

Clean Earth Sampling Protocol
Southeast PA (Morrisville)

PARAMETERS	TPH-DRO and TPH-DRO	BTEX	TOTAL VOCs	TOTAL PESTICIDES	TOTAL SVOCs	PCBs	TOTAL METALS - 8 RCRA + Cu, Ni, Zn	TCLP METALS - 8 RCRA + Cu, Ni, Zn	TCLP VOCs (GRAB SAMPLE) (5)	TCLP SVOCs (5)	TCLP HERBICIDES (4)	TCLP PESTICIDES (5)	IGNITABILITY	CORROSIVITY (pH)	REACTIVITY - SULFIDE AND CYANIDE	TOTAL SULFUR (6)	TOX (GRAB SAMPLE)	
METHODS (1)		8000	8000	8000	8000	8000	8000	6000/7000	1311/6000/7000	1311/8000	1311/8000	1311/8000	1311/8000	1000	9000		ASTM D129 or equivalent	9000
	FREQUENCY																	
VIRGIN PETROLEUM (3)	Grab Sample Every 1000 tons	X	X															X
	5 point composite sample every 1000 tons						X	X	X					X	X	X		
Limit (mg/Kg)		(2)	(2)					End Use Criteria	Below RCRA Toxicity Level	Below RCRA Toxicity Level	Below RCRA Toxicity Level	Below RCRA Toxicity Level	Below RCRA Toxicity Level	Negative	> 2 - <12.5	Sulfide <500; Cyanide <250	No Limit	<1000
DRS/NON-VIRGIN	Grab Sample Every 1000 tons	X		X						X								X
	5 point composite sample every 1000 tons				X	X	X	X	X		X	X	X	X	X	X	X	
Limit (mg/Kg)		(2)	(2)					End Use Criteria	Below RCRA Toxicity Level	Below RCRA Toxicity Level	Below RCRA Toxicity Level	Below RCRA Toxicity Level	Below RCRA Toxicity Level	Negative	> 2 - <12.5	Sulfide <500; Cyanide <250	No Limit	<1000
TRS/BRs/MGP	Grab Sample Every 750 tons	X																X
	Grab sample every 1000 tons			X						X								
	5 point composite sample every 1000 tons				X	X	X	X	X		X	X	X	X	X	X	X	
Limit (mg/Kg)		(2)	(2)		<30,000			End Use Criteria	Below RCRA Toxicity Level	Below RCRA Toxicity Level	Below RCRA Toxicity Level	Below RCRA Toxicity Level	Below RCRA Toxicity Level	Negative	> 2 - <12.5	Sulfide <500; Cyanide <250	No Limit	<1000

PLEASE NOTE: Laboratory must be certified by the state of Pennsylvania.

- (1) The methods provided are standard EPA methods. The method revisions are subject to change and the most current method should always be utilized by the laboratory.
- (2) Contact CE facility for limits.
- (3) Virgin petroleum soils, less than 50 tons from a residential source, require only TPH-DRO to C44 (EPA 8000) and TOX (EPA 9000) analysis for acceptance. Residential is defined as a single family home or multiple unit dwelling containing no more than 4 units and cannot be part of a commercial building.
- (4) TCLP Herbicides required for suspected sources
- (5) If the result of the total constituent analysis is less than twenty (20) times for TCLP limit for a specific constituent, the total analysis may be used to demonstrate compliance with the applicable TCLP limit.
- (6) Required for waste expected to contain sulfur only.

This is to be used as a guideline for sampling. Sampling frequencies and parameter requirements may be modified at the discretion of the CE Approval staff based items such as site history, levels of contamination and/or source of contamination, etc.