



SYRIAN MINISTRY OF ENERGY

PUBLIC ESTABLISHMENT FOR TRANSMISSION AND
DISTRIBUTION OF ELECTRICITY (PETDE)

SYRIA EMERGENCY ELECTRICITY PROJECT (SEEP)

Annex H – Emergency Response Plan (ERP)

Final

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LIST OF ACRONYMS & GLOSSARY

Acronym	Full Term	Brief Definition / Relevance
CESMP	Construction Environmental and Social Management Plan	Contractor's project-specific ESMP for the construction phase.
CHSP	Community Health and Safety Plan	Plan for protecting community health and safety at and around work fronts.
CLMP	Contaminated Land Management Plan	Plan for managing legacy contaminated land at substations, including delineation and management controls.
EOD	Explosive Ordnance Disposal	Accredited body responsible for ERW surveys, clearance and incident response.
EORE	Explosive Ordnance Risk Education	Training and information to reduce risks from UXO/ERW.
ERP	Emergency Response Plan	Plan defining procedures, roles and resources for responding to emergencies.
ERW	Explosive Remnants of War	Explosive devices remaining from past conflict, including UXO.
ESCP	Environmental and Social Commitment Plan	Time-bound E&S commitments agreed between PETDE/GoS and the World Bank.
ESMIP	Environmental and Social Management Implementation Plan	ESIA chapter describing how ESMPs are organized, resourced and monitored.
HM/WMP	Hazardous Materials and Waste Management Plan	Plan for handling hazardous materials and wastes safely, including spills.

Acronym	Full Term	Brief Definition / Relevance
MERP	Medical Emergency Response Plan	Component of ERP focused on medical emergencies and evacuation.
OE	Owner's Engineer	Supervision consultant providing technical and E&S oversight.
OESMP	Operational Environmental and Social Management Plan	ESMP for the operation and maintenance phase.
OHTL	Overhead Transmission Line	High-voltage overhead transmission infrastructure.
PETDE	Public Establishment for Transmission and Distribution of Electricity	SEEP Implementing Agency.
PMT	Project Management Team	PETDE's SEEP implementation team responsible for E&S oversight.
SEA/SH	Sexual Exploitation and Abuse / Sexual Harassment	Forms of GBV addressed through CoCs, SEA/SH Action Plan and GMs.
SMP	Security Management Plan	Plan for managing security risks and security provider conduct.
SRP	Site-specific Soil/Groundwater Remediation Plan	Plan for active remediation/management of contaminated soil and groundwater.
TMP	Traffic Management Plan	Plan for managing traffic risks and road safety.
UXO	Unexploded Ordnance	Munitions that failed to detonate and remain explosive.

1. INTRODUCTION

This Emergency Response Plan (ERP) sets out the framework, procedures and responsibilities for preparing for and responding to emergency events associated with SEEP rehabilitation works on existing 400/230 kV Overhead Transmission Lines (OHTLs) and substations, as well as during subsequent operation and maintenance (O&M) of rehabilitated assets.

The ERP operationalizes relevant commitments from the SEEP ESIA (including the Environmental and Social Management Implementation Plan (ESMIP) in Chapter 26), the OHTL and Substation ESMs, the OHS Plan, the Hazardous Materials & Waste Management Plan (HM/WMP), the Traffic Management Plan (TMP), the ERW Chance-Finds Procedure (by UNMAS), the Security Management Plan (SMP), the Sexual Exploitation and Abuse / Sexual Harassment (SEA/SH) Action Plan and the Environmental and Social Commitment Plan (ESCP). It is intended for inclusion in procurement documents and as a binding reference for EPC Contractors, Public Establishment for Transmission and Distribution of Electricity/ Project Management Team (PETDE/PMT), the Owner's Engineer (OE), PETDE O&M and subcontractors.

All EPC Contractors shall prepare and implement contract-specific Emergency Response Plans that follow and align with this ERP; Contractor ERPs may add detail but must not dilute or contradict the requirements of this ERP or the ESIA/ESMP.

The ERP uses an "all-hazards" approach consistent with ESS4 (Community Health and Safety) and the WBG General and T&D EHS Guidelines on Emergency Preparedness and Response.

2. PROJECT SCOPE AND PHASES COVERED

This ERP applies to:

- OHTL rehabilitation: works within existing high-voltage OHTL corridors (tower repair/replacement, conductor and earthwire works, access tracks, temporary laydown areas).
- Substation rehabilitation: civil, mechanical and electrical works within existing substations, including handling of oils, SF₆, legacy equipment and contaminated soil.
- Associated activities: temporary construction facilities, material storage, fuel storage, worker transport, and community interface at and near work fronts.

