

# TZERO LABS

Oil & Gas Testing | Inspection Coordination | Petroleum Product Verification

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## HSE Policy Statement & Safe Work Practices Manual

Health, Safety & Environmental Standards for Field Inspection and Laboratory  
Operations

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# TZERO LABS

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## HSE Policy Statement & Safe Work Practices Manual

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CLASSIFICATION	DEPARTMENT	APPROVED BY	EFFECTIVE DATE
CONFIDENTIAL	Health, Safety & Environment	Chief Executive Officer	January 1, 2025

*"Safety is not a priority — it is a core value."*

### TABLE OF CONTENTS

- 01 HSE Policy Statement
- 02 CEO Commitment Letter
- 03 Health, Safety & Environmental Objectives
- 04 Regulatory Compliance Commitment
- 05 Risk Management Framework
- 06 Roles and Responsibilities
  - 6.1 Board of Directors
  - 6.2 Senior Management / CEO
  - 6.3 Supervisors & Site Managers
  - 6.4 Employees
  - 6.5 Contractors & Sub-Contractors
- 07 Safe Work Practices
  - 7.1 Field Inspection & Tank Access Activities
  - 7.2 Petroleum Sampling Procedures
  - 7.3 Laboratory Safety
  - 7.4 Maintenance of Inspection Equipment
  - 7.5 Emergency Response — Initial Actions
- 08 Incident Reporting Procedures
- 09 Emergency Preparedness Plan
- 10 Continuous Improvement Program
- 11 Document Approval & Signature Page

## 01 HSE POLICY STATEMENT

Tzero Labs is committed to conducting all oil and gas testing, inspection coordination, dip testing, petroleum product verification, and laboratory field service activities in a manner that safeguards the health, safety, and wellbeing of every person involved — employees, contractors, field inspection personnel, laboratory staff, visiting clients, and the communities near the port facilities, storage terminals, and industrial sites in which we operate.

Our environmental stewardship commitment drives us to minimise the ecological impact of our operations, including the responsible handling and disposal of petroleum samples, chemical reagents, and all materials associated with our field and laboratory activities.

This Health, Safety & Environmental (HSE) Policy applies to all Tzero Labs office facilities, field operations, inspection assignments, tank access activities, laboratory support engagements, and supply chain activities without exception. It is reviewed annually and updated to reflect current legislation, industry best practice, and operational experience.

### EXECUTIVE SUMMARY

Tzero Labs' HSE Management System is structured around five core pillars: **Leadership Commitment, Risk Elimination, Legal Compliance, Employee Empowerment, and Continuous Improvement**. This manual establishes the binding policy framework, responsibilities, and safe work procedures that govern all company operations — including field inspection at petroleum terminals, dip test coordination, product sampling at storage tanks, laboratory support activities, and port-based cargo verification services. Zero harm is our goal. Every incident is preventable.

#### Tzero Labs HSE Core Commitment Pillars:

ZERO HARM | LEGAL COMPLIANCE | ENVIRONMENTAL STEWARDSHIP | RISK REDUCTION | CONTINUOUS IMPROVEMENT

*Figure 1: Tzero Labs HSE Core Commitment Pillars*

## 02 CEO COMMITMENT LETTER

To All Employees, Contractors, Inspection Partners, and Stakeholders of Tzero Labs,

At Tzero Labs, we work in environments where the consequences of safety failures can be serious. Our field personnel operate at petroleum storage terminals, port facilities, marine vessel decks, and inside confined tank environments. Our laboratory support staff handle petroleum samples, chemical reagents, and testing materials that require careful and responsible management. In these environments, safety is not a procedural checkbox — it is the foundation of everything we do.

Every person who works with or for Tzero Labs — whether as a full-time employee, contracted inspector, laboratory partner, or field representative — deserves to return home safely at the end of each working day. This is not a regulatory statement. It is a commitment that I take personally and that I hold every member of this organisation accountable to uphold.

As Chief Executive Officer, I commit to providing the leadership, resources, and organisational culture needed to achieve and sustain the highest standards of Health, Safety, and Environmental performance across all our operations. Commercial pressures, assignment deadlines, and business targets will never justify placing our people at risk. Where safety and productivity conflict, safety prevails — always.

I direct all levels of management, field supervision, and inspection coordination to treat HSE performance as a non-negotiable priority — equal in importance to client service, technical quality, and operational efficiency.

This manual is the foundation of that commitment. I ask every member of our team to read it, understand it, and actively apply its principles in every assignment they undertake.

