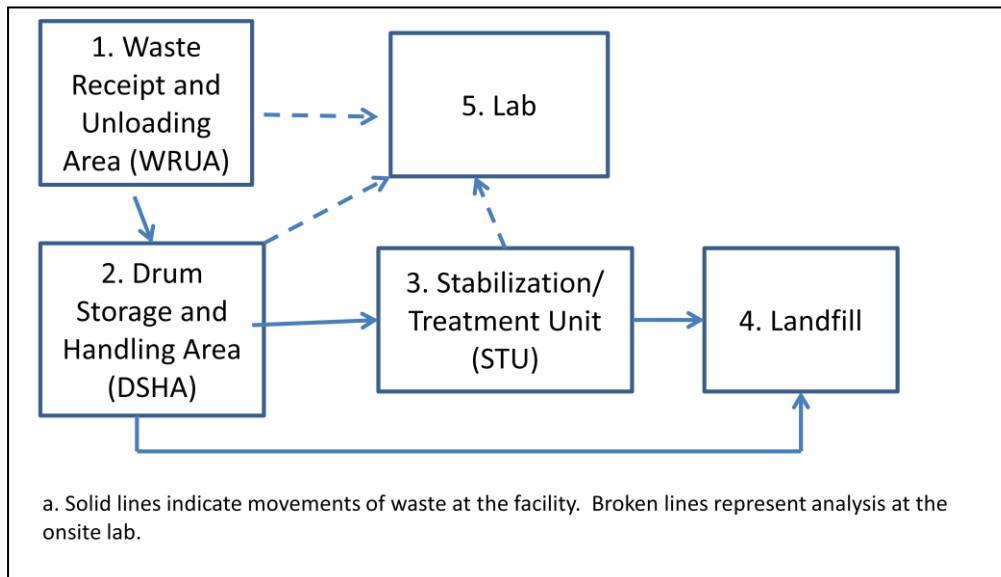


Land Disposal Restrictions Training
Lesson 2: Conducting the Inspection
Exercise 1: Conducting the Opening Meeting and Walk-Through

Instructions: This exercise asks you to participate in an opening meeting and walk-through of WD's facility, which was described in Lesson 1. The WD facility is a permitted TSDF and large quantity generator.

During the exercise, the voice of a facility representative will describe the facility and lead the walk-through, and visual aids will be presented when needed, such as documentation and photos of the facility. Periodically, you will be asked questions about potential compliance concerns and other issues. Feel free to take notes while the facility representative is speaking. If needed, refer to background information on the facility in Lesson 1 or the LDR regulations.

**Diagram of WD Facility's
Waste Management Operations ^a**



1. Opening Meeting

Voice of facility representative: Well, as you've requested, let me start by giving you an overview of our facility operations and touch on some things that have happened since your last visit. Feel free to jump in with questions if you feel the need.

As you know, our facility is a commercial TSD that receives shipments from sites up and down the east coast. We provide commercial storage, along with some consolidation and re-shipment. We also do waste stabilization at our STU and have a landfill. We receive both

treated wastes that go straight to the landfill, as well as untreated wastes that we stabilize and put into the landfill. Occasionally, we have to reject a shipment, or we'll treat it but find we can't sufficiently stabilize it. We're one of seven WD facilities up and down the east coast. If we can't process it, we'll find another facility that can.

We really haven't had any major problems. We had a shutdown of our STU for a few weeks or a month last summer but we worked around it. We re-paved our WRUA and installed some run-on controls. Other than that, there's not much to speak of.

As you've requested, our walk-through today will cover all of our major operations, starting at the very beginning, which is basically our unloading area, and following the wastes as they move onsite from one unit or process to the next. Let me briefly touch on the basics of our operations, and then we can do the walk-through:

- We've got a waste receipt and unloading area where we receive wastes from offsite and initiate shipments offsite. We do the usual processing of shipments. You know – inspecting and weighing the shipment, closing out the manifest.
- After acceptance, wastes are moved to the DSHA. Our DSHA is divided into six compartments, with a pretty big capacity. Wastes are stored in containers and tanks.
- It's at our STU where treatment takes place. It's basically a concrete floor with a roof and it's located in the middle of our facility. The wastes are brought in by conveyor or truckload. We mix the wastes with additives and what have you, to get it to the right level of consistency – you know, stabilized. We haul the treated load to a temporary staging area until we verify that it meets the LDRs. We put it in cell 3 of our landfill.
- That's pretty much our process. We've got some administrative buildings on site – our laboratory and some office buildings, which I can take you to. As a matter of fact, I've got a person pulling some treatment records for you right now.