Phases covered:

- Pre-construction: detailed design, site investigations (including CLMP-related activities), Unexploded Ordnance / Explosive Remnants of War (UXO/ERW) risk classification / Clearance by UNMAS, Construction Environmental and Social Management Plan (CESMP) preparation, initial ERP/ Medical Emergency Response Plan (MERP) development and coordination with local emergency services.
- Construction: all OHTL and substation rehabilitation activities, including temporary facilities, transport and traffic interfaces.
- Operation and Maintenance: routine and corrective maintenance, emergency repairs and incident response on rehabilitated assets.

Decommissioning of major assets is not planned under SEEP; if any component is fully decommissioned, PETDE will prepare a specific D-ESMP and ensure this ERP is adapted accordingly.

3. APPLICABLE STANDARDS AND REFERENCE DOCUMENTS

3.1 WORLD BANK ESF AND ESS

- ESS1: Assessment and Management of E&S Risks and Impacts
- ESS2: Labor and Working Conditions (including OHS and worker GM)
- ESS3: Resource Efficiency and Pollution Prevention and Management (including spills and contamination)
- ESS4: Community Health and Safety (including emergency preparedness, traffic safety, UXO/ERW and security interface)
- ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement (interface with emergency access and ROW issues)
- ESS6: Biodiversity Conservation (e.g. wildfire risk near corridors)
- ESS8: Cultural Heritage (chance-finds)
- ESS10: Stakeholder Engagement and Information Disclosure (including emergency communications and GMs)

3.2 WBG EHS GUIDELINES

- General EHS Guidelines:
 - Emergency Preparedness and Response
 - Occupational Health and Safety
 - Hazardous Materials Management
 - Community Health and Safety
- EHS Guidelines for Electric Power Transmission and Distribution:
 - Electrical safety, live-line work and substation hazards
 - Fire and explosion risks
 - PCB, SF₆ and oil handling

3.3 SYRIAN LEGAL FRAMEWORK

Relevant national legislation and regulations on civil defense, fire protection, health and safety, transport of dangerous goods and incident reporting, as summarized in the ESIA and subsequent guidance issued by authorities.

3.4 SEEP PROJECT INSTRUMENTS

The ERP is aligned with and should be read alongside:

- SEEP ESIA and ESMPs, including:

- OHTL ESMP (Annex A)
- Substation ESMP (Annex B)
- ESMIP matrices for climate and air quality, hazardous materials, community health, safety and security, natural hazards, UXO/ERW, etc.
- ESCP: commitments on incident reporting, including serious incident notification to the World Bank.
- OHS Plan (Annex C): worker accident prevention, incident reporting and medical emergency preparedness.
- HM/WMP (Annex D): spill prevention and response, hazardous material and contaminated soil management.
- Traffic Management Plan (Annex E): traffic incident prevention and interface with communities.
- Chance-Finds Procedures (Annex F): for cultural heritage incidents.
- Guidance for RP/LRP Preparation (Annex G): where emergency access intersects with ESS5 cases.
- CESMP ToR (Annex I): emergency preparedness and response requirements within contractor CESMPs (Section on Emergency Preparedness and Response).
- Security Management Plan (SMP) and SEA/SH Action Plan: for security and GBV/SEA/SH incidents.

4. ERP OBJECTIVES AND PRINCIPLES

4.1 OBJECTIVES

The ERP aims to:

- Ensure timely, coordinated and effective response to emergencies affecting workers, nearby communities, assets and the environment.
- Translate ESIA/ESMIP and ESCP commitments on incident preparedness and response into clear operational procedures for Contractors and PETDE.
- Minimize the consequences of unplanned events (injury, fatality, environmental damage, community harm, asset loss).
- Ensure compliance with ESS2 and ESS4, national law and WBG EHS Guidelines.
- Provide a standardized structure for Contractor site-specific Emergency Response Plans / Medical Emergency Response Plans (MERPs) that form part of CESMPs, and for PETDE O&M ERPs.

4.2 PRINCIPLES

- Life first: protection of life and safety of workers and communities takes precedence.
- Prevention and preparedness: prioritize eliminating and controlling hazards before they escalate into emergencies.
- Proportionality and context sensitivity: emergency arrangements reflect FCV context, UXO/ERW and security risks.
- Clear command and communication: defined roles, notification chains and contact lists at all fronts.

- Integration: ERP is integrated with OHS, TMP, HM/WMP, UXO/ERW, SMP, CHMP/CFP, RP/LRP, SEP and GMs.
- Learning and continuous improvement: systematic investigation, corrective actions and sharing of lessons learned.