\_\_\_\_\_  
 Chief Executive Officer HSE Director

Tzero Labs Tzero Labs

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

### 03 HEALTH, SAFETY & ENVIRONMENTAL OBJECTIVES

Tzero Labs sets measurable annual HSE objectives aligned to the nature of our operations — including field inspection at petroleum terminals, tank access coordination, product sampling, and laboratory field support. Objectives are tracked quarterly by the HSE Director and reported to the Board.

Objective	KPI	Target 2025	Owner
Zero Lost-Time Injuries	LTIFR	0.00	HSE Director
Zero Environmental Incidents at Field Sites	Spill/Release Events	0	Operations Manager
Near-Miss Reporting	Near-Miss Reports Submitted	≥ 95% reported	All Field Supervisors
HSE Training Completion	% Staff & Contractors Trained	100%	HR / HSE
Tank Access Safety Compliance	PTW Compliance Rate	100%	Field Supervisors
Contractor HSE Audits	Audits Completed	4 per year	HSE Officer
Emergency Drill Frequency	Drills Conducted	2 per site/year	Site Supervisor
Laboratory Safety Inspections	Inspections Completed	Monthly	HSE Officer

### 04 REGULATORY COMPLIANCE COMMITMENT

Tzero Labs is committed to full compliance with all applicable health, safety, and environmental legislation, regulations, codes of practice, and industry standards in every jurisdiction in which we operate. Our compliance framework includes, but is not limited to:

#### International Standards

ISO 45001:2018 – Occupational Health & Safety Management Systems; ISO 14001:2015 – Environmental Management Systems; ILO OSH 2001 Guidelines; API standards relevant to petroleum measurement, sampling, and inspection.

#### US Federal & State Legislation

OSHA 29 CFR 1910 (General Industry); OSHA 29 CFR 1926 (Construction Safety where applicable); EPA hazardous materials and waste management regulations; US DOT regulations for the transport of petroleum samples and hazardous materials; applicable state-level occupational safety and environmental protection laws.

**Industry Codes of Practice**

NFPA 30 – Flammable and Combustible Liquids Code; NFPA 70E – Electrical Safety in the Workplace; API MPMS (Manual of Petroleum Measurement Standards) relevant chapters; ASTM standards for petroleum sampling and testing; ISGOTT (International Safety Guide for Oil Tankers and Terminals) for marine-based inspection activities.

**Client & Contractual Requirements**

All HSE clauses within client service agreements and project-specific HSE plans that meet or exceed baseline statutory requirements.

**05 RISK MANAGEMENT FRAMEWORK**

Tzero Labs employs a systematic five-step risk management process in accordance with ISO 45001 and ISO 31000. All significant hazards associated with petroleum inspection, dip test coordination, tank access, product sampling, and laboratory activities are assessed prior to commencing work using a Job Hazard Analysis (JHA) or Risk Assessment methodology.

**Step 1 — HAZARD IDENTIFICATION**

Identify all potential sources of harm in the work environment — including flammable atmospheres, confined tank spaces, slippery surfaces at terminal facilities, toxic vapour exposure, and petroleum product contact hazards.

**Step 2 — RISK ASSESSMENT**

Evaluate the likelihood and consequence of identified hazards using the Tzero Labs 5x5 Risk Matrix.

**Step 3 — CONTROL MEASURES**

Apply the Hierarchy of Controls: Eliminate → Substitute → Engineer → Administrative → PPE.

**Step 4 — IMPLEMENTATION**

Assign responsibility and timeline for all control actions. Communicate requirements to all field personnel and contractors before work commences.

**Step 5 — REVIEW & MONITOR**

Verify the effectiveness of controls. Update risk assessments following any incident, near-miss, change in work scope, or new site conditions.

**RISK ASSESSMENT MATRIX (Likelihood × Consequence)**

	Rare (1)	Unlikely (2)	Possible (3)	Likely (4)	Almost Certain (5)
Catastrophic (5)	5	10	15	20	25
Major (4)	4	8	12	16	20
Moderate (3)	3	6	9	12	15

Minor (2)	2	4	6	8	10
Insignificant (1)	1	2	3	4	5

**EXTREME (15–25) | HIGH (8–14) | MEDIUM (4–7) | LOW (1–3)**

Figure 2: Tzero Labs 5x5 Risk Assessment Matrix

##

## 06 ROLES AND RESPONSIBILITIES

Clear accountability across all levels of the organization is essential to maintaining a safe, compliant, and effective HSE culture. The following responsibilities apply to all personnel involved in Tzero Labs operations.