All in all, we did good business last year. We hit our annual through-put capacity limit for the year. That's 100 tons/hr of through-put in the STU times the total number of operational hours in the year – that's a lot of waste! We've talked about expanding to meet increasing demand but haven't put our plans together yet.

By the way, we've also seen a huge upsurge in shipments of hazardous debris...C&D debris, glass, concrete, bricks, crushed drums, some scrap metal, animal carcasses, process residuals, tree stumps and other plant matter, rocks, plastics, rubber.

We handle all of the debris under the alternative treatment standards, and most treatment is done in our STU. At times of excess supply, we've been treating debris in cell 3 – you know, immobilization. For the really large debris, we use macro-encapsulation – basically applying a sealant around the entire item so nothing can get in or out. For smaller debris, we use microencapsulation – Portland cement or fly ash. We may apply other reagents like iron salts or clays. We sometimes grind up the debris into small bits to facilitate microencapsulation and reduce volume requirements. So, it's working out well for us.....(fade out) **(Pause)**

1.1 Based on the facility representative's statements, what potential concerns do you have?

Issues	Is this a potential concern?		Answer
	Yes	No	
Temporary shutdown of STU			(Yes is Correct.) The facility representative stated that, last year, the facility operated at full throughput for the year. However, he also mentioned that the STU was shut down for up to a month. A question, then, is how WD operated at full annual throughput given the shutdown and how this could have affected treatment effectiveness and waste storage. For example, how did they "work around" this problem? Did they make adjustments to the treatment process and, if so, how did this affect treatment effectiveness? Another area of questioning is what caused the shutdown and has the process been changed such that the permit should be modified. You may want to look into this further.
Use of a conveyor to deliver waste from DSHA to STU			(No is Correct.) The facility representative's statements are consistent with the permit, which requires that an auger shredder system be used to convey the waste from the DSHA to STU. The auger shredding system is a type of conveyor.

Issues	Is this a potential concern?		Answer
	Yes	No	
Use of trucks to deliver waste from DSHA to STU			(Yes is Correct.) The facility representative's statements are inconsistent with the permit, which requires that an auger shredding system be used to convey the waste from the DSHA to STU.
Treatment of "process residuals" under the alternative debris standards			(Yes is Correct.) Section 268.2 excludes from the definition of "debris" process residuals such as smelter slag, sludges, etc.
Treatment of animal carcasses under the alternative debris standards			(No is Correct.) Section 268.2 includes "animal matter" in the definition of "debris."
Immobilization of debris in landfill			<p>(Yes is Correct.) Part 268 prohibits waste from being land disposed unless it meets applicable treatment standards. As provided in 268.2, "land disposal" means placement in or on the land, except in a corrective action management unit or staging pile, and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, or placement in a concrete vault, or bunker intended for disposal purposes. Hence, treatment (e.g., immobilization) of wastes that do not meet the LDR treatment standards cannot occur in a landfill or other land-based unit.</p> <p>EPA addressed this issue in an April 11, 2014, memo from EPA's Office of Resource Conservation and Recovery (RCRA Online Number 14843). The memo states that</p>

Issues	Is this a potential concern?		Answer
	Yes	No	
			<p>questions have been raised on whether hazardous wastes that are prohibited from land disposal can be temporarily put or placed in or on a landfill (or on synthetic material in or on a landfill) before it is confirmed that the waste meets the applicable LDR treatment standards. The memo clarifies that the answer is prohibited wastes (wastes that do not meet applicable treatment standards) cannot be placed in or on land disposal units unless the unit satisfies the statutory no-migration standards. See 268.6 for the no-migration standards.</p>
Grinding of contaminated debris			<p>(Yes is Correct.) Footnote 5 to Table 1 in 268.45 provides that, if reducing the particle size of debris to meet the treatment standards results in material that no longer meets the 60 mm minimum particle size limit for debris, such material is subject to the waste-specific treatment standards for the waste contaminating the material, unless the debris has been cleaned and separated from contaminated soil and waste prior to size reduction. At a minimum, simple physical or mechanical means must be used to provide such cleaning and separation of non-debris materials to ensure that the debris surface is free of caked soil, waste, or other non-debris material. The facility representative stated that all debris is being managed under the alternative standards, including the ground up debris. You should verify that soil and other wastes are</p>

Issues	Is this a potential concern?		Answer
	Yes	No	
			properly removed from the debris before grinding.
Use of reagents like iron salts or clays to facilitate treatment of debris using microencapsulation			(No is Correct.) Table 1 in 268.45 provides that reagents (e.g., iron salts, silicates, and clays) may be added during microencapsulation to enhance the set/cure time and/or compressive strength, or to reduce the leachability of the hazardous constituents. The facility representative has not made any statement suggesting the inappropriate use of iron salts or clays.