5. INSTITUTIONAL ARRANGEMENTS AND RESPONSIBILITIES

This section defines who does what for emergency preparedness and response across SEEP.

5.1 PETDE / PROJECT MANAGEMENT TEAM (PMT)

PETDE/PMT retains overall accountability for ERP implementation and compliance with ESIA, ESMPs and ESCP. In addition to broader SEEP responsibilities, PETDE/PMT will:

- Approve this ERP and ensure it is included in bidding documents and contracts.
- Require EPC Contractors to develop site-specific ERPs/MERPs as part of their CESMPs, aligned with this Annex and the OHS Plan.
- Maintain project-wide emergency notification and escalation protocols, including serious incident reporting to the World Bank in line with ESCP requirements.
- Facilitate coordination with civil defense, health facilities, police, local authorities and accredited EOD/ERW organizations.
- Review Contractor emergency drills and incident reports; ensure corrective actions are implemented.
- Consolidate emergency incident data and report to the World Bank and authorities as required.

5.2 PETDE O&M DIRECTORATES

For rehabilitated assets, PETDE O&M Directorates will:

- Adapt this ERP to prepare O&M-phase ERPs for substations and OHTL maintenance.
- Ensure O&M personnel are trained in emergency procedures, including electrical and fire incidents.
- Maintain O&M emergency equipment (fire and spill equipment, alarms, PPE).
- Coordinate with PETDE/PMT and external services during major incidents.

5.3 OWNER'S ENGINEER (OE)

The OE will:

- Review and recommend approval of Contractor ERPs/MERPs as part of CESMPs.
- Verify that emergency arrangements and equipment are in place at work fronts.
- Participate in and observe emergency drills; record findings and follow-up.
- Support PETDE/PMT in incident investigations, root-cause analysis and corrective action tracking.

5.4 EPC CONTRACTORS AND SUBCONTRACTORS

Each EPC Contractor will:

- Prepare and implement a Contractor ERP/MERP for each contract, aligned with this Annex and included in the CESMP.
- Appoint an Emergency Coordinator and designate deputies, fire wardens, first-aiders, traffic marshals and ERW focal points.
- Ensure emergency procedures are available, communicated and displayed at all work fronts (OHTL and substations).
- Provide and maintain emergency equipment, conduct regular drills and record performance.
- Ensure subcontractors comply with Contractor ERP and participate in drills and investigations.

Subcontractors will:

- Follow the Contractor ERP and instructions of the Emergency Coordinator.
- Ensure their workers attend induction and drills and use required PPE.

5.5 LOCAL AUTHORITIES AND EMERGENCY SERVICES

- Civil Defense / Fire Services: respond to major fires, explosions, building collapse or other civil emergencies.
- Ambulance and Hospitals / Clinics: receive and treat injured persons; advise on medical evacuation protocols.
- Police / Security Forces: respond to security incidents and serious traffic accidents.
- Accredited EOD/ERW Organizations: respond to UXO/ERW incidents and implement ERW Incident Response Plan.
- Local Authorities (municipalities/governorates): facilitate access routes, assembly points, community notices and coordination.

5.6 ROLES AND RESPONSIBILITIES SUMMARY

Table 5-1 summarizes the key institutional roles and responsibilities for emergency preparedness and response under SEEP. Contractors shall adapt and expand this table in their CESMPs to include named individuals, contact details and site-specific duties.

Table 5-1. Roles and Responsibilities for ERP Implementation

Entity / Function	Key ERP Responsibilities	Phase(s)	Primary Responsibility
PETDE Senior Management / PMT	<ul style="list-style-type: none"> - Approve ERP - Include ERP requirements in contracts - Maintain project-wide emergency notification protocol (including serious incident reporting to WB as per ESCP) - Coordinate with authorities and emergency services 	All	PETDE/PMT