### 6.1 Board of Directors

The Board of Directors holds ultimate governance responsibility for HSE performance at Tzero Labs. Specifically, the Board shall:

- Approve the HSE Policy Statement and ensure it reflects the company's values and legal obligations
- Receive periodic HSE performance reports from senior management, including incident summaries and leading indicator data
- Ensure sufficient financial and human resources are allocated to support HSE program implementation
- Hold senior management accountable for achieving HSE objectives and KPI targets
- Ensure HSE risks are considered within the company's overall enterprise risk management framework

### 6.2 Chief Executive Officer / Senior Management

The CEO and senior leadership team are responsible for translating HSE policy commitments into operational practice. Their responsibilities include:

- Championing HSE culture through visible leadership and personal compliance with all safe work requirements
- Appointing a designated HSE Lead with appropriate authority, resources, and access to management
- Ensuring HSE objectives are integrated into annual planning and budget cycles
- Reviewing HSE performance data quarterly and directing corrective action where targets are not met
- Approving all significant changes to HSE procedures, risk assessments, or emergency response plans
- Communicating openly with clients, regulators, and stakeholders on HSE matters when required

### 6.3 HSE Lead / Designated Safety Officer

The HSE Lead coordinates the day-to-day implementation of this manual and serves as the primary technical resource for HSE matters. Responsibilities include:

- Maintaining, reviewing, and updating this manual and all supporting HSE documents at defined intervals
- Conducting or coordinating site risk assessments for field inspection activities, tank access operations, and laboratory environments
- Reviewing and approving Permit to Work (PTW) documentation for high-risk field activities
- Investigating incidents, near-misses, and unsafe conditions; preparing written reports with root cause analysis
- Delivering or arranging HSE induction and refresher training for all personnel

- Monitoring regulatory developments and ensuring Tzero Labs remains compliant with applicable OSHA, EPA, and industry standards
- Coordinating with terminal operators and port facility HSE representatives before field assignments commence

#### **6.4 Supervisors and Site Managers**

Supervisors and Site Managers are responsible for HSE implementation at the point of work — field sites, terminal facilities, port locations, and laboratory environments. They shall:

- Conduct pre-task briefings (toolbox talks) before field inspection, dip testing, and sampling activities commence
- Verify that all personnel under their supervision hold valid task-specific training and certifications before work begins
- Ensure required PPE is available, serviceable, and being worn correctly
- Confirm that Permit to Work documentation has been issued by the facility operator before entering confined spaces or restricted terminal areas
- Immediately halt any work activity identified as presenting an unacceptable risk
- Ensure incidents and near-misses are reported promptly and accurately within the timeframes set out in Section 08
- Maintain records of attendance at toolbox talks and pre-task briefings

#### **6.5 Employees and Field Inspectors**

All Tzero Labs employees bear personal responsibility for their own safety and the safety of those around them. Each employee and field inspector is required to:

- Comply fully with all applicable procedures in this manual and any supplementary site-specific instructions issued by a facility operator
- Wear all specified PPE at all times in designated areas — no exceptions
- Refuse to enter a confined tank space, board a vessel, or conduct sampling activities without a valid Permit to Work issued by the appropriate facility authority
- Report all incidents, near-misses, unsafe conditions, and equipment defects immediately to their supervisor or the HSE Lead
- Attend all HSE training, inductions, and toolbox talks as required
- Never undertake tasks for which they have not received adequate training or authorization
- Co-operate fully with any HSE inspection, audit, or incident investigation

#### **6.6 Contractors and Sub-Contractors**

Where Tzero Labs engages third-party contractors or sub-contractors to support its operations, those contractors are required to:

- Comply with all requirements of this manual as a minimum standard, and additionally comply with the HSE requirements of any facility at which they are working
- Provide evidence of relevant HSE certifications, qualifications, and insurance prior to commencing work
- Participate in site inductions and toolbox talks as directed by the Tzero Labs supervisor on site
- Report all incidents and near-misses to the Tzero Labs supervisor immediately
- Ensure their personnel are adequately supervised, equipped, and trained for the tasks assigned

Tzero Labs reserves the right to remove any contractor from a field assignment for failure to comply with HSE requirements.

## 07 SAFE WORK PRACTICES

This section establishes the minimum required safe work practices for the principal activities carried out by Tzero Labs personnel. These practices are mandatory. Supervisors are responsible for ensuring that field inspectors and laboratory personnel understand and follow these requirements before commencing any assigned task.

