



Oil and Gas Management

Oil and Gas Operations: Pennsylvania

RRT III Meeting

November 15, 2017

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Office of Oil and Gas Management

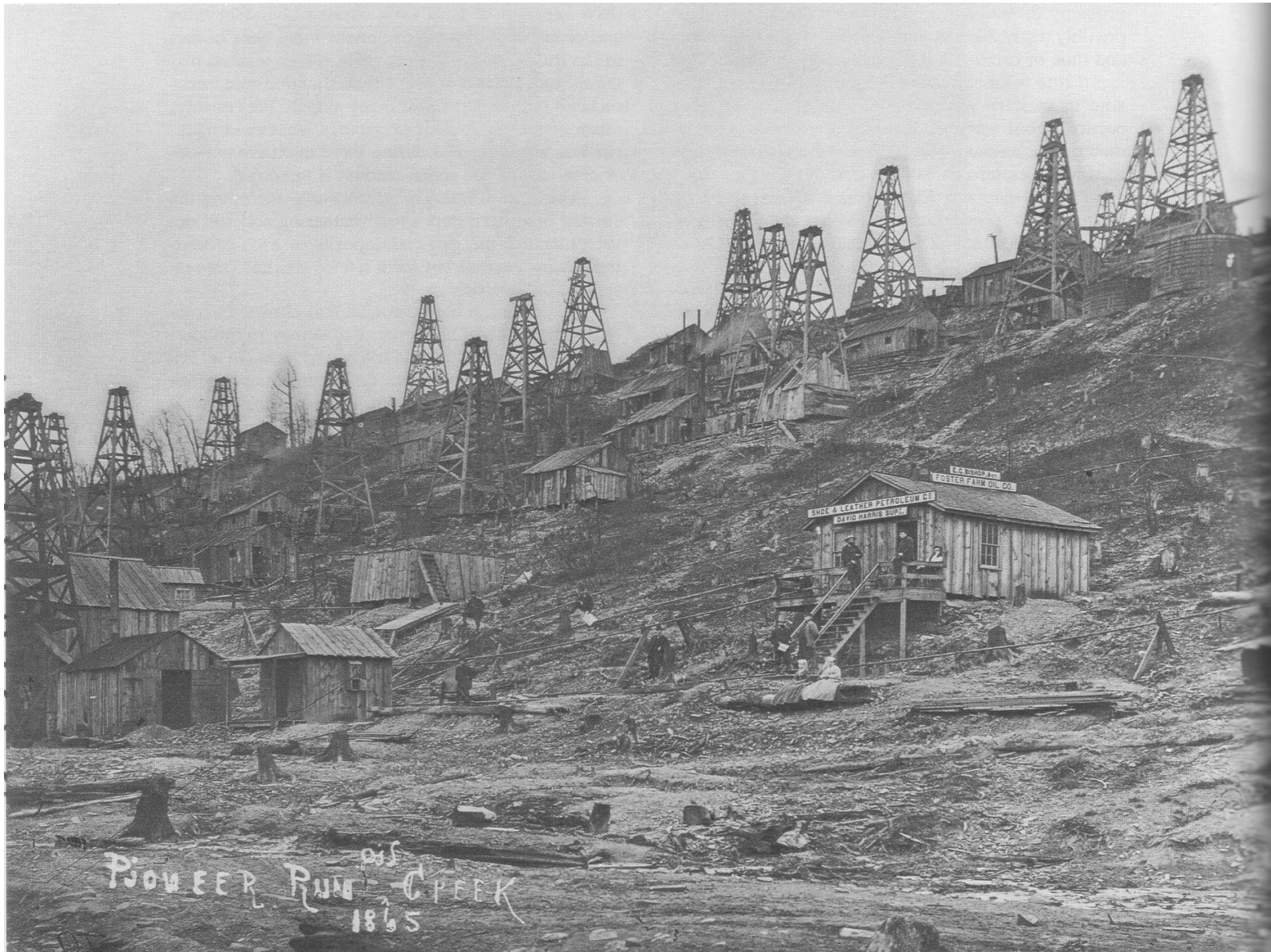
Pennsylvania Department of Environmental Protection

DEP Mission

“To protect Pennsylvania’s air, land and water from pollution and to provide for the health and safety of its citizens through a cleaner environment. We will work as partners with individuals, organizations, governments and businesses to prevent pollution and restore our natural resources.”