Voice of facility representative: Actually, I have a question in connection with hazardous debris that we're getting. If the debris is contaminated with a hazardous waste that carries a waste code which requires a specified method of treatment in 268.40, can the alternative treatment standards for debris be used to treat the debris, or must the specified method of treatment for that waste code be used? **(Pause)**

1.2 What is your response?

Possible responses	Check the correct response	Answer
Either method can be used		Correct. As stated in 268.45(a), hazardous debris may be treated using the treatment standards found in Table 1 of that section or may be treated to the waste-specific treatment standard for the waste contaminating the debris. Either option is acceptable. However, as stated in 268.45(d), if the alternative treatment standards for debris are used, any residues from such treatment are subject only to the waste-specific treatment standards, except as otherwise specified. For example, if debris contaminated with P040 is treated

Possible responses	Check the correct response	Answer
		by grinding (an alternative treatment standard found in Table 1), the residue created (e.g., the 0.6 cm surface layer removed from the debris) must be combusted, since combustion (CMBST) is the treatment standard for P040 specified in 268.40. See “Clarification of the Alternative Treatment Standards for Hazardous Debris” for additional information (RCRA Online Number 14220).
The alternative method must be used only		Incorrect. As stated in 268.45(a), hazardous debris may be treated using the treatment standards found in Table 1 of that section or may be treated to the waste-specific treatment standard for the waste contaminating the debris. Either option is acceptable. However, as stated in 268.45(d), if the alternative treatment standards for debris are used, any residues from such treatment are subject only to the waste-specific treatment standards, except as otherwise specified. For example, if debris contaminated with P040 is treated by grinding (an alternative treatment standard found in Table 1), the residue created (e.g., the 0.6 cm surface layer removed from the debris) must be combusted, since combustion (CMBST) is the treatment standard for P040 specified in 268.40. See “Clarification of the Alternative Treatment Standards for Hazardous Debris” for additional information (RCRA Online Number 14220).
The method specified in 268.40 must be used only		Incorrect. As stated in 268.45(a), hazardous debris may be treated using the treatment standards found in Table 1 of that section or may be treated to the waste-specific treatment standard for the waste contaminating the debris.

Possible responses	Check the correct response	Answer
		Either option is acceptable. However, as stated in 268.45(d), if the alternative treatment standards for debris are used, any residues from such treatment are subject only to the waste-specific treatment standards, except as otherwise specified. For example, if debris contaminated with P040 is treated by grinding (an alternative treatment standard found in Table 1), the residue created (e.g., the 0.6 cm surface layer removed from the debris) must be combusted, since CMBST is the treatment standard for P040 specified in 268.40. See “Clarification of the Alternative Treatment Standards for Hazardous Debris” for additional information (RCRA Online Number 14220).

Voice of facility representative: Ok, if the alternative treatment standards for debris are used to treat debris contaminated with D012-D043 wastes, must the universal treatment standards for UHCs also be met? **(Pause)**

1.3 What is your response?

Yes or No	Answer
Yes	Incorrect. As stated in 268.45(b)(1), the constituents subject to treatment in debris contaminated with toxicity characteristic waste are only those constituents for which the debris exhibits the characteristic. The debris itself is not otherwise subject to the universal treatment standards in 268.48. However, if any residues created from the treatment of such debris still display the toxicity characteristic found in 261.24, those residues are subject to the treatment standards found in 268.40 for the characteristic. Note that those 268.40 treatment standards are likely to invoke the universal treatment standard in 268.48. See “Clarification of the Alternative Treatment Standards for Hazardous Debris” for additional information (RCRA Online Number 14220).
No	Correct. As stated in 268.45(b)(1), the constituents subject to treatment in debris contaminated with toxicity characteristic waste are only those constituents for which the debris exhibits the characteristic. The debris