### 7.1 Field Inspection and Tank Access Activities

Field inspection at petroleum terminals, tank farms, storage facilities, and marine vessel berths represents the highest-risk operational environment in which Tzero Labs personnel work. The following requirements apply without exception.

#### Pre-Mobilization Requirements

Before departing for any field assignment, the assigned inspector shall confirm:

- The identity of the terminal or facility HSE contact and emergency response procedures for that site
- That a valid Permit to Work (PTW) will be issued by the facility before any tank access or confined space entry takes place
- That appropriate PPE for the specific product and environment has been prepared and is in serviceable condition
- That the inspector holds current training relevant to the activity (confined space awareness, gas testing procedures, H<sub>2</sub>S awareness as applicable)
- That communication arrangements are confirmed — inspectors working alone at terminals must have a check-in schedule with a designated contact

#### At the Facility

- Comply with all site-specific rules, induction requirements, and access procedures of the terminal or facility operator without exception
- Never enter a storage tank, cargo tank, or any confined space without a valid PTW issued by the facility and confirmed gas-free clearance by a qualified gas tester using calibrated equipment
- Confirm atmospheric testing results (oxygen level, flammable gas concentration, toxic vapour levels) before entering any enclosed or semi-enclosed space
- Maintain continuous communication with the standby person throughout any confined space entry
- Never work alone during tank access activities — a minimum of two personnel must be present, with one remaining outside as standby

#### Environmental Awareness at Terminal Sites

- Be alert to slip, trip, and fall hazards on terminal walkways, tank roofs, vessel decks, and jetty structures — use handrails and designated access routes at all times
- Be aware of vehicle and equipment movement in terminal areas — remain in designated pedestrian zones when not actively working
- Monitor weather conditions; suspend outdoor height-related activities in high winds or electrical storms

### 7.2 Petroleum Sampling Procedures

Petroleum product sampling is a core activity of Tzero Labs field inspectors. Sampling must be conducted in strict compliance with applicable API MPMS standards, ASTM procedures, and any facility-specific sampling protocols.

#### General Sampling Safety

- Wear the full PPE set specified for petroleum sampling at all times during sampling activities: chemical-resistant gloves, safety glasses or face shield (as appropriate to product type), flame-resistant or antistatic clothing, and safety boots
- Ensure sampling equipment is clean, dry, serviceable, and approved for use with the specific petroleum product being sampled
- Never use improvised or uncertified sampling equipment
- Do not smoke, use open flames, or operate non-intrinsically-safe electronic devices in the vicinity of open tanks, open sample containers, or flammable vapour zones

#### **Electrostatic and Flammable Atmosphere Precautions**

- Observe mandatory relaxation times before lowering sampling equipment into tanks containing distillate or other static-accumulating petroleum products, in accordance with API MPMS Chapter 8.1
- Use only electrically bonded, antistatic sampling equipment and lines
- Bond all metallic sampling equipment to the tank or vessel structure before commencing sampling operations
- Do not conduct sampling during active loading or discharge operations unless specifically authorized by the facility operator with appropriate safety provisions confirmed

#### **Sample Handling and Labeling**

- Transfer samples immediately into correctly labelled, sealed containers using appropriate sample handling equipment
- Never re-use sample containers that have not been properly cleaned and certified
- Store samples in designated, ventilated, and correctly rated storage areas — never in vehicles, offices, or unventilated spaces
- Complete all chain-of-custody documentation at the point of sampling; do not leave labeling or documentation for later

### **7.3 Laboratory Safety**

Where Tzero Labs personnel work in laboratory environments — whether at a client laboratory, accredited testing facility, or a Tzero Labs-operated workspace — the following safety practices apply.

#### **General Laboratory Conduct**

- Follow all laboratory-specific rules, posted safety instructions, and the directions of laboratory supervisory personnel at all times
- Wear mandatory PPE throughout laboratory activities: lab coat, chemical-resistant gloves, and safety glasses as a minimum; upgrade to face shield and chemical-resistant apron when handling concentrated reagents or petroleum products with significant vapour pressure
- Keep laboratory workspaces clean, organized, and free of unnecessary materials that could create hazards
- Never eat, drink, or handle personal items in the laboratory working area
- Familiarize yourself with the location and operation of safety equipment at each laboratory facility: eyewash stations, safety showers, fire extinguishers, spill kits, and emergency exits