Oil and Gas Development in PA

- **Conventional Oil and Gas Wells**
- **Unconventional Gas Wells**
- **Gas Storage Wells; Underground Injection**
- **Pipelines**

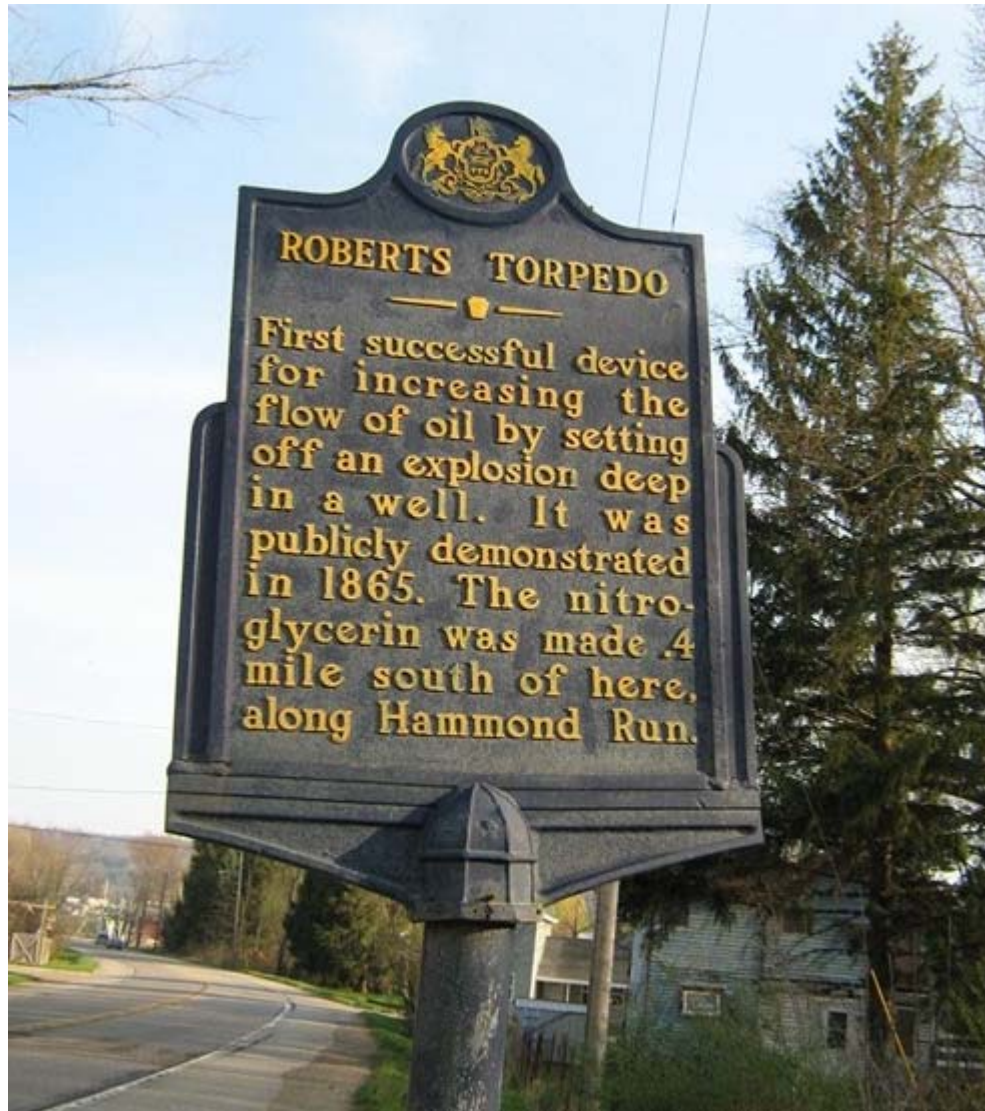


PIONEER RUN CREEK
1865

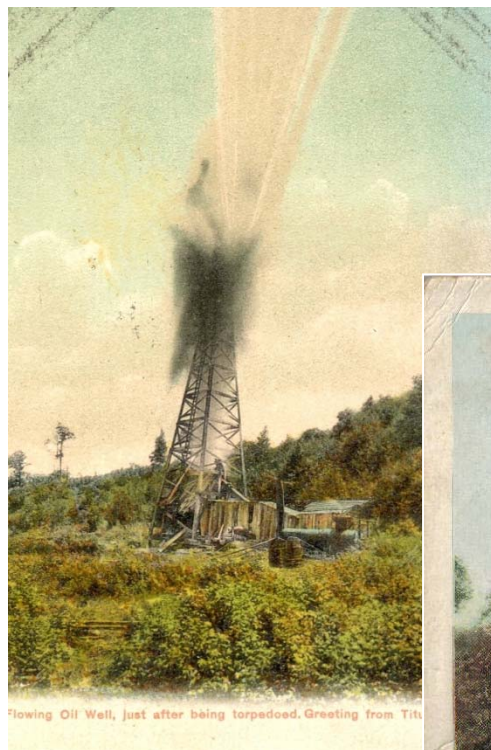
The Wild West of Oil



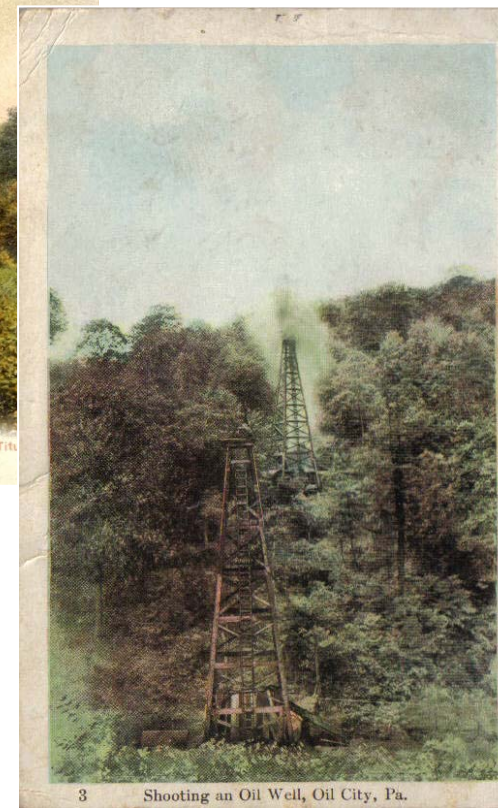
The Wild West of Oil



The Wild West of Oil



Flowing Oil Well, just after being torpedoed. Greeting from Tit



3 Shooting an Oil Well, Oil City, Pa.

Courtesy of Martha Rial, DCNR Monitoring Report (2014)



Hydraulic Fracturing







Historic (and Current) Planning

- **Chapter 91**
- **Chapter 102**
- **Chapter 78 Emergency Response Planning**
- **Guidelines for the Development and Implementation of Environmental Emergency Response Plans (2005)**

Historic (and Current) Planning

Section 91.34

- Clean Streams Law – protection of waters of the Commonwealth
- Impoundment, production, processing, transportation, storage, use, application or disposal of **pollutants** shall take necessary measures to prevent the substances from directly or indirectly reaching waters of this Commonwealth, through accident, carelessness, maliciousness, hazards of weather or from another cause
- Department may require submission of a report or plan for such activities
- Encourage the use of pollution prevention measures that minimize or eliminate the generation of the pollutant over measures which involve pollutant handling or treatment
- Encourage consideration of the following pollution prevention measures, in descending order of preference, for environmental management of wastes: reuse, recycling, treatment and disposal.

Historic (and Current) Planning

Section 102.5(I)

- Clean Streams Law
- Prepare and implement a PPC Plan when storing, using or transporting materials including: fuels, chemicals, solvents, pesticides, fertilizers, lime, petrochemicals, wastewater, wash water, core drilling wastewater, cement, sanitary wastes, solid wastes or hazardous materials onto, on or from the project site **during earth disturbance activities**