	<p>itself is not otherwise subject to the universal treatment standards in 268.48. However, if any residues created from the treatment of such debris still display the toxicity characteristic found in 261.24, those residues are subject to the treatment standards found in 268.40 for the characteristic. Note that those 268.40 treatment standards are likely to invoke the universal treatment standard in 268.48. See “Clarification of the Alternative Treatment Standards for Hazardous Debris” for additional information (RCRA Online Number 14220).</p>
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2. Waste receipt/acceptance

Voice of facility representative: Here we are at our waste receipt and unloading areas:

- (Show Photo 1)
 - Over to your right is our bulk unloading area. We use heavy equipment/front-end loaders to move bulk solids from trucks into accumulation tanks. Our equipment is operated by trained personnel with years of experience.



Photo 1: Example of Heavy Equipment

- (Show Photo 2)
 - Now, straight ahead is where we receive containers, liquids in tanker trucks, and what have you, as well as send wastes offsite. When a shipment comes in, we inspect it and do our fingerprint tests. For example, for a shipment of containers of untreated waste, we'll fingerprint ten percent of the containers within each waste profile. So, if the shipment includes 10 containers of a profiled waste, we'll sample 1 container. If, on that same shipment, there's a single container of

another profiled waste, we'll sample it too. Our routine fingerprint tests look at pH, sulfides and oxidizers. We may also screen for cyanides if the generator's waste profile or other information indicates their presence.

Of course, we don't do fingerprinting on certain types of wastes that we receive for various reasons, such as safety concerns or just the plain infeasibility of getting a sample, such as lab packs, personal protective equipment, PCB drainings and flushings from PCB articles, plant and animal debris, C&D debris.

For containers and bulk shipments of treated waste that will be direct landfilled, we'll do a thorough visual inspection, but generally tests aren't done. Of course, we receive LDR notices from the generator or treater certifying that they meet all applicable LDR treatment standards....fade out. **(Pause)**



Photo 2: Tanker Truck

2.1 Do you have any potential compliance concerns with WD's management of the following wastes?

Wastes	Is there a potential compliance concern?		Answer
	Yes	No	
Lab packs			(No is Correct.) Based on the facility representative's statement, there is no concern with this waste. The representative stated that fingerprinting is not performed on this waste. This is consistent with WD's permit.

Wastes	Is there a potential compliance concern?		Answer
	Yes	No	
Plant and animal debris			(Yes is Correct.) The facility representative stated that fingerprinting is not performed on this debris. This is inconsistent with the WD's permit, which does not exempt plant/animal debris from fingerprinting.
Personal protective equipment			(No is Correct.) Based on the facility representative's statement, there is no concern with this waste. The representative stated that fingerprinting is not performed on this waste. This is consistent with WD's permit.
C&D debris			(No is Correct.) Based on the facility representative's statement, there is no concern with this waste. The representative stated that fingerprinting is not performed on this waste. This is consistent with WD's permit.
PCBs			(Yes is Correct.) The facility representative stated that it does not perform fingerprinting on PCB wastes. This suggests that PCB wastes are in fact accepted at the facility (or, at the least, that the facility representative believes that PCBs are accepted). However, WD's permit prohibits the acceptance of PCB waste.

3. Temporary Staging Piles of STU

Voice of facility representative: Here we are at the part of the STU where we sample our treated wastes. These are our temporary staging piles.

- (Show Photo 1)
 - As you know, the STU receives and processes hazardous wastes that cannot be directly disposed into a landfill. The STU treatment process modifies chemical

and physical characteristics of the wastes to meet applicable LDR standards. The wastes are mixed with various process additives, such as Portland cement, for stabilization.

- Treated waste from the STU is discharged to a hauling truck. When the hauling truck is full, the batch is transported to a temporary staging area within the STU. You can see the staging area straight ahead as we're approaching it – essentially, they're waste piles.
- (Show Photo 2)
 - Let's take a closer look at the piles. The piles are placed on plastic and covered with plastic. The piles remain in the staging area until treatment verification sampling is performed.
- (Show Photo 3)
 - One of our field technicians is sampling a pile. As you can see, he is taking a single grab sample from each pile for verification. If the verification sampling shows that one or more treatment standards are not met, the waste is re-treated. **(Pause)**



Photo 1 : Waste Piles



Photo 2: Waste Piles (close up)