#### **Chemical and Reagent Handling**

- Consult the applicable Safety Data Sheet (SDS) before handling any chemical reagent or petroleum product for the first time or after an absence from laboratory work
- Use the minimum quantity of reagent necessary to complete the test procedure
- Handle flammable and volatile petroleum samples only within fume hoods or designated ventilated areas

- Never pipette by mouth; use mechanical pipetting aids at all times
- Label all containers, intermediate vessels, and waste receptacles clearly and immediately upon filling

### **Waste Management**

- Segregate laboratory waste at the point of generation: petroleum-contaminated waste, chemical waste, sharps, and general waste must be placed in the correct, labelled containers
- Dispose of petroleum sample waste, chemical reagent waste, and contaminated materials through licensed waste disposal channels only — refer to Section 10 for waste disposal recording requirements
- Report any spillage immediately, apply appropriate spill control materials from the spill kit, and notify the laboratory supervisor

## **7.4 Maintenance of Inspection Equipment**

Tzero Labs inspection equipment — gauging tapes, thermometers, sampling devices, flow meters, gas detectors, and associated calibration instruments — must be maintained in reliable, calibrated condition. Faulty equipment introduces both safety risk and integrity risk to inspection results.

### **Routine Maintenance**

- Inspect all field equipment before each field assignment; do not deploy equipment that is damaged, overdue for calibration, or showing signs of malfunction
- Clean and dry all sampling equipment thoroughly after each use, following the cleaning procedure appropriate to the last product sampled
- Store equipment in designated cases or storage areas; do not leave equipment loose in vehicles or exposed to environmental extremes
- Record all equipment checks, cleaning, and calibration events in the equipment maintenance log

### **Calibration Management**

- All measurement instruments used in inspection activities — gauging tapes, thermometers, density meters, and gas detectors — must be calibrated at the intervals specified by the manufacturer and by applicable API MPMS or ASTM standards
- Calibration must be performed by an accredited calibration provider or within an accredited laboratory; field calibration workarounds are not acceptable as a substitute for formal recertification
- Instruments that fail calibration must be immediately removed from service and labelled "OUT OF SERVICE — DO NOT USE" until formally recertified or replaced
- Gas detectors used for confined space pre-entry checks must be bump-tested against certified reference gas before each field deployment

### **Defect Reporting**

- Any equipment defect, calibration failure, or suspected malfunction must be reported to the supervising inspector or HSE Lead on the same day it is identified
- Do not attempt field repairs on calibrated instruments — return to the equipment custodian for assessment and authorized repair

## **7.5 Emergency Response — Initial Actions**

In the event of any emergency at a field location — including a petroleum product spill, fire, explosion, toxic vapour release, personal injury, or medical emergency — the following immediate actions apply.

### **STOP — ALERT — EVACUATE — REPORT**

1. **STOP** all work activities in the affected area immediately

2. **ALERT** personnel in the immediate vicinity using the facility's alarm system or by direct verbal warning
3. **EVACUATE** to the designated muster point for the facility, following the facility's evacuation routes — do not use elevators; do not return for personal belongings
4. **REPORT** — call the facility emergency number and, as soon as safe to do so, notify the Tzero Labs supervisor or HSE Lead

Do not attempt to fight a petroleum or chemical fire beyond incipient stage unless you have received specific firefighting training and the appropriate equipment is immediately available. Your primary responsibility is to evacuate safely and account for all personnel.

Await instructions from the facility emergency response team or emergency services before re-entering any area affected by a spill, fire, or toxic vapour release.

Full emergency response procedures, including Tzero Labs-specific contact numbers and communication protocols, are set out in Section 09 of this manual.

## 08 INCIDENT REPORTING PROCEDURES

Tzero Labs requires that all workplace incidents — including injuries, illnesses, near-misses, property damage, environmental releases, and dangerous occurrences — are reported promptly and accurately. Incident reporting is not a punitive process. It is a critical mechanism for identifying hazards, preventing recurrence, and fulfilling regulatory obligations.

