

Emergency Preparedness and Response Guide

EMERGENCY PREPAREDNESS AND RESPONSE GUIDE

1. Introduction

This guide outlines a framework for managing emergencies in onshore production, integrating safety, regulatory compliance, and operational continuity. Key hazards include oil spills, gas releases, fires, and natural disasters.

1.1 How to Use this Manual

This manual provides guidance, explanations, and expectations that empower **Solutions Projects & Consulting, LLC** to develop and implement an effective Emergency Response Plan (ERP). It meets the requirements of regulatory bodies and relevant laws, ensuring that all personnel are well-prepared for potential emergencies. Each section offers practical information tailored to enhance safety, minimize risks, and facilitate efficient responses during incidents.

2. Hazard Identification and Risk Assessment

Expand on identifying potential hazards:

- Hazardous Substance Releases (H2S, hydrocarbons)
- Well Blowouts
- Pipeline Leaks Each identified hazard should include an Emergency Planning Zone (EPZ) calculation for potential impacts, aligned with best practices in risk management.

3. Public and Authority Engagement

Strengthen the **Public Communication Protocol**:

- Engage local authorities early in the planning process.
- Develop public information packages, including evacuation plans and safety measures for surrounding communities.
- Maintain open communication channels with emergency responders, ensuring seamless coordination in emergencies.



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4. Emergency Response Plans (ERP)

Each operation (e.g., wells, pipelines) must have specific ERPs approved by the relevant authorities. These plans should include:

- Roles and Responsibilities for all personnel, detailing the incident command system.
- Mitigation Measures for high-risk scenarios (e.g., ignition systems for sour gas).

5. Public Safety Measures

Enhance protocols for evacuation or shelter in place:

- **Evacuation:** Used primarily in severe releases (e.g., gas or fire), depending on **wind direction** and release duration.
- **Sheltering:** Deployed when evacuation is unsafe or impractical, providing temporary protection from exposure.

6. Air Quality and Hazard Monitoring

Integrate **air quality monitoring systems** for real-time tracking of hazardous gases (e.g., H2S, SO2) or fire-related hazards, ensuring informed decision-making on **public evacuation or sheltering**.

7. Incident Command Systems and Drills

Implement a structured Incident Command System (ICS), ensuring:

- Clear communication protocols.
- Defined responsibilities for evacuation coordination, air quality monitoring, and ignition control. Regular emergency drills should be mandatory, simulating various scenarios to ensure personnel readiness.

8. Media Communication

Prepare **media communication plans** to provide accurate updates during emergencies. Designate a trained spokesperson and ensure coordination with **local authorities** for consistent information flow.



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9. Continuous Improvement

Post-incident reviews and continuous feedback from stakeholders should drive **updates to the ERP** and other preparedness measures. This ensures constant refinement of the response approach, based on real-world lessons learned.

Annexes (Available for Download)

- 1. Emergency Planning Zone (EPZ) Calculation Guide
- 2. Air Quality Monitoring Procedures
- 3. Public Information and Evacuation Procedures
- 4. Incident Command Roles and Responsibilities Template