Photo 3: Field Technician

3.1 True or False: The field technician's sampling is being performed in compliance with LDR requirements.

True or False	Answer
True	<p>Correct. Compliance with the LDR standards for non-wastewaters should be based on grab samples (i.e., a one-time sample taken from any part of the waste), rather than composite samples (i.e., a combination of samples collected at various locations for a given waste, or samples collected over time from that waste). This is because grab samples normally reflect maximum process variability, and thus would reasonably characterize the range of treatment system performance. See 54 FR at 26605–06, June 23, 1989; 55 FR at 22539, June 1, 1990. This is consistent with the permit, which calls for a grab sample. (Note: Although grab sampling is appropriate for nonwastewaters, a <u>single</u> grab sample may not be sufficient for determining LDR compliance. This potential discrepancy between WD’s permit and the LDR requirements will be explored later in this training.)</p>
False	<p>Incorrect. Compliance with the LDR standards for non-wastewaters should be based on grab samples (i.e., a one-time sample taken from any part of the waste), rather than composite samples (i.e., a combination of samples collected at various locations for a given waste, or samples collected over time from that waste). This is because grab samples normally reflect maximum process variability, and thus would reasonably characterize the range of treatment system performance. See 54 FR at 26605–06, June 23, 1989; 55 FR at 22539, June 1, 1990. This is consistent with the permit, which calls for a grab sample. (Note: Although grab sampling is appropriate for nonwastewaters, a <u>single</u> grab sample may not be sufficient for determining LDR compliance. This potential discrepancy between WD’s permit and the LDR requirements will be explored later in this training.)</p>

3.2 True or False: A waste pile that failed the verification is in violation of the LDR storage prohibition at 268.50.

True or False	Answer
True	<p>Correct. Section 268.50 provides that the storage of wastes that do not meet their LDR treatment standards is prohibited, unless specified conditions are met. Among other things, a TSDF may store such wastes in <u>ONLY tanks, containers, or containment buildings</u>, and comply with marking/recordkeeping requirements. Hence, waste piles are not authorized for the storage of such wastes. Rather, a waste pile is a land disposal unit into which prohibited waste cannot be placed until it meets all applicable LDR treatment standards.</p> <p>You should review WD's permit to verify that it does not incorrectly allow for such wastes to be stored in waste piles pending verification and re-treatment.</p>
False	<p>Incorrect. Section 268.50 provides that the storage of wastes that do not meet their LDR treatment standards is prohibited, unless specified conditions are met. Among other things, a TSDF may store such wastes in <u>ONLY tanks, containers, or containment buildings</u> and comply with marking/recordkeeping requirements. Hence, waste piles are not authorized for the storage of such wastes. Rather, a waste pile is a land disposal unit into which prohibited waste cannot be placed until it meets all applicable LDR treatment standards.</p> <p>You should review WD's permit to verify that it does not incorrectly allow for such wastes to be stored in waste piles pending verification and re-treatment.</p>

Voice of facility representative: Here are the treatment results that you asked for. They show the results of our initial verification testing for some of our piles. Keep in mind that we assign a

unique tracking number to each pile. Specifically, each pile is an individual truckload from the STU's stabilization area, and each truckload is given a batch number. The batch number reflects the date (i.e., the first six numbers) and treatment run (i.e., last three numbers). For example, a batch number of 120803-001 translates to batch number 001, treated on August 3, 2012....fade out (**Pause**)

3.3 Which constituents meet the LDR's constituent-specific treatment standards?

Verification Results				
Constituent	Result	Does it meet the LDR treatment standard? (Yes or No)		Answer
		Yes	No	
Batch: 120803-001				
Lead	< 0.13 mg/L TCLP			(Yes is Correct), it meets the treatment standard: 0.13 mg/L TCLP < 0.75 mg/L TCLP. See Table UTS
Arsenic	0.48 mg/L TCLP			(Yes is Correct), it meets the treatment standard: 0.48 mg/L TCLP < 5.0 mg/L TCLP. See Table UTS
Vanadium	1.5 mg/L TCLP			(Yes is Correct), it meets the treatment standard: 1.5 mg/L TCLP < 1.6 mg/L TCLP. See Table UTS
Cyanides (Total)	720 mg/kg			(No is Correct), it does not meet the treatment standard: 720 mg/kg > 590 mg/kg. See Table UTS