### 8.1 Definitions

Term	Definition
<b>Fatality</b>	Work-related death of any employee, contractor, or visitor
<b>Serious Injury</b>	Any injury requiring hospitalization, resulting in loss of consciousness, or causing permanent impairment
<b>Recordable Injury</b>	Work-related injury or illness meeting OSHA 300 Log recording criteria
<b>First Aid Case</b>	Minor injury treated on site without further medical referral
<b>Near-Miss</b>	An event that had the potential to cause injury or damage but did not — including uncontrolled releases of petroleum product that were contained without harm
<b>Dangerous Occurrence</b>	A significant failure of equipment, process, or control that could have resulted in serious harm — including gas detector failures on entry to confined spaces, structural failures at terminal access points, or significant product spills regardless of injury outcome
<b>Environmental Incident</b>	Any unplanned release of petroleum product, chemical reagent, or waste material into the environment

## 8.2 Reporting Timelines

Incident Type	Report to Supervisor	Report to HSE Lead	Regulatory Notification
Fatality	Immediately	Immediately	Within 8 hours (OSHA)
Serious Injury / Hospitalization	Immediately	Within 1 hour	Within 24 hours (OSHA)
Recordable Injury	Same shift	Within 4 hours	As applicable
Near-Miss / Dangerous Occurrence	Same shift	Within 24 hours	As applicable
Environmental Incident	Immediately	Within 2 hours	Per EPA/state requirements
First Aid Case	Same shift	Within 48 hours	Not required

Personnel shall not wait to report an incident until the end of a field assignment if an earlier opportunity to report is available.

## 8.3 Reporting Process

**Step 1 — Secure the scene.** Where an incident has occurred, the immediate priority is personnel safety. Secure the area to prevent further injury or escalation. Do not disturb evidence unless required to prevent further harm or to provide medical assistance.

**Step 2 — Notify your supervisor.** The assigned supervisor must be notified by telephone or direct communication at the earliest practicable moment. If the supervisor is unavailable, notify the HSE Lead directly.

**Step 3 — Provide first aid or emergency response.** Call emergency services if required. Accompany injured personnel to medical care where appropriate.

**Step 4 — Complete the Incident Report Form.** The reporting person (or supervisor, where the reporting person is incapacitated) must complete the Tzero Labs Incident Report Form within 24 hours of the incident. The form captures: date, time, and location; names of all personnel involved and witnesses; description of the event; immediate causes; equipment and materials involved; injuries or damage sustained; immediate actions taken.

**Step 5 — Preserve records.** Retain photographs, equipment logs, gas test records, PTW documentation, and any other records relevant to the incident. These must be submitted to the HSE Lead as supporting documentation.

## 8.4 Incident Investigation

The HSE Lead shall lead or commission a formal investigation for all incidents classified as Serious Injury, Dangerous Occurrence, or Environmental Incident, and for any near-miss assessed as high-potential.

Investigations shall follow a structured root cause analysis methodology to identify:

- The immediate cause (what happened)
- The underlying or systemic cause (why the conditions existed)
- Any management system failures that permitted the conditions to arise

Investigation reports shall include documented corrective actions with assigned owners and completion deadlines. Corrective action completion shall be tracked and verified by the HSE Lead. Lessons learned shall be shared with all relevant personnel through toolbox talks or written safety alerts, without disclosing personal identifying information about injured parties where avoidable.

## **09 EMERGENCY PREPAREDNESS PLAN**

### **9.1 Overview**

Tzero Labs field personnel operate in environments that carry inherent emergency risks: petroleum terminals with flammable product inventories, marine vessel berths, confined spaces with potential for oxygen depletion and toxic vapour accumulation, and active port environments with heavy equipment and vessel movements. This section establishes the minimum preparedness requirements for Tzero Labs personnel assigned to these environments.

Tzero Labs does not operate emergency response infrastructure at client sites. The primary emergency response capability at any terminal, tank farm, or port facility rests with that facility's own emergency response team and local emergency services. Tzero Labs personnel must therefore be familiar with each facility's emergency arrangements before commencing work, and must integrate their personal emergency response actions with the facility's existing plans.

### **9.2 Pre-Assignment Emergency Preparedness**

Before commencing any field assignment, the assigned inspector shall obtain and confirm the following from the facility operator or Tzero Labs site coordinator:

- The facility emergency contact number and the name of the facility HSE or emergency response coordinator
- The location of muster points, emergency exits, and assembly areas for the work zone
- The facility alarm signals and what each signal requires personnel to do
- The location of the nearest first aid station, eyewash, and safety shower relative to the planned work area
- Any facility-specific emergency procedures relevant to the planned activities (e.g., terminal evacuation procedures, vessel abandon-ship procedures, confined space rescue protocols)

This information must be recorded on the pre-assignment checklist and confirmed as received before departure.