- Available upon request by the Department or conservation district.

Historic (and Current) Planning

Section 78.55. Control and disposal planning.

- **Prior to generation of waste**, the well operator shall prepare and implement a plan under § 91.34 (relating to activities utilizing pollutants) for the control and disposal of fluids, residual waste and drill cuttings, including tophole water, brines, drilling fluids, additives, drilling muds, stimulation fluids, well servicing fluids, oil, production fluids and drill cuttings from the drilling, alteration, production, plugging or other activity associated with oil and gas wells.
- Identify the control and disposal methods and practices utilized by the well operator and be consistent with environmental statutes
- Pressure barrier policy
- Provided to the Department upon request and shall be available at the site during drilling and completion activities for review
- Emergency contact phone numbers prominently displayed at the well site during drilling, completion or alteration activities.

Emergency Response Guidance

- **Addresses ALL DEP emergency response planning**
- **Who needs to prepare them?**
- **Elements and format?**
- **Compliance assistance document – examples and appendices with model documents**

Act 9 of 2012

- **Updating outdated laws in the face of unconventional development; Marcellus Shale Advisory Commission**
- **ONLY issue addressed by standalone legislation – emergency response planning at unconventional well sites**
- **Amended Emergency Management Code**
- **Required PEMA and DEP to develop regulations requiring:**
 - **GPS/911 Addressing of Well Sites**
 - **Standardized Signage Identifying Well Site Entrances**
 - **Emergency Response Planning by Unconventional Operators including submission**