Entity / Function	Key ERP Responsibilities	Phase(s)	Primary Responsibility
	<ul style="list-style-type: none"> - Review consolidated incident and drill reports. 		
PETDE E&S Unit	<ul style="list-style-type: none"> - Review and monitor Contractor ERPs - Track emergency KPIs - Participate in major drills - Support investigations and lessons-learned processes. 	Pre-construction & Construction	PETDE/PMT
PETDE O&M Directorates	<ul style="list-style-type: none"> - Prepare and implement O&M ERPs for substations and OHTL maintenance - Maintain emergency equipment - Coordinate with PMT during major incidents. 	O&M	PETDE O&M
Owner's Engineer (OE)	<ul style="list-style-type: none"> - Review Contractors' ERPs/MERPs - Verify emergency arrangements on site - Participate in drills - Support incident investigations and corrective actions. 	Pre-construction & Construction	OE
EPC Contractor Project Manager	<ul style="list-style-type: none"> - Overall accountable person for emergency preparedness and response within the contract - Approve Contractor ERP/MERP - Ensure resources (staff, equipment, drills) - Stop work where emergency risks are uncontrolled. 	Construction	EPC Contractor
EPC Contractor HSE / Emergency Coordinator	<ul style="list-style-type: none"> - Lead development and implementation of ERP/MERP - Maintain emergency contact lists and maps - Coordinate drills - Ensure interface with OHS Plan, HM/WMP, TMP, UXO/ERW and SMP. 	Construction	EPC Contractor
Supervisors / Foremen	<ul style="list-style-type: none"> - Implement emergency procedures at work fronts - Ensure workers know muster points and alarms - Initiate first response and notifications. 	Construction	EPC Contractor / Subs
First-aiders	<ul style="list-style-type: none"> - Provide initial medical care - Coordinate evacuation to medical facilities - Maintain first-aid supplies and records. 	Construction & O&M	EPC Contractor / PETDE O&M
Fire Wardens / Spill Responders	<ul style="list-style-type: none"> - Lead immediate response to fires and spills - Ensure fire extinguishers and spill kits are maintained and accessible. 	Construction & O&M	EPC Contractor / PETDE O&M

Entity / Function	Key ERP Responsibilities	Phase(s)	Primary Responsibility
UXO/ERW Focal Points & EOD Organizations	<ul style="list-style-type: none"> - Coordinate ERW risk classification, TS and clearance - Implement ERW Incident Response Procedure and cordon/evacuation if suspect items are discovered or detonate. 	Pre-construction & Construction	Accredited EOD Org., PETDE, EPC
Local Emergency Services (Fire, Ambulance, Police)	<ul style="list-style-type: none"> - Provide external response capacity - Coordinate with Contractor and PETDE during major emergencies. 	Construction & O&M	Authorities

6. EMERGENCY RISK ASSESSMENT AND SCENARIOS

Emergency scenarios under SEEP are derived from the ESIA “Unplanned Events” sections and CHSS, HM, Natural Hazards, UXO/ERW and OHS chapters.

Key scenario families include the following while illustrative scenarios are shown in Table 6-1:

- Medical emergencies and serious occupational injuries
- Fires and explosions (including from fuel, transformer oils, SF₆, and ERW/UXO)
- Hazardous material spills and releases (fuel, oil, chemicals, SF₆, contaminated soil)
- Electrical incidents and arc flash
- Structural collapse, working at height or lifting failures
- Traffic accidents involving project vehicles and third parties
- Natural hazards (earthquakes, flash floods, strong winds, dust storms, lightning, slope failures)
- UXO/ERW incidents (discovery, near miss, detonation)
- Security incidents (threats, confrontation, violent events)
- Community health and safety incidents (community injuries near work fronts, crowd formation, protests)
- SEA/SH incident and emergency

Contractors must perform site-specific emergency risk assessments as part of their CESMPs and use this plan as the minimum framework.

Table 6-1. Illustrative Emergency Scenarios and Interface Plans

Scenario	Typical Causes	Main Receptors	Primary Interface Plans / Procedures
Serious worker injury or acute illness	Falls, electrocution, struck-by, equipment failure, acute medical episode	Workers, supervisors	<ul style="list-style-type: none"> - OHS Plan - Medical Emergency Response Plan (MERP) - ERP
Fire in substation yard, laydown area, camp or fuel store	Hot work, electrical faults, fuel spills, arson	Workers, nearby communities, assets	<ul style="list-style-type: none"> - ERP - OHS Plan - HM/WMP

