energized Equipment

- 5.12.1 When electricians will be working on or near energized equipment the "Energized Equipment" designation must be checked in the "Nature of Work" section.

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- 5.12.1.1 Nature of work Item No. 11 is used when I&E (Instrumentation & Electrical) is conducting "testing only.". No additional permits.
- 5.12.1.2 Nature of work Item 12 is used when work other than testing will be conducted. This type of work requires both an additional permit (as denoted by the asterisk) and management approval (as denoted by the star). The Energized Work Permit can only be issued and signed by the I&E Superintendent and Maintenance Manager.
- 5.12.1.3 Questions about this procedure or Energized Work Permit should be forwarded to the I&E Department.

5.12.2 See **HSP – 317 Control of Hazardous Energy** (Lockout/Tagout) for specific details regarding working on or near energized equipment.

5.13 Scaffold Erection/Dismantling

- 5.13.1 A permit pre-job meeting between the work crew and operations must be conducted at the job site prior to the issuing of the permit for the erection and dismantling of scaffolds.

6.0 TRAINING

- 6.1 All new employees will receive appropriate Safe Work Permit Program training prior to the performance of any plant-related tasks.
- 6.2 All contractors are required to be trained in the appropriate Safe work permitting procedures prior to being permitted to do any work on-site.
- 6.3 Fire watches will be trained in incipient fire extinguishing procedures, Plant Emergency Response procedures, and OSHA 29CFR1910.252.
- 6.4 Employees will be re-trained in the Safe Work Permit Program for any updated procedures or whenever changes in job assignment or process equipment and machinery occur.
- 6.5 Retraining will be conducted whenever a periodic inspection reveals that employees are not fully aware of or are not following established procedures or if regulatory requirements change.

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7.0 RECORDKEEPING

- 7.1 Training Specialists will maintain employee training records.
- 7.2 Safe Work Permits will be kept for one week following work completion by each department.
- 7.3 Gas Free Certificates, OSHA Forms 74, and Westlake safe and hot work permits for marine dock work will be maintained by the Shipping Department for three months following work completion.

8.0 REVIEWS

- 8.1 The Westlake Safe Work Permit Program will be reviewed at least every three years. H&S will ensure this review is performed. The purpose is to assess compliance, to ensure that all employees who should be included are, and to evaluate program effectiveness.
- 8.2 The review includes:
 - 8.2.2 The current Safe Work Permit Program
 - 8.2.3 Employee training records
 - 8.2.4 Safe work permit practices;
 - 8.2.5 Employee awareness; and
 - 8.2.6 Contractor awareness.
- 8.3 Following the review, the Safe Work Permit Program will be revised to include any necessary changes. Review results will be documented. All employees will be informed of any changes made to the plan.
- 8.4 Department Managers will be informed of the review results.
- 8.5 SIT will develop corrective action plans and schedules to address any deficiencies documented during reviews.
- 8.6 Corrective action plans will be submitted to H&S.
- 8.7 In the event of a permit work-related incident, an investigation will be conducted following procedures outlined in Westlake, Plaquemine Complex Incident Investigation Program.

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9.0 REFERENCES

American Petroleum Institute (February, 1983). "Safe Maintenance Practices in Refineries," API Publication No. 2007, Washington, D.C.

American Petroleum Institute (August, 1988). "Safe Welding and Cutting Practices in Refineries, Gasoline Plants, and Petrochemical Plants," API Publication No. 2009, Washington, D.C.

Coast Guard, Department of Transportation 33 CFR 126 (September 4, 1990). "Handling of Explosives or Other Dangerous Cargoes within or Contiguous to Water Front Facilities."

National Fire Protection Association (1990). "National Electrical Code - 1990," NEC-1990, Boston, MA.

National Fire Protection Association (1989). "Standard for Fire Prevention in Use of Cutting and Welding Processes," NFPA 51B, Boston, MA.

Occupational Health and Safety Administration's 29 CFR 1910.119 (August 26, 1992). "Process Safety Management of Highly Hazardous Chemicals."

Occupational Safety and Health Administration's 29 CFR 1915.7 (April 20, 1982). "Standards for Shipyard Employment - Competent Person."

Occupational Safety and Health Administration's 29 CFR 1915.11-16 (April 20, 1982). "Standards for Shipyard Employment Subpart B - Explosive and Other Dangerous Atmospheres."

Occupational Health and Safety Administration's 29 CFR 1917.152 (July 5, 1983). "Welding, Cutting and Heating (Hot Work)."