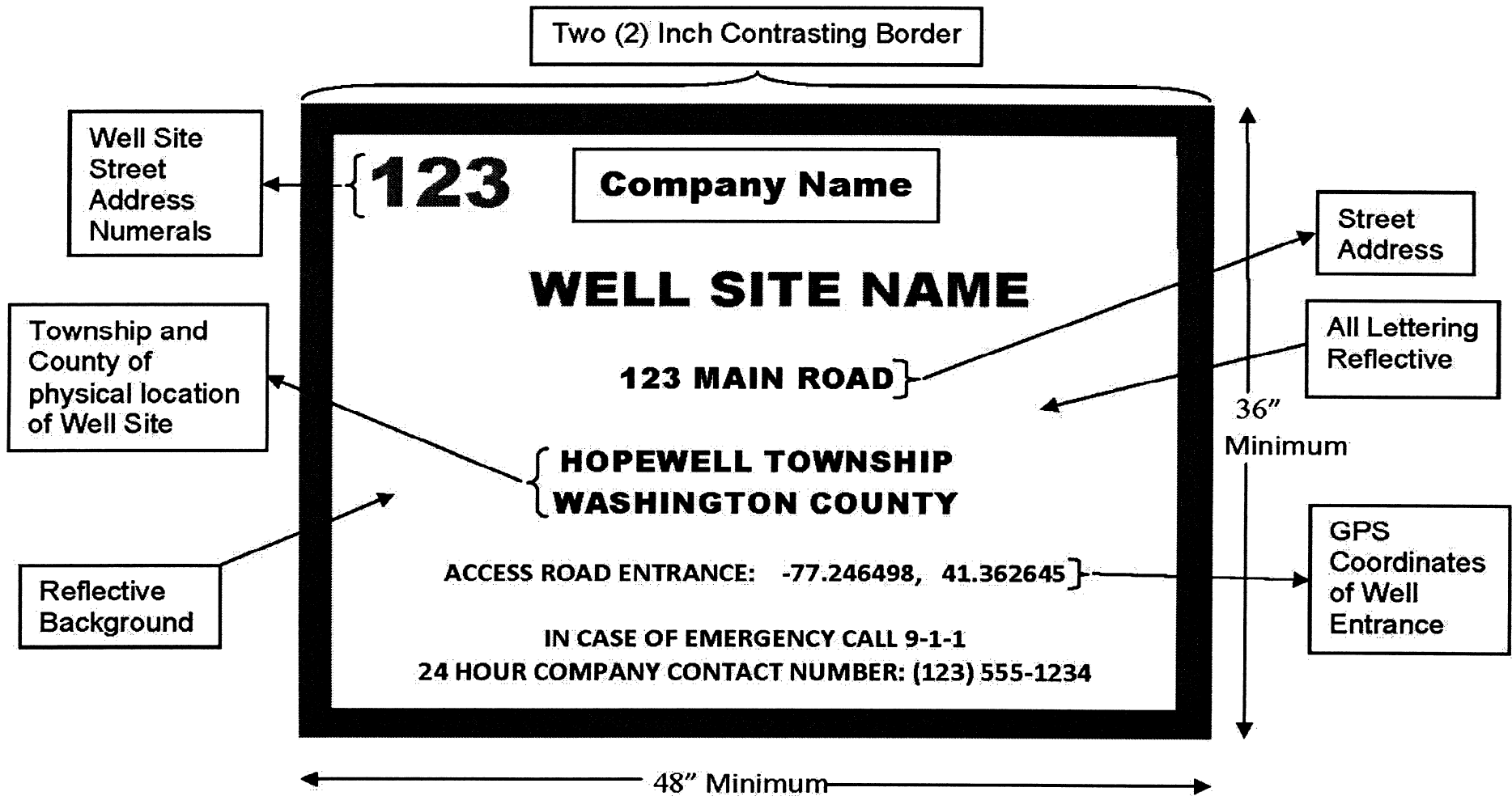
Emergency Response Rulemaking

- January 2013 “emergency” rulemaking
- Industry, DEP, PEMA, Local Governments, First Responders all participated
- Transition Period

Locational Information

- **911 Addressing of Well Site Entrance**
- **GPS Coordinates for Access Road Entrance Point and Well Pad**

Well Site Signage



Well Site Signage



Emergency Response Planning

- Equipment, procedures, training and documentation to properly respond to emergencies that threaten human health and safety
- National Incident Management System planning standards, including the use of the Incident Command System, Incident Action Planning and Common Communications Plans
- Must address all phases of development
- On-site response

Emergency Response Planning

- Off-site response
- Communication/Information
- Summary of risks and hazards within ½ mile of well site and associated planning assumptions
- Training
- Base plan + site-specific plans

Future Developments

- Development and Implementation of Well Site Integrated Contingency Plans
- Model Plans
- Review and Oversight











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Thank you!

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