### **9.3 Emergency Scenarios and Response Guidance**

#### ***Petroleum Product Spill***

##### **Immediate Actions:**

- Alert all personnel in the immediate area
- Eliminate ignition sources where it is safe to do so (extinguish open flames, shut down non-intrinsically safe equipment)
- If the spill is minor and can be safely contained using available spill kit materials without risk to personnel — contain it; if in doubt, evacuate first
- Activate the facility emergency response system and notify the facility HSE contact
- Do not attempt to recover spilled product
- Notify the Tzero Labs HSE Lead as soon as safe to do so

### ***Fire or Explosion at Terminal or Vessel***

#### **Immediate Actions:**

- Activate the nearest facility fire alarm
- Evacuate the area immediately via the designated escape route to the facility muster point
- Do not use elevators; do not re-enter affected areas
- Call local emergency services (911) if not already activated by the facility
- Account for all Tzero Labs personnel at the muster point and report to the facility emergency coordinator
- Notify the Tzero Labs HSE Lead once at a safe location

Do not attempt to fight petroleum or chemical fires except with a portable extinguisher on an incipient-stage fire and only if trained to do so. Personnel safety takes absolute precedence over property protection.

### ***Toxic Vapour or H<sub>2</sub>S Exposure***

#### **Immediate Actions:**

- If a gas alarm activates or personnel detect unusual odours or experience symptoms (headache, dizziness, eye irritation) — evacuate upwind immediately
- Do not attempt rescue of a collapsed person in a vapour atmosphere without confirmed use of SCBA by trained rescue personnel — many fatal incidents in the industry have resulted from would-be rescuers entering lethal atmospheres
- Activate the facility alarm system; call 911 and request hazmat response
- Move all personnel to the designated upwind muster point
- Provide first aid as trained (fresh air, rescue breathing if trained and safe) to any affected personnel once they are clear of the hazard zone
- Notify Tzero Labs HSE Lead

### ***Personal Injury or Medical Emergency***

#### **Immediate Actions:**

- Call 911 and request emergency medical assistance
- Apply first aid within the limits of your training — do not move an injured person unnecessarily
- Notify the facility HSE contact and the Tzero Labs supervisor or HSE Lead
- Remain with the injured person until emergency services arrive
- Preserve the scene for investigation purposes

### ***Confined Space Emergency***

#### **Immediate Actions:**

- The standby person outside the confined space must immediately activate the facility emergency alarm and call for rescue — do not enter the confined space without appropriate rescue equipment and training
- Contact the facility's confined space rescue team
- Maintain communication with any conscious person inside the space from outside the entry point
- Provide the emergency responders with all available information: nature of the space, product type, last atmospheric readings, number of persons inside, time of entry

## **9.4 Emergency Contact List**

The following emergency contacts must be confirmed and recorded before each field assignment:

Contact	Details to Confirm Before Assignment
Facility Emergency Line	Provided by facility on induction
Local Emergency Services	911 (United States)
Tzero Labs HSE Lead	[HSE Lead name and mobile — maintained by HSE Lead]
Tzero Labs CEO / Senior Management	[Name and mobile — maintained in current personnel directory]
Nearest Hospital (from field site)	Confirmed from facility induction or local map
National Poison Control Center	1-800-222-1222 (United States)

The HSE Lead shall maintain a current Emergency Contact Register and distribute it to all field personnel at the start of each calendar quarter and following any personnel change.

## 10 CONTINUOUS IMPROVEMENT PROGRAM

### 10.1 The PDCA Framework

Tzero Labs applies the Plan–Do–Check–Act (PDCA) cycle as the structural basis for its continuous improvement program. This framework drives ongoing improvement in HSE performance, inspection quality, laboratory safety, and field operations, and ensures that the HSE Management System remains relevant, effective, and responsive to changing operational conditions.

### 10.2 Plan

#### Annual HSE Objectives Setting

At the beginning of each calendar year, the HSE Lead and senior management shall review the previous year's HSE performance data and establish updated HSE objectives and KPIs for the coming year. Objectives shall be specific, measurable, achievable, relevant, and time-bound (SMART).

Input to the planning process shall include:

- Incident and near-miss data from the preceding period
- Results of internal HSE audits
- Findings from field inspection activity risk assessments
- Feedback from employees and field inspectors
- Any changes in applicable regulatory requirements or industry standards
- Client HSE feedback or performance data where available

HSE objectives are documented in the HSE Objectives Register (see Section 03) and reviewed quarterly against actual performance.

#### Risk Assessment Review

Existing risk assessments for field inspection, tank access, petroleum sampling, and laboratory activities shall be formally reviewed annually or following any incident, near-miss, or significant change in operations, standards, or equipment.