Westlake Tier II procedures

- Control of Hazardous Energy
- Confined Space Entry
- Hot Work

Electrical Safety Procedure ESP - 004

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10.0 APPENDICES

Appendix A - Safe Work Permit

Appendix B - Excavation Permit

Appendix C – Safe Work Permit Step-by-Step Instructions

Appendix D – Safe Work Permit – Site Visitation Exemptions

Revision History

Rev	Changes	Approved	Date
13	<i>Added Revision History Box, updated review date, no content updates</i>	<i>H. Garner</i>	<i>12.08.20</i>
14	<i>Added in definitions "Energized" per ESP – 004, added procedure names to section 5.1, updated sections 5.12 for clarity involving working on Energized Equipment and properly referencing ESP – 004.</i>	<i>H. Garner</i>	<i>09.01.21</i>
15	<i>Added information to meet PEMS minimum standards: Definitions: Process Area & Vehicle</i> <i>Requirement to ensure permits are not issued until MOC is approved where applicable.</i> <i>MOC #: PLQ8.EHSSPSM.123123.77392</i>	<i>H. Garner</i>	<i>05/14/24</i>

APPENDIX A

SAFE WORK PERMIT



Westlake
Chemical

SAFE WORK PERMIT

DATE:	TIME ISSUED:	VALID UNTIL:	Work Order #
Permit Issued To: (e.g.: Axiall, I/E, Turner)			
Description of Work. (Including location of work):			
Equipment Name:		Equipment Number:	
Equipment Service: (List current or previous contents)			
NATURE OF WORK * Additional Permit Required ★ Manager Approval Required			
1 ☐ HOT WORK	5 ☐ REGULAR WORK	8 ☐ HOT TAP *	11 ☐ ENERGIZED EQUIPMENT
2 ☐ COMBUSTION ENGINES	6 ☐ PROCESS OPENING	9 ☐ EXCAVATION *	12 ☐ ENERGIZED EQUIPMENT ★ ★
3 ☐ VEHICLE ENTRY ONLY	7 ☐ CONFINED SPACE ENTRY *	10 ☐ PIPE PLUG USE ★	13 ☐ USCG HOT WORK * (Dock Only)
4 ☐ POWER TOOLS ONLY			14 ☐ MANAGER APPROVAL REQUIRED
PERSONAL PROTECTIVE EQUIPMENT FOR THE NATURE OF WORK (Plant Entry PPE: Escape Respirator, Hard Hat, Safety Glasses)			
☐ Goggles	☐ PVC Boots	☐ Durable Work Gloves	☐ Supplied Air Equipment
☐ Face Shield	☐ Dielectric Boots	☐ Nitrile Gloves	☐ Air Purifying Respirator
☐ Hearing Protection	☐ Safety Harness	☐ Butyl Gloves	☐ Flame Resistant Clothing
☐ _____	☐ _____	☐ Neoprene Gloves	☐ Chemical Slicker Suit
			☐ Tychem SL Suit
			☐ Tychem CPF3 Suit
			☐ See attached PPE Matrix
GENERAL CONSIDERATIONS			
Has equipment been: locked out?	YES	NO*	N/A
Has equipment been: tagged out?			
Has equipment been: tried out?			
Is the isolation/blind list complete and attached?			
Has equipment been: drained?			
Has equipment been: purged?			
Has equipment been: decontaminated?			
Have all blinds been installed?			
Has steam and/or elec. tracing been isolated?			
HOT WORK CONSIDERATIONS ☐ N/A			
Has all combustible material been removed, where practical or covered within 35 feet of work area?			
Have precautions been taken to control sparks?			
Is continuous monitoring required?			
Is a fire extinguisher, water hose or both available?			
Is a fire watch required?			
(A fire watch is required any time sparks are produced that cannot be controlled by the initiator.)			
Is sprinkler system in service?			
YES NO* N/A			
* A CHECK IN A "NO" AREA REQUIRES AN EXPLANATION IN THE COMMENT SECTION			
ATMOSPHERIC MONITORING			
Oxygen/ Flammability reading required? Yes ☐ No ☐	Time	O ₂ 19.5 to 21.5%	LEL = 0%
Instrument Function (bump) tested? Yes ☐ No ☐			Tox
Is Toxic reading required? Yes ☐ No ☐			
Instrument Name, No. & Cal. Date			
Technician Signature			
PROCESS OPENING SECTION			
Line Opening Affected Area: Red barricade perimeter distance _____ Shielding _____			
Process Opening location(s) physically identified: Operation Signature: _____			
Line Opening Field Review: Operations Signature: _____ Time _____			
Crew Leader Signature: _____ Time _____			
Cleared Process Confirmation: Operation Signature: _____ Time _____			
AUTHORIZATION			
DEPARTMENT SUPERVISOR:	Signature: _____	Time: _____	Reissued: _____
AREA OPERATIONS TECHNICIAN:	Signature: _____	Time: _____	Reissued: _____
DEPARTMENT MANAGER:	Signature: _____	Time: _____	Reissued: _____
Comments: (List any special precautions or additional hazards)			
PERMIT RECIPIENT			
PERMIT RECIPIENT:	Signature: _____	Time: _____	Reissued: _____