Scenario	Typical Causes	Main Receptors	Primary Interface Plans / Procedures
			<ul style="list-style-type: none"> - CLMP/ Site-specific Soil/Groundwater Remediation Plans (SRPs) - SMP - Civil Defense procedures
Major fuel / oil / chemical spill	Fuel storage leaks, refueling spills, transformer oil transfer	Workers, soil/groundwater, communities	<ul style="list-style-type: none"> - HM/WMP - CLMP/SRPs - ERP - Groundwater Protection Plan
SF ₆ release	Cylinder handling, equipment failure	Workers, environment (GHG)	<ul style="list-style-type: none"> - HM/WMP - OHS Plan - ERP
UXO/ERW incident	Disturbance of ordnance during excavation, clearance failure	Workers, communities	<ul style="list-style-type: none"> - Contractor CESMPs - ERW Incident Response Procedure - ERP - OHS Plan - Community Health and Safety Plan (CHSP)
Traffic accident involving project vehicle	Speeding, poor visibility, congestion, pedestrian conflict	Workers, road users, pedestrians	<ul style="list-style-type: none"> - TMP - ERP - CHSP - SEP/GM - Police protocols
Natural hazard event (earthquake, flash flood, strong winds, dust storm, lightning, slope failure)	<ul style="list-style-type: none"> - Ground shaking - Intense rainfall and wadis flooding - High winds and storms - Lightning - Unstable slopes or rockfall 	Workers, nearby communities, project assets and access routes	<ul style="list-style-type: none"> - Natural hazards and extreme-weather control measures in the ESMIP - Emergency Response Plan (ERP) and site ERPs - TMP - CHSP
Security incident	Theft, threats, crowding, confrontation	Workers, communities, security staff	<ul style="list-style-type: none"> - SMP - ERP - SEP/GM - SEA/SH Action Plan (for SEA/SH incidents)
Community injury near work fronts	Poor barricades, access through work zone, night visibility issues	Community members	<ul style="list-style-type: none"> - CHSP - TMP - ERP - SEP/GM

7. EMERGENCY PREPAREDNESS MEASURES

7.1 PLANNING AND DOCUMENTATION

Each EPC Contractor shall:

- Prepare a site-specific ERP/MERP as part of the CESMP, consistent with this Annex and the OHS Plan.
- Identify credible emergency scenarios per work front (substation and OHTL) and document specific procedures.
- Develop and keep up to date:
 - Emergency contact lists (internal and external).
 - Site layout plans showing access/egress, emergency routes, muster points, fire and spill equipment, and shut-off points.
 - Emergency call-out and escalation flowcharts.

PETDE O&M shall similarly prepare O&M-phase ERPs.

7.2 EMERGENCY ORGANIZATION, COMMAND AND CONTROL

ERPs shall define:

- An Incident Commander / Emergency Coordinator for each site/shift.
- Deputies and backups during all working hours.
- Roles for fire wardens, first-aiders, traffic marshals, ERW focal points, security liaison, and communications officer.
- Authority to stop work and evacuate areas when risk is unacceptable.

7.3 COMMUNICATION AND NOTIFICATION

ERPs shall include:

- Internal notification: how workers raise the alarm (verbal, whistle, radio, siren), who they notify first, and how the chain escalates to Contractor management, OE and PETDE/PMT.
- External notification: when and how to contact civil defense, ambulance, police, hospitals, accredited EOD, local authorities and, where applicable, security forces.
- Notification to the World Bank: PETDE/PMT shall ensure serious incidents are notified to the World Bank within the ESCP-defined timeframe (typically within 48 hours of PETDE becoming aware), with follow-up incident reports as required.
- Community notification: how communities are informed before drills that may be visible/audible, and how they are informed during/after real emergencies, consistent with the SEP.

7.4 EMERGENCY EQUIPMENT AND FACILITIES

Contractors and PETDE O&M shall provide and maintain, as applicable:

- Fire extinguishers and hose reels sized for the hazard (class A/B/C, CO₂, foam, etc.), with monthly inspections.

- Spill kits and absorbents near fuel storage, transformer oils, chemical storage and maintenance areas.
- First-aid kits, stretchers, blankets and emergency eyewash.
- Radios or other reliable communication devices.
- Clearly marked muster points and evacuation routes.
- Emergency lighting/signage in substations and critical corridors.
- Personal protective equipment (PPE) appropriate to emergency tasks (e.g. fire-resistant clothing, respiratory protection, dielectric gloves).

7.5 COORDINATION WITH EXTERNAL SERVICES AND COMMUNITIES

- Engage with local civil defense, ambulance services and hospitals to understand capacity, response times and access routes.
- Share site maps and access information (where security allows).
- Ensure access routes are kept open for emergency vehicles.
- Coordinate with local authorities and community leaders on emergency access, assembly areas and communications, via the SEP.
- As part of pre-construction ERP/MERP preparation, each Contractor shall identify the nearest clinics/hospitals to each work front and camp, document their capacity to handle severe incidents (e.g., emergency room, imaging/diagnostic capability such as X-ray/CT/MRI where available, intensive care and surgical capacity), and keep this information updated and displayed in site ERPs.

