

RCRA Inspector Training

Land Disposal Restrictions

Introduction

- Training objectives
 - To strengthen your understanding of the RCRA Land Disposal Restrictions (LDR) program and activities for inspecting facilities for LDR compliance
- This training consists of 3 lessons that cover the primary phases of a RCRA inspection
 - Lesson 1: Preparing for the inspection
 - Lesson 2: Conducting the inspection
 - Lesson 3: Conducting follow-up after the inspection
- At the end of this training is a final exam

Introduction (continued)

- This training has been specially designed to promote increased student interaction and engagement
 - Includes numerous exercises that encourage you to apply your understanding of the regulations to resolve compliance problems that may be found in the field
- This training is based on the federal RCRA program
 - State inspectors should consult their own state's regulations for requirements that may be more stringent and/or broader in scope

Lesson 1: Preparing for the Inspection

Lesson 1: Overview

- Welcome to Lesson 1. By the end of this lesson, you will be able to
 - Describe the LDR requirements that apply to generators and TSDFs
 - Review the LDR regulations to determine the applicable treatment standards for different types of hazardous waste
 - Review an LDR notice for compliance with applicable requirements
 - Review portions of a RCRA permit to prepare for the inspection
 - Review Biennial Report data to find issues that may be relevant to an inspection

Reviewing the LDR Regulations

Insert Narration on LDR Regulations

Insert Part 268

Land Disposal Restriction Notification Form

Generator name: Acme Steel

EPA ID number: NY123456789

Manifest: 000000099 JJK

Notes: Required Information*

Manifest number of first shipment

The applicable wastewater/ non-wastewater category (see §§268.2(d) and (f))

EPA hazardous waste numbers (i.e., codes), including subdivisions made within a waste code based on waste-specific criteria (such as D003 reactive cyanide)

The constituents of concern for F001-F005, and F039, and underlying hazardous constituents in characteristic wastes, unless the waste will be treated and monitored for all constituents. If all constituents will be treated and monitored, there is no need to put them all on the LDR notice

Statement: The waste is subject to the LDRs

*Based on "Generator Paperwork Requirements Table" at 268.7(a)(4).

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 -189283764658-001 (1/2)

WIP/Approval Code: 800917/PTAAERNJ1

Wastewater or Non-wastewater: Non-wastewater

Waste codes (subcategories): D001 (IGNITABLE CHARACTERISTIC WASTE, LIQUIDS >= 10% TOC PER 261.21(a)(

Constituents (F001-F005): None

UHCs Present: None

Treatment requirements: restricted waste requires treatment to applicable standards

Container : NY -187282764558-002 (2/2)

WIP/Approval Code: 778345/PTAAERNJ1

Wastewater or Non-wastewater: Non-wastewater

Waste codes (subcategories): F002, F003 (NONE), D022

Constituents (F001-F005): Disposal site monitors for constituents

UHCs Present: None

Treatment requirements: restricted waste requires treatment to applicable standards

I hereby certify that all information in this and associated LDR documents is complete and accurate to the best of my knowledge.

Signature: 

Title: Facility Manager

Date: February 14, 2014

Insert Lesson 1, Exercise 1

Insert Lesson 1, Exercise 2

Reviewing Facility Information

Inspector Tips to Prepare for Inspection

- Re-familiarize yourself with LDR requirements
- Review the facility's files (e.g., RCRA permit, enforcement and inspection reports)
 - “Permit as a shield” does not apply to LDR requirements unless such requirements are in permit
- Review the most