SAFE WORK PERMIT

PERMIT ACCEPTANCE

I have read and understand the requirements of this safe work permit and agree to follow it fully in the execution of my work. I have surveyed my work area and located the nearest safety shower/eye wash and fire extinguisher. I have applied my personal locks to all required isolation points. I understand that should the scope of my work change, I must return this permit to operations to have it expanded or have a new permit issued.

FIRE WATCH

As the Fire Watch I understand it is my responsibility to:

- Discuss with Operations the hot work area and any special hazards the area may pose.
- Stay alert for fires and their potential.
- Have available the appropriate fire fighting equipment.
- Attempt to extinguish all fires when capable.
- Immediately report all fires to operations.
- Ensure all sources of ignition are extinguished before leaving the job site. (Minimum 30 minutes)

Fire Watch Signature: _____

ADDITIONAL ATMOSPHERIC MONITORING

Time	O ₂ 19.5% to 21.5%	LEL = 0%	Toxic	Instrument Name, No. & Cal. Date	Technician Signature

PERMIT RETURN

NOTE: Immediately following completion of your job or at the end of your work shift, this permit must be returned to axiall operations for closeout.

The area in which my crew conducted work today has been cleaned and has been left in a safe condition.

Is the job Complete ☐ Yes ☐ No Comments: _____

Maintenance/ Contractor Representative:	Signature: _____	Time: _____
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I have inspected the work area and confirm the area has been left in an acceptable condition.

axiall Operations Representative:	Signature: _____	Time: _____
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APPENDIX B

EXCAVATION PERMIT



EXCAVATION PERMIT

Requested By:

Area: _____

Date: _____

Location and Description of Excavation:

REFERENCE DRAWINGS

☐ Grounding	_____	_____	_____
☐ Electrical	_____	_____	_____
☐ Cathodic Protection	_____	_____	_____
☐ Firewater	_____	_____	_____
☐ Drainage	_____	_____	_____
☐ Foundations	_____	_____	_____
☐ Other	_____	_____	_____

DISPOSITION OF EXCAVATED MATERIAL

The following conditions do not require EH&S approval and Waste Manifest:

- ☐ Material to be used as backfill at excavation, stockpiled/spread within battery limits of the Production unit, or stockpiled/spread within immediate vicinity of excavation if in off-site area.

The following conditions require Environmental approval and Waste Manifest:

- ☐ Material to be transported to Westlake land farm, to remain within Westlake property limits in a manner other than described above, or to be removed from Westlake property.

Environmental Approval _____ Date _____

The Excavation Permit is not issued in lieu of, nor does it constitute, a Safe Work Permit. Any excavation work performed in the operating areas must have prior approval of Department Supervision in charge of the area involved. Rules set forth in the Westlake Safety Manual shall be followed at all times.

The Engineering Department requests that the excavator proceed with care and exercise caution at all times while working on this job. Encounter with any obstruction not shown on drawings should be reported immediately to the Engineering Department.

Issued By _____ Approved By _____

APPENDIX C

Safe Work Permit Step-by-Step Instructions



Westlake
Chemical

SAFE WORK PERMIT

DATE: **1** TIME ISSUED: **2** VALID UNTIL: **3** Work Order # **4**

Permit Issued To: (e.g.; Axiall, I/E, Turner) **5**

Description of Work. (Including location of work):

6

Equipment Name: **7**

Equipment Number: **8**

Equipment Service: (List current or previous contents) **9**

NATURE OF WORK

* Additional Permit Required

★ Manager Approval Required

- | | | | |
|---|---|---|---|
| 1 ☐ HOT WORK | 5 ☐ REGULAR WORK | 10 HOT TAP * | 11 ☐ ENERGIZED EQUIPMENT |
| 2 ☐ COMBUSTION ENGINES | 6 ☐ PROCESS OPENING | EXCAVATION * | 12 ☐ ENERGIZED EQUIPMENT * ★ |
| 3 ☐ VEHICLE ENTRY ONLY | 7 ☐ CONFINED SPACE ENTRY * | 10 ☐ PIPE PLUG USE ★ | 13 ☐ USCG HOT WORK * (Dock Only) |
| 4 ☐ POWER TOOLS ONLY | | | 14 ☐ MANAGER APPROVAL REQUIRED |

