

THE SPILL RULE

PART 1

This newsflash takes a look at proposed Rule 29 (The Spill Rule). The rule defines the concentrations of chloride (salt) and petroleum hydrocarbons (such as gasoline range organics or GRO) that require action on the part of the "Responsible Party."

QUICK TAKEAWAYS FROM THE SPILL RULE

- After notification (if release >5 bbls) and initial response characterization of the release is necessary. Division approval of the characterization plan is not required.
- The upper four feet (soil horizon) must have a chloride concentration \leq 600 mg/kg, and meet the hydrocarbon closure criteria in Table 1.
- If depth to groundwater is > 50 feet and \leq 100 feet, soil samples must define the vertical extent of chloride exceeding 600 mg/kg, **IF:**
 - Chloride concentration of the release exceeds 10,000 mg/L **AND**
 - The volume of the release exceeds 200 bbls or is unknown
- If a release occurred within the following areas, the closure criteria for groundwater \leq 50-feet applies (regardless of actual depth to water):
 - 300 feet of a watercourse, school, residence, etc.
 - 200 feet of a lakebed
 - 500 feet of a well or spring used by stock or less than 5 households
 - 1,000 feet of any other well or spring
 - within 100 feet of a wetland
 - Within a 100-year floodplain, an unstable area, the surface footprint of an underground mine, most fresh water municipal well fields

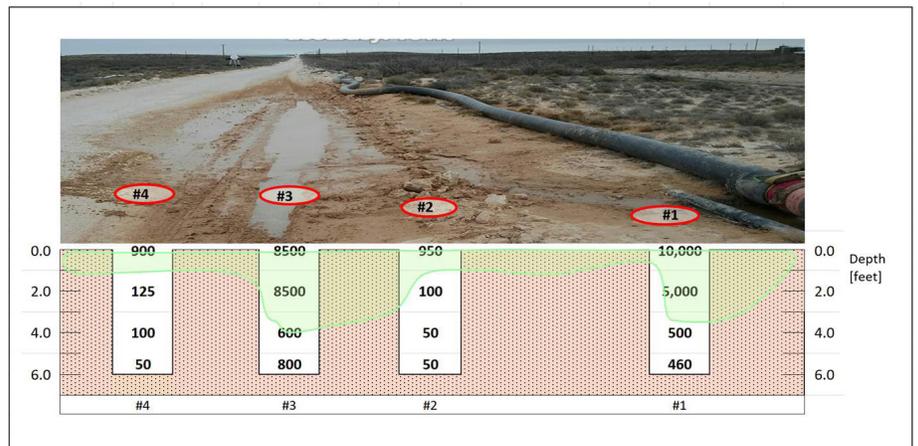
TABLE 1 - CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE

Depth below bottom of release to groundwater	Chloride*	TPH*	GRO + DRO*	BTEX*	Benzene*
LESS THAN 50 FEET	600	100		50	10
51-100 FEET	10,000	2,500	1,000	50	10
GREATER THAN 100 FEET	20,000	2,500	1,000	50	10

*Constituent concentration in mg/kg

EXAMPLE

A net release of less than 200 bbls from a frac water line impacted an area of about 1,200 square yards and calculates to a probable impacted volume of about 100 cubic yards. Excavation along the roads, pipelines, and other possible historic release locations combined with an uncertain volume of the release necessitated characterization before implementing a remedy. At the source of release, sample #1 (see below diagram) found 10,000 mg/kg of chloride at grade with decreasing concentrations to a 6-foot depth. The diagram also presents results from 3 other borings. Because depth to groundwater is greater than 100 feet, other setback requirements are met, and the sampling found no chloride concentrations above closure criteria below 4-feet. Therefore, corrective action is limited to the upper 4-feet and further delineation is not required. The operator can now determine the appropriate remedy.



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