

## South Dakota Cleanup\* Standards for Hydrocarbon Contaminated Groundwater

Product	Parameter/ Constituent	Lab Test Protocol & Number	Detection Level	Notification Level	Action Level	Cleanup Level
Gasoline	Ethylbenzene	EPA 602, 8020, 8015 or equivalent	0.7mg/L	0.7mg/L	0.7mg/L	0.7mg/L
	Benzene	EPA 602, 8020, 8015 or equivalent	0.005mg/L	0.005mg/L	0.005mg/L	0.005mg/L
	Toluene	EPA 602, 8020, 8015 or equivalent	1mg/L	1mg/L	1mg/L	1mg/L
	Xylene	EPA 602, 8020, 8015 or equivalent	10mg/L	10mg/L	10mg/L	10mg/L
	TPH	California/USG S or equivalent	0.1mg/L	0.1mg/L	10mg/L	**
Diesel	TPH	EPA 610, 8100 or equivalent	0.1mg/L	0.1mg/L	10mg/L	**
Waste Oil	TPH**	***	0.1mg/L	0.1mg/L	10mg/L	**

\* South Dakota does not specifically refer to the groundwater quality standards as "Cleanup Standards" but in a practical sense they are used as such.

\*\* Compliance to the 0.1mg/L level is required if the contamination is within the radius of influence of a well or within a delineated well head protection area, unless a variance is obtained. Otherwise the compliance level is 10mg/L.

\*\*\* No particular method is specified as is dependent on characteristics of waste, however, methods used must conform with "Standard Methods for Examination of Water and Waste Water" and "EPA Methods, Methods for Chemical Analysis of Waters and Wastes."

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## South Dakota Cleanup Standards for Hydrocarbon Contaminated Soil

Product	Parameter/ Constituent	Lab Test Protocol & Number	Detection Level	Notification Level	Action Level	Cleanup Level
Gasoline	Benzene	EPA 8020, 8015 or equivalent	0.2mg/kg	above detection levels	0.2mg/kg	**
	Toluene	EPA 8020, 8015 or equivalent	15mg/kg	above detection levels	15mg/kg	**
	Ethylbenzene	EPA 8020, 8015 or equivalent	10mg/kg	above detection levels	10mg/kg	**
	Xylene	EPA 8020, 8015 or equivalent	300mg/kg	above detection levels	300mg/kg	**
	TPH*	California/USGS or equivalent	500mg/kg	above detection levels	500mg/kg	**
Diesel	Naphthalene	If >25 must be confirmed by GC/MS	25mg/kg	25mg/kg	25mg/kg	**
	TPH*	EPA 8100 or equivalent	500mg/kg	0.1mg/kg	500mg/kg	**
Waste Oil	TPH* (Other constituents based on composition of waste oil)		500mg/kg	0.1mg/kg	500mg/kg	**

\* California/USGS method or similar methods that can quantify TPH by integrating all detectable peaks within the time period in which 95% of the recoverable hydrocarbons are eluted.

\*\* Cleanup is not required if risks to human health are not present. Source removal is required. If risks are present cleanup is done to site specific target levels or the Tier I action Levels(detection levels).

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