PERSONAL PROTECTIVE EQUIPMENT FOR THE NATURE OF WORK (Plant Entry PPE: Escape Respirator, Hard Hat, Safety Glasses)

- | | | | | |
|---|---|--|---|--|
| ☐ Goggles | ☐ PVC Boots | ☐ Durable Work Gloves | ☐ Supplied Air Equipment | ☐ Chemical Slicker Suit |
| ☐ Face Shield | ☐ Dielectric Boots | ☐ Nitrile Gloves | ☐ Air Purifying Respirator | ☐ Tychem SL Suit |
| ☐ Hearing Protection | ☐ Safety Harness | ☐ Butyl Gloves | ☐ Flame Resistant Clothing | ☐ Tychem CPF3 Suit |
| ☐ | ☐ | ☐ Neoprene Gloves | ☐ | ☐ See attached PPE Matrix |

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GENERAL CONSIDERATIONS			HOT WORK CONSIDERATIONS					
YES	NO*	N/A	YES	NO*	N/A	YES	NO*	N/A
			Has equipment been: locked out?			Has all combustible material been removed, where practical or covered within 35 feet of work area?		
			tagged out?			Have precautions been taken to control sparks?		
			Lockbox Number: tried out?			Is continuous monitoring required?		
			Is the isolation/blind list complete and attached?			Is a fire extinguisher, water hose or both available?		
			Has equipment been: drained?			Is a fire watch required?		
			purged?			(A fire watch is required any time sparks are produced that cannot be controlled by the initiator.)		
			decontaminated?			Is sprinkler system in service?		
			Have all blinds been installed?					
			Has steam and/or elec. tracing been isolated?					

* A CHECK IN A "NO" AREA REQUIRES AN EXPLANATION IN THE COMMENT SECTION

ATMOSPHERIC MONITORING

Oxygen/ Flammability reading required? Yes ☐ No ☐	Time	O ₂ 19.5 to 21.5%	LEL = 0%	Tox	Instrument Name, No. & Cal. Date	Technician Signature
Instrument Function (bump) tested? Yes ☐ No ☐					14	
Is Toxic reading required? Yes ☐ No ☐						

PROCESS OPENING SECTION

Line Opening Affected Area: Red barricade perimeter distance _____ Shielding _____

Process Opening location(s) physically identified: Operation Signature: _____

Line Opening Field Review: Operations Signature: _____ Time _____

Crew Leader Signature: **15** Time _____

Cleared Process Confirmation: Operation Signature: _____ Time _____

Revalidation	
Intl. _____	Time _____
Intl. _____	Time _____

AUTHORIZATION

DEPARTMENT SUPERVISOR:	Signature: _____	Time: _____	Reissued: _____
AREA OPERATIONS TECHNICIAN:	Signature: _____	Time: _____	Reissued: _____
DEPARTMENT MANAGER:	Signature: _____	Time: _____	Reissued: _____

Comments: (List any special precautions or additional hazards)

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PERMIT RECIPIENT

PERMIT RECIPIENT:	Signature: _____	Time: _____	Reissued: _____
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Front Side of Safe Work Permit Checklist

1. Date of Work
2. Time work starts.
3. Maintenance actual stopping time.
4. Work Order number or N/A.
5. Circle or write if necessary.
6. Be as specific and descriptive as possible.
7. Name of what is being worked on.
8. If no number is available write N/A.
9. When filling this section out remember to list any previous contents even though decontamination has taken place.
10. Item 10 includes working on or near exposed electrical systems. If this occurs, then an electrical Safe Work Permit is required – issued by the Maintenance Electrical Department (ESP-004).
11. Check all appropriate boxes for the job. Explain the type of protective equipment.
12. Each box should be checked individually. No straight lines drawn vertically.
13. Each box should be checked individually. No straight lines drawn vertically.
14. Write which toxicity test was run. Must have at least the full last name in the technician signature block – not just initials.
 - a. Entries must be legible (print if necessary).
 - b. Signature must include last name. (First initial OK, but must spell out your last name).
15. This section is dedicated to Process Opening. It allows for documentation of barricaded area, identification of process opening points, Line Opening Field Review and the CPC.
16. These two signatures can be the same individual if manpower is an issue. Otherwise different individuals should sign.
 - a. Entries must be legible (print if necessary).
 - b. Signature must include last name. (You may have first initial but must spell out your last name).
 - c. Area Operations signature must be completed in the field only after all job details and job walk down has been communicated and performed.
17. Comment section is to explain the reason for picking "no" in the "General or Hot Work Considerations" sections of the permit.
18. This space is for the signature of the Permit Recipient (Crew Leader in most cases) and the time the permit was received.
19. Safe Work Permit Checklist – Back Side of Permit