7.6 MEDICAL EMERGENCY PREPAREDNESS

- Maintain a Medical Emergency Response Plan (MERP) integrated into the ERP.
- Ensure presence of trained first-aiders in all active work fronts and camps.
- Establish clear referral pathways to designated clinics/hospitals, including modes of transport (ambulance, project vehicles).
- Keep emergency medical contact numbers posted at all work fronts and in control rooms.
- Ensure alignment with the SEA/SH Action Plan and survivor-centered referral pathways for SEA/SH incidents (without disclosing survivor-identifying information in general reporting).
- For remote or hard-to-access work fronts where public ambulance response times are likely to be long or uncertain, the Contractor shall ensure availability of a dedicated ambulance or appropriately equipped medical transport vehicle with trained first-aiders, as agreed with PETDE/PMT in the MERP.
- To the extent feasible under national law and practice, Contractors shall establish agreements with one or more well-equipped medical centers/clinics along the project corridor to enable immediate treatment of injured workers without delay from administrative or payment procedures.

7.7 UXO/ERW EMERGENCY PREPAREDNESS

The first response to any suspected UXO/ERW item or event shall always be to stop work immediately and isolate the area, in line with the ERW Chance-Finds Procedure.

- ERW Chance-Finds Procedure, developed and validated by an accredited EOD organization (UNMAS) and adopted by PETDE and EPC Contractors through their CESMPs and ERPs.
- Ensure workers receive EORE (explosive ordnance risk education) by an accredited EOD and understand the “Recognize–Avoid–Report” principle.
- Integrate ERW emergency actions (stop work, cordon, call-out of accredited EOD organization) into site ERPs.

7.8 SECURITY INCIDENT PREPAREDNESS

- Integrate emergency response provisions from the Security Management Plan for security incidents at/near work fronts (threats, violence, armed confrontation).
- Define procedures that prioritize de-escalation, safe withdrawal and non-use of force in line with ESS4 and WB security guidance.
- Ensure that security incidents involving alleged SEA/SH are handled via survivor-centered SEA/SH pathways.

8. EMERGENCY RESPONSE PROCEDURES

ERPs shall define both generic response steps and scenario-specific procedures.

8.1 GENERIC RESPONSE STEPS

For any emergency:

1. Recognize and raise the alarm.
2. Protect life: stop work, make area safe, evacuate as required.
3. Provide first aid where safe to do so.
4. Notify internal supervisors, Emergency Coordinator and external services as applicable.
5. Stabilize and contain the situation (firefighting, spill control) within the capability of trained personnel.
6. Account for all personnel at muster points.
7. Record and report the incident in line with Section 9.
8. Suspend work in affected areas until authorized to resume based on conditions.

8.2 MEDICAL EMERGENCIES AND SERIOUS INJURIES

- Immediately stop nearby work and secure the area.
- Provide first aid by trained first-aiders; activate the on-site ambulance/medical transport where provided under Section 7.6, or call public ambulance services or arrange safe transport to the designated medical facility, as defined in the MERP.
- Do not move severely injured persons unless necessary to avoid greater harm.
- Notify Contractor management, OE, PETDE/PMT.
- For fatalities or life-threatening injuries, treat as serious incidents and follow ESCP notification procedures to the World Bank.

8.3 FIRES AND EXPLOSIONS

Applicable to fires in substations, OHTL work fronts, fuel storage, laydown areas and camps:

- Raise the alarm and initiate evacuation to designated muster points.
- Where safe, trained fire wardens use appropriate extinguishers for incipient fires.
- Shut down relevant equipment and isolate power as instructed by authorized electrical staff.
- Call civil defense/fire services for any medium/large fire.
- Protect adjacent communities and assets, including traffic control if near public roads.
- Account for all workers; do not re-enter until authorized.
- Document and investigate; coordinate with HM/WMP and CLMP/SRPs for post-fire contamination management.

8.4 HAZARDOUS MATERIAL SPILLS AND RELEASES

- Stop the source of the spill if safe.
- Prevent spread by using spill kits, booms and absorbents; protect drains, watercourses and sensitive receptors.
- Evacuate area if there is a risk of fire, toxic fumes or explosion.
- Notify HM/WMP focal point and Contractor HSE; inform PETDE/PMT and OE.
- For SF₆ leaks, follow specific OEM and HM/WMP guidance and ensure adequate ventilation and worker protection.
- Record volumes and type of material; manage contaminated soil, absorbents and PPE as hazardous waste per HM/WMP and, where applicable, CLMP/SRPs.

8.5 ELECTRICAL INCIDENTS AND ARC FLASH

- If someone is in contact with live parts, do not touch them directly; disconnect power if feasible, or use insulated tools/objects to break contact.
- Evacuate area around the incident and maintain safe distances.
- Provide first aid (including CPR if trained and safe to do so) once victim is free from the electrical source.
- Notify Contractor and PETDE O&M electrical teams; secure the area until investigation and testing confirm it is safe.