## 10.3 Do

### Training and Competency Development

The following training activities shall be delivered and recorded as part of the annual HSE program:

Training Activity	Frequency	Applicable Personnel
HSE Induction	Before first field assignment	All new hires and contractors
Confined Space Awareness	Annual refresher	All field inspectors
H <sub>2</sub> S Awareness	Annual refresher	All field inspectors assigned to crude or sour product sites
Petroleum Sampling Safety	Annual refresher	All sampling personnel
Laboratory Safety	Annual refresher	All laboratory personnel
Emergency Response Procedures	Annual (with drill)	All personnel
First Aid / CPR	Per certification requirements	Designated first aiders (minimum one per team)
HSE Leadership	As required	Supervisors and site managers

### Toolbox Talks

Pre-task toolbox talks shall be conducted by the supervisor or site manager before the commencement of all field inspection and sampling activities. Records of attendance shall be maintained.

### HSE Communications

Following any significant incident, near-miss, or industry safety alert relevant to petroleum inspection operations, the HSE Lead shall issue a written Safety Alert to all field personnel within five working days. Safety Alerts are retained in the HSE records system.

## 10.4 Check

### Internal HSE Audits

Tzero Labs shall conduct a minimum of one formal internal HSE audit per year, covering compliance with this manual across field inspection, sampling, and laboratory activities. Audits shall be conducted by the HSE Lead or a qualified designee, and shall include a review of:

- Incident reports, near-miss reports, and corrective action status
- Training records and competency documentation
- Equipment maintenance and calibration records
- PTW compliance records from field assignments
- Waste disposal records

Audit findings shall be graded by severity and assigned corrective actions with named owners and completion dates.

### HSE Performance Review

Senior management shall conduct a formal review of HSE performance on a quarterly basis, using data from the HSE KPI Scorecards (see Section 03). The annual management review shall assess whether the HSE

objectives set during the Plan phase were achieved, and shall determine revised objectives for the following year.

## 10.5 Act

### Corrective and Preventive Actions

All corrective actions arising from incident investigations, audit findings, and management reviews shall be recorded in the Tzero Labs Corrective Action Register. Each entry shall include: the finding or trigger, the root cause identified, the corrective action required, the person responsible, the target completion date, and the verified closure date.

The HSE Lead shall review the Corrective Action Register monthly and escalate any overdue items to senior management.

### Management System Updates

Where corrective actions reveal systemic gaps in this manual, associated procedures, risk assessments, or training materials — those documents shall be updated as part of the corrective action closure process. Updated documents shall be re-issued with a revised version number and communicated to all affected personnel.

## 11 DOCUMENT APPROVAL AND REVIEW

### 11.1 Document Information

Field	Detail
Document Title	HSE Policy Statement & Safe Work Practices Manual
Document Reference	HSE-POL-001
Version	1.0
Status	Active
Classification	Internal — All Employees
Effective Date	January 1, 2025
Next Review Date	January 1, 2026
Owner	HSE Lead, Tzero Labs

### 11.2 Revision History

Version	Date	Description of Change	Revised By
1.0	January 2025	Initial issue — full document	HSE Lead

### 11.3 Approval and Authorization

This HSE Policy Statement and Safe Work Practices Manual has been reviewed and approved for issue by the undersigned.

**HSE Lead**

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

Signature: \_\_\_\_\_

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

**Chief Executive Officer**

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

Signature: \_\_\_\_\_

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

**Chairman / Board Representative**

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

Signature: \_\_\_\_\_

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

**11.4 Document Control Statement**

This document is controlled. Printed copies are uncontrolled. The current version is maintained in the Tzero Labs document management system. Personnel are responsible for ensuring they are working from the current version before relying on any procedure contained in this manual.

Requests to amend this manual must be submitted in writing to the HSE Lead. All amendments require approval by the CEO before issue.

*Tzero Labs — HSE Policy Statement & Safe Work Practices Manual — HSE-POL-001 v1.0*

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All four documents are now complete:

- 5. **Supplier Code of Conduct (COC-SUP-001)** — Fully repositioned
- 6. **Data Ethics, Privacy & Information Security Framework (SEC-FRM-001)** — Fully repositioned
- 7. **ESG Framework & KPI Report (ESG-RPT-001)** — Fully repositioned
- 8. **HSE Policy Statement & Safe Work Practices Manual (HSE-POL-001)** — Fully repositioned, sections 06–11 completed here