SAFE WORK PERMIT

PERMIT ACCEPTANCE

I have read and understand the requirements of this safe work permit and agree to follow it fully in the execution of my work. I have surveyed my work area and located the nearest safety shower/eye wash and fire extinguisher. I have applied my personal locks to all required isolation points. I understand that should the scope of my work change, I must return this permit to operations to have it expanded or have a new permit issued.

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FIRE WATCH

As the Fire Watch I understand it is my responsibility to:

- Discuss with Operations the hot work area and any special hazards the area may pose.
- Stay alert for fires and their potential.
- Have available the appropriate fire fighting equipment.
- Attempt to extinguish all fires when capable.
- Immediately report all fires to operations.
- Ensure all sources of ignition are extinguished before leaving the job site. (Minimum 30 minutes)

20

Fire Watch Signature:

ADDITIONAL ATMOSPHERIC MONITORING

Time	O ₂ 19.5% to 21.5%	LEL = 0%	Toxic	Instrument Name, No. & Cal. Date	Technician Signature

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PERMIT RETURN

NOTE: Immediately following completion of your job or at the end of your work shift, this permit must be returned to axial operations for closeout.

The area in which my crew conducted work today has been cleaned and has been left in a safe condition.

Is the job Complete ☐ Yes ☐ No Comments:

22

Maintenance/ Contractor Representative: Signature:

Time:

I have inspected the work area and confirm the area has been left in an acceptable condition

23

axial Operations Representative: Signature:

Time:

BACK SIDE OF SAFE WORK PERMIT

- 19.** Must have signatures of all workers and in a legible fashion. [Print name if necessary to be legible]
- 20.** Fire watch must continue to monitor for 30 minutes after the last spark has been made.
- 21.** This area for additional monitoring if needed. If used remember to write down specific toxicity test that was used.
- 22.** This is very important to get the proper exchange between operations and maintenance to understand the status of the equipment or job that was performed. Signature in this box says that area is clean and safe condition, additionally a yes or no needs to be checked. If no is checked an explanation must be explained in the comments section.
- 23.** Remember that once you sign here you have accepted the job and area are in pre-work condition. This needs to be done in the field.

HSP-200 APPENDIX D

Work Permit Site Visitation Exemptions

HSP-200 APPENDIX D

Work Permit Site Visitation Exemptions

The following tasks have been determined to be of such a nature that they may not require visiting the job site for the Safe Work Permit to be issued. This list does not exempt any job from the procedure of issuing/obtaining a Safe Work Permit. However, the steps of visiting the job site and performing a pre-job meeting may be excluded.

All parties concerned must clearly communicate and understand exactly what job is to be done and on which equipment. If there is any question whatsoever, visitation must be made. The exemptions are only allowed when all parties concerned feel there is no risk.

NOTE: These visitation exceptions do not preclude responsibility for ensuring job safety.

Possible Exemptions to Safe Work Permit Site Visitation and Permit Pre-Job Meeting Requirement

- Instrumentation Work by Westlake employees (visual inspection, checks, calibrations)
- Analyzer Maintenance, including sample systems by Westlake employees
- LDAR Checks
- HVAC Work on Comfort Air
- Grass Cutting
- Grass and Weed Spraying
- Bug Spraying
- Condition Monitoring Rounds (pumps, compressors, motors)
- UT Thickness Measurements (SEI) (pumps, compressors, motors)
- Visual Inspections (pumps, compressors, motors)
- Electrical (visual inspections, motor control center work, power distribution work, non-operator lockout work)
- Wildlife Control
- Phone Repair
- Engineering, Maintenance, Drafting surveys
- Control Room maintenance work
- Monitor well check
- Cathodic Protection Checks
- Changing Light Bulbs
- Maintenance IRD Readings
- Oilers functions
- Rail Road
 - Permits
 - Track Repair and Inspection
 - Locomotive PM
 - Scales PM
 - Tank Car Repair