8.6 UXO/ERW INCIDENTS

- For any suspect item discovered or suspected explosion:
 - Stop work immediately; do not touch, move or attempt to neutralize the item.
 - Evacuate and cordon off the area with a safety perimeter as per ERW Chance-Finds Procedure.
 - Notify ERW focal point, Contractor management, PETDE/PMT and OE.
 - Call the accredited EOD organization and follow their instructions.
- Record event; do not resume work until EOD clearance and authorization to restart is provided.

8.7 TRAFFIC ACCIDENTS

- Stop all traffic in the immediate vicinity if safe to do so.
- Provide first aid and call ambulance and police, as required by law.
- Maintain safe control of the scene; prevent secondary accidents (e.g. using cones, flaggers).
- Notify Contractor management, PETDE/PMT and OE.
- Record details of vehicles, persons involved and witnesses; treat as CHSS incident for ESF reporting and TMP review.

8.8 NATURAL HAZARD EVENTS (EARTHQUAKES, FLASH FLOODS, WINDS, LIGHTNING, ROCKFALL)

- Stop work at exposed fronts immediately in the event of an earthquake, or when natural-hazard warning thresholds are reached (e.g., official weather alerts, high wind speeds, lightning proximity).
- Follow ERP procedures for earthquakes, including moving away from unstable structures and potential falling objects and assembling at designated safe areas once shaking stops.
- Evacuate to higher ground or designated shelters in case of flash-flood risk.
- Secure plant, materials and temporary structures against high winds (e.g., lowering cranes, tying down loose items, closing scaffold access) before storms.
- After any natural-hazard event, inspect slopes, access routes, scaffolding, cranes and temporary works before authorizing restart of activities in the affected areas.

8.9 SECURITY INCIDENTS

- For direct threats or violence at/near work fronts:
 - Stop work and withdraw personnel to safe areas.
 - Notify Contractor management, PETDE/PMT, OE and security provider/state security as per SMP.
 - Avoid confrontation and do not attempt enforcement actions; follow SMP protocols.
- Record incidents and coordinate with SMP, SEP and SEA/SH Action Plan if applicable.

9. INCIDENT REPORTING, INVESTIGATION AND CORRECTIVE ACTIONS

The ERP is closely linked to incident reporting and learning arrangements already defined in the OHS Plan and ESIA/ESMIP.

Key requirements:

- Immediate reporting: all emergencies and near-misses must be reported to supervisors and recorded in the incident register.
- Classification: incidents are classified (e.g. minor, moderate, serious) considering severity, potential and ESF/ESCP thresholds. SEA/SH and serious community incidents are treated as serious regardless of injury severity.
- Serious incidents: fatalities, life-threatening injuries, severe permanent disability, major pollution events, serious UXO/ERW accidents and serious SEA/SH or security incidents are

to be reported immediately by PETDE/PMT to the World Bank within the ESCP-defined timeframe.

- Investigation: Contractors conduct root-cause analysis for significant incidents; PETDE/PMT and OE review and may participate.
- Corrective and preventive actions: defined with responsible persons and deadlines; tracked to closure.
- Feedback and learning: lessons learned are communicated to workers and integrated into revised procedures, training and ERPs.

10. TRAINING, DRILLS AND EXERCISES

10.1 TRAINING

Effective emergency response depends on all personnel understanding the site-specific hazards, the ERP/MERP procedures, and their own roles during an incident. Each Contractor, and PETDE for the O&M phase, shall therefore establish and maintain an emergency training program that covers general induction for all workers and visitors, as well as role-specific training for first-aiders, fire wardens, spill responders, ERW focal points, drivers, security staff and other key functions as follows:

- All workers and visitors receive site E&S induction including emergency procedures, muster points, alarms and key contacts.
- Specific training is provided for:
 - First-aiders and medical responders.
 - Fire wardens and spill responders.
 - ERW focal points and workers in ground-disturbing tasks (EORE).
 - Drivers and traffic marshals (including accident response).
 - Security staff (aligned with SMP and SEA/SH Action Plan).

10.2 DRILLS AND EXERCISES

Emergency arrangements must be tested regularly to confirm that workers understand their roles, equipment functions as intended, and coordination with external services is effective. Each Contractor (and PETDE O&M for the operation phase) shall therefore plan and implement a program of scenario-based drills and exercises proportionate to the risks at each site. Table 10-1 presents an indicative training and drill schedule which Contractors shall adapt and detail in their CESMPs/ERPs.

Drills should include at a minimum the following:

- Fire drills: at least annually at each major substation and camp; more frequent where risk is higher or required by authority.
- Spill response drills: at least annually at sites with significant fuel/oil storage.
- Medical evacuation drills: at least annually per contract.
- ERW incident drills: at least annually in districts with ERW risk.