Verification Results				
Constituent	Result	Does it meet the LDR treatment standard? (Yes or No)		Answer
		Yes	No	
Cyanides (Amendable)	45 mg/kg			(No is Correct), it does not meet the treatment standard: 45 mg/kg > 30 mg/kg. See Table UTS
Nickel	13 mg/L TCLP			(No is Correct), it does not meet the treatment standard: 13 mg/L TCLP > 11 mg/L TCLP. See Table UTS
Batch: 120803-002				
Lead	< 0.12 mg/L TCLP			(Yes is Correct), it meets the treatment standard: 0.12 mg/L TCLP < 0.75 mg/L TCLP. See Table UTS
Arsenic	0.48 mg/L TCLP			(Yes is Correct), it meets the treatment standard: 0.48 mg/L TCLP < 5.0 mg/L TCLP. See Table UTS
Vanadium	0.5 mg/L TCLP			(Yes is Correct), it meets the treatment standard: 0.5 mg/L TCLP < 1.6 mg/L TCLP. See Table UTS
Cyanides (Total)	804 mg/kg			(No is Correct), it does not meet the treatment

Verification Results				
Constituent	Result	Does it meet the LDR treatment standard? (Yes or No)		Answer
		Yes	No	
				standard: 804 mg/kg > 590 mg/kg. See Table UTS
Cyanides (Amendable)	29 mg/kg			(Yes is Correct), it meets the treatment standard: 29 mg/kg < 30 mg/kg. See Table UTS
Nickel	15 mg/L TCLP			(No is Correct), it does not meet the treatment standard: 15 mg/L TCLP > 11 mg/L TCLP. See Table UTS

3.4 Does either batch pass the verification?

Batch No.	Does the batch pass the verification test (Yes or No)?		Answer
	Yes	No	
120803-001			(No is Correct). The batch failed for cyanides (total and amenable) and nickel.
120803-002			(No is Correct). The batch failed for cyanides (total) and nickel.

Voice of facility representative: As you can see, both batches failed the post-treatment verification which, for purposes of this discussion, we can refer to as the “first” verification. So, we re-treated them and performed a second verification. Here are the results of the second verification. **(Pause)**

Second Verification Results	
Constituent	Result
Batch 120803-001	
Lead	0.15 mg/L TCLP
Arsenic	4.9 mg/L TCLP
Vanadium	1.5 mg/L TCLP
Cyanides (Total)	720 mg/kg
Cyanides (Amendable)	45 mg/kg
Nickel	20 mg/L TCLP
Batch 120803-002	
Lead	0.18 mg/L TCLP
Arsenic	4.6 mg/L TCLP
Vanadium	1.2 mg/L TCLP
Cyanides (Total)	720 mg/kg
Cyanides (Amendable)	32 mg/kg
Nickel	9 mg/L TCLP

3.5 Does either batch pass the second verification?

Batch No.	Does the batch pass the second verification (Yes or No)?	Answer
120803-001		(No is Correct.) The batch failed for cyanides (total and amendable) and nickel.
120803-002		(No is Correct.) The batch failed for cyanides (total and amendable).

3.6 Based on the first and second verifications, which constituents indicate a potential problem?

Constituent	Check all that apply		Answer
	Yes	No	
Lead			(No is Correct.) The batches passed the TCLP for this constituent during the first and second verifications, and there are no apparent problems with sampling methodology.
Arsenic			(Yes is Correct.) The first verification (both batches) shows 0.48 mg/L TCLP for arsenic.

Constituent	Check all that apply		Answer
	Yes	No	
			However, the second verification shows 4.6 and 4.9 mg/L TCLP for each batch respectively. Although neither batch failed the TCLP for arsenic, there is roughly a 10-fold increase in the test results from the first verification to the second. The samples collected for the first verification are well below the treatment standard, and the samples collected for the second verification are close to the treatment standard. Based on these sample results, there is a potential problem in the accuracy and precision of the verification sampling methodology.
Vanadium			(No is Correct.) The batches passed the TCLP for this constituent during the first and second verifications, and there are no apparent problems with sampling methodology.
Cyanides (total)			(Yes is Correct.) Both batches failed for total cyanides during the first and second verification.
Cyanides (Amendable)			(Yes is Correct.) One batch failed for amendable cyanides during the first verification and both failed during the second verification
Nickel			(Yes is Correct.) Both batches failed for nickel during the first verification and one failed during the second verification.

