

Gas Well Workshop

Looking at a drill site

Be careful. An active drilling site can both be confusing and dangerous.

What you'll be looking for are a few specific issues and then more general problems.

Pits

Pits must be lined and the liner must be intact – no rips or holes. Fluid in the pit must be no higher than 2 feet from the top edge of the pit or a rip or hole (35CSR4).



Improperly constructed pits will have stormwater drainage from the site into the pit. Pit failures are evident when part of the pit wall collapses or slumps into the pit, or when the pit or part of the pit has slipped on a fill slope.



Material must stay in the pit. Overspray of waste or drill mud must not happen.



Pits must be fenced. Note animal death – deer, cattle, birds, etc. Some birds are protected under the Migratory Bird Treaty Act (such as red tail hawks).

Diesel storage

Diesel and fracture gel solvents that are oils in aboveground tanks must have secondary containment (35CSR1).

Spills of any size must be reported (1-800-642-3074). Spills affecting surface water can also be reported to the EPA (1-877-919-4372).

Chemical storage

Stockpiles of chemicals should be placed within secondary containment on skids where the soil and ground water are protected by an impervious barrier such as pit liner.



Spills of liquid or powder chemicals onto unprotected ground should be reported to the Office of Oil and Gas as a complaint. Take photographs.

Some chemicals, such as glutaraldehyde, by federal law require personal protective equipment – goggles, respirator and skin protection (29CFR1910).

If it's possible, note products, ingredients, and quantities.

General appearance of site

The site should be neat and clean. Presence of deep mud indicates poor site construction and probability of other, more serious, problems.

Note leaking pipe fittings and connectors, trash, strange odors, etc.

Note: The photos of the pit's collapsed corner with torn liner and spilled chemicals are from Arkansas DEQ inspector reports.

The pit slipping down the hillside is from a vertical Marcellus well site in Putnam county, West Virginia. The waste "bounced", according to the inspector, from a pit was at a horizontal Marcellus well site in Doddridge county, West Virginia.

Fracture gel solvents that would be called oils include: diesel; petroleum distillate; gas oils, straight run; gas oils, straight run, high boiling; kerosene; mineral oil; hydrotreated light petroleum distillate; and paraffinic solvent.