- Table-top multi-scenario drill: at least once per contract covering combined scenarios (e.g. fire + medical + traffic).

Table 10-1. Indicative Training and Drill Schedule

Activity	Target Audience	Minimum Frequency
Emergency and ERP induction	All workers / visitors	- Before access - Refresh annually
First-aid training	Designated first-aiders	- Initial - Refresh every 2 years
Fire response training	Fire wardens and general workers	- Initial - Annual refresh
Spill response training	Fuel/oil handlers, maintenance staff	- Initial - Annual refresh
ERW/EORE training	All workers in ground-disturbing tasks	- Induction - Toolbox refreshers in ERW-risk areas
Fire drill	All site personnel	- Annual per substation / camp
Spill drill	Relevant staff at storage areas	- Annual
Medical evacuation drill	All staff at main sites	- Annual
ERW incident drill	Relevant staff in risk districts	- Annual

11. MONITORING, KPIS AND REPORTING

KPIs for emergency preparedness and response align with the ESMIP matrices (e.g., incident preparedness and response, MERP, ERW incident response); indicative KPIs and their monitoring are provided in Table 11-1. Contractors shall submit monthly ERP/incident sections in their E&S reports while PETDE consolidates and reports per ESCP and ESMP requirements.

Table 11-1. Indicative ERP KPIs and Monitoring

KPI	Target	Monitoring & Frequency	Responsibility
ERP/MERP in place and approved for each contract	100% of contracts before mobilization	Document review at mobilization	PETDE/PMT, OE
Workers inducted on emergency procedures	≥ 95% of active workforce	- Induction logs - monthly review	EPC Contractor
First-aiders present at active work fronts	100%	- Daily toolbox/shift checks	Supervisors, EPC HSE
Required emergency equipment available and inspected	100% compliance	Monthly inspection checklists	EPC HSE, PETDE O&M
Planned drills completed (fire, spill, ERW, medical)	≥ 90% of planned drills per year	- Drill schedule & records - quarterly review	EPC, PETDE/PMT, OE
Serious incidents notified to WB within ESCP timeframe	100%	- Incident log and correspondence	PETDE/PMT

		- after each serious incident	
Corrective actions from incident investigations closed on time	≥ 90% within agreed deadlines	- CAPA (Corrective Action Plan) log - monthly review	EPC, PETDE/PMT

12. LINKAGES TO OTHER SEEP INSTRUMENTS

The ERP is closely linked to and must remain consistent with:

- ESIA Chapter 23:
- OHS Plan (Annex C): incident prevention, worker safety, incident reporting and investigation.
- HM/WMP (Annex D): spill response, hazardous materials and contaminated soil management.
- TMP (Annex E): traffic incidents, vehicle-related emergencies and community interface.
- Chance-Finds Procedures (Annex F): stop-work and notification procedures for cultural heritage discoveries.
- RP/LRP Guidance (Annex G): ensuring emergency access does not undermine ESS5 entitlements and vice versa.
- CESMP ToR (Annex I): defining emergency preparedness content and structure within Contractor CESMPs.
- Security Management Plan (SMP): security incident response and interface with ERP and CHSS arrangements.
- SEA/SH Action Plan: survivor-centered response to SEA/SH incidents, integrated with ERP only at the level of notification protocols and protection of survivors.

13. PLAN IMPLEMENTATION, REVIEW AND UPDATE

- Contractors shall submit their ERPs/MERPs as part of the CESMP for PETDE/PMT and OE approval before mobilization.
- PETDE shall ensure O&M ERPs are in place before energization of rehabilitated assets.
- This ERP and Contractor ERPs shall be reviewed at least annually and updated whenever:
 - A serious incident occurs.
 - Project scope, methods or risk profile significantly change (e.g., new workfronts with higher UXO/ERW or security risk).
 - There are changes in national law or World Bank requirements.
 - Audits or monitoring identify significant gaps.
- Revisions shall be documented, dated and communicated to all relevant staff and stakeholders; old versions shall be archived with a clear version control log.

14. ILLUSTRATIVE TEMPLATES

Contractors and PETDE/O&M shall develop and use ERP-related tools such as:

- Site-specific Emergency Contact Sheet (internal and external contacts).
- Emergency Response Flowchart (alarm and escalation steps).
- Site Emergency Layout Plan (muster points, equipment, routes).
- Emergency Drill Report Form (scenario, participants, performance, lessons learned).
- Incident / Near-Miss Report Form (classification, cause analysis, actions).
- Emergency Equipment Inspection Checklist (fire extinguishers, spill kits, first-aid kits, alarms, radios).

These templates should be aligned with the formats used in the OHS Plan and ESMPs to facilitate consistent reporting.