4. 90-Day Accumulation Area/Recordkeeping

Voice of facility representative: Well, here's a page from the notice you asked for. We generated some spent solvent here onsite, drummed it and sent it for offsite treatment. It's an F005 solvent. I can show you the manifest afterwards. As you'll see on the manifest, we listed F005 as the sole waste code in box 13. So, I think the two forms are comparable in that regard....fade out. **(Pause)**

Land Disposal Restriction (LDR) Notice	
Generator name: WD Facility	
EPA ID Number: NY982394827	Manifest Number: 185739020 JJK
This notice is being provided in accordance with 40 CFR 268.7 to inform you that this shipment contains waste restricted from land disposal under USEPA land disposal restriction	

program. Identified below for each container is the designation of the waste as a wastewater or non-wastewater, applicable waste codes and any corresponding subcategories, list of any F001-F005 solvent constituents that are present in the waste, and any underlying hazardous constituents that are present.
Container: NY -189283764668-001 (1/1)
WIP Approval Code: 800918/PTAAERNJ1
Wastewater or Non-wastewater: Non-wastewater
Waste codes (subcategories): F005 (None)
Constituents (F001-F005): Toluene
UHCs Present: N/A
Treatment requirements: restricted waste requires treatment to applicable standards

Questions

4.1 Suppose the F005 waste failed the TC for lead (D008). True or False: The waste code for lead (D008) must be added to the LDR notice.

Select the correct answer	Answer
True	Correct. Lead is not addressed as part of the treatment standard for F005; therefore, it must be included on the LDR notice.
False	Incorrect. Lead is not addressed as part of the treatment standard for F005; therefore, it must be included on the LDR notice.

4.2 Suppose the F005 waste exhibited the ignitability characteristic solely because of toluene. True or False: The waste would be subject to the requirement to monitor for and treat UHCs because of ignitability.

Yes or No	Answer
True	<p>Incorrect. Under 268.9(b), where a prohibited waste is both listed and exhibits a characteristic, the treatment standard for the listed waste code will operate in lieu of the standard for the characteristic waste code, provided that the treatment standard for the listed waste includes a treatment standard for the constituent that causes the waste to exhibit the characteristic.</p> <p>In this case, it is the solvent's toluene constituent that causes the waste to exhibit the characteristic of ignitability. The F005 treatment standard includes a standard for toluene. Hence, the F005 standard operates in lieu of the treatment standard for ignitability, including the requirement to address UHCs.</p>

False	<p>Correct. Under 268.9(b), where a prohibited waste is both listed and exhibits a characteristic, the treatment standard for the listed waste code will operate in lieu of the standard for the characteristic waste code, provided that the treatment standard for the listed waste includes a treatment standard for the constituent that causes the waste to exhibit the characteristic.</p> <p>In this case, it is the solvent's toluene constituent that causes the waste to exhibit the characteristic of ignitability. The F005 treatment standard includes a standard for toluene. Hence, the F005 standard operates in lieu of the treatment standard for ignitability, including the requirement to address UHCs.</p>
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Voice of facility representative: Here's a page from another notice you asked for. It's F006 generated from a facility that performs metals plating. It was shipped to us, and we re-packaged it and sent it to the treater. Based on documentation provided by the generator, it failed the TCLP for silver. Since silver is addressed in the F006 treatment standard, we didn't list D011 for silver on the manifest or LDR notice. **(Pause)**

Land Disposal Restriction (LDR) Notice	
Generator name: WD Facility	
EPA ID Number: NY982394827	Manifest Number: 185738111 JJK
This notice is being provided in accordance with 40 CFR 268.7 to inform you that this shipment contains waste restricted from land disposal under USEPA land disposal restriction program. Identified below for each container is the designation of the waste as a wastewater or non-wastewater, applicable waste codes and any corresponding subcategories, list of any F001-F005 solvent constituents that are present in the waste, and any underlying hazardous constituents that are present.	
Container: : NY -1892837643458-001 (1/1)	
WIP Approval Code: 800919/PTAAERNJ1	
Wastewater or Non-wastewater: Non-wastewater	
Waste codes (subcategories): F006	
Constituents (F001-F005): None	
UHCs Present: None	
Treatment requirements: restricted waste requires treatment to applicable standards	

4.3 True or False: WD is correct for not listing silver on the LDR notice.

True or False	Answer
True	Incorrect. WD is mistaken. The treatment standard for F006 wastewater does not include silver. D011 and F006 <u>must</u> both be on the notice.

False	Correct. WD is mistaken. The treatment standard for F006 wastewater does not include silver. D011 and F006 <u>must</u> both be on the notice.
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Voice of facility representative: Also, I realize that these notices need to be sent out only for the initial shipment and don't need to be sent again unless the waste or treatment facility changes. When this happens, which manifest number do we put on that updated notice: the original manifest number or the new one? **(Pause)**

4.4 What is your response?

Select the correct answer	Answer
The manifest number of the original manifest	Incorrect. The manifest number should be the one associated with the first shipment of "changed" waste or the one sent to the "changed" treatment facility. It should not be the manifest number associated with the original first shipment because that number is superseded. See" Questions Regarding the Land Disposal Restrictions (LDR) Notification Regulations at 40 CFR 268.7" (RCRA Online Number 14325).
The manifest number of the updated manifest	Correct. The manifest number should be the one associated with the first shipment of "changed" waste or the one sent to the "changed" treatment facility. It should not be the manifest number associated with the original first shipment because that number is superseded. See" Questions Regarding the Land Disposal Restrictions (LDR) Notification Regulations at 40 CFR 268.7" (RCRA Online Number 14325).

Voice of facility representative: Here's a page from another notice you asked for. This is an LDR notice for lab packs that we sent for incineration under the alternative standards. Essentially, we received several shipments of lab packs, broke them up into different shipments and sent for incineration at various sites. There's a bunch of wastes reflected on this notice, such as metals like barium, lead, silver, cadmium; corrosives like spent sulfuric acid, oleum, ammonium hydroxide, nitric acid; lab samples from K-listed wastewater treatment sludges...fade out. **(Pause)**

Land Disposal Restrictions Lab Pack Notification/Certification (268.7(a)(9))	
Generator ID: NY982394827 Manifest No: 185738222 JJK	Sales Order Number: 144443299
Lab pack instructions: Hazardous wastes placed in a lab pack that will be incinerated under the alternative LDR treatment standards in 268.42(b) should be identified below. The lab pack cannot contain any of the wastes listed in Appendix IV to Part 268.	

Line #	Container	EPA Waste Codes	Customer Container #	Container Size & Type
1	CH Container # C000000100	D001, D002, D005	CDR#4011	05DF
2	CH Container # C000000101	D002, D005, D008, D011, U106, U159, U162, U213	CDR#4016	55DM
3	CH Container # C000000102	K003, K004	CDR#4012	05DF
4	CH Container # C000000105	D001, D002, D011	CDR#4087	55DM
5	CH Container # C000000106	D001, D003, D009	CDR#4025	05DF
6	CH Container # C000000102	D001, D003, D035	CDR#4009	05DF
<p>I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only wastes that have not been excluded under appendix IV to 40 CFR part 268 and that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR 268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.</p>				
Generator's Signature: 		Generator's Name and Title: Joe Smith, Facility Manager		Date: February 14, 2014

4.5 Based on the facility representative's statements and LDR notice, do you have any concerns with the following waste codes?

Waste codes	Do you have concerns associated with the following codes?		Answer
	Yes	No	
D001			(No is Correct). There is no potential concern with this waste code based on the representative's statements.
D002			(Yes is Correct). Oleum is a fuming sulfuric acid (D002) that is forbidden from lab packs under Department of Transportation regulations at 49 CFR 173.12(b).
D003			(No is Correct). There is no potential concern with this waste code based on the representative's statements.
D005			(No is Correct). There is no potential concern with this waste code based on the representative's statements.

Waste codes	Do you have concerns associated with the following codes?		Answer
	Yes	No	
D008			(No is Correct). There is no potential concern with this waste code based on the representative's statements.
D009			(Yes is Correct). D009 (mercury) is excluded from lab packs in Appendix IV of Part 268.
D011			(No is Correct). There is no potential concern with this waste code based on the representative's statements.
D035			(No is Correct). There is no potential concern with this waste code based on the representative's statements.
K003			(Yes is Correct). K003 (wastewater treatment sludge from the production of molybdate orange pigments) is excluded from lab packs in Appendix IV of Part 268.
K004			(Yes is Correct). K004 (wastewater treatment sludge from the production of zinc yellow pigments) is excluded from lab packs in Appendix IV of Part 268.
U159			(No is Correct). There is no potential concern with this waste code based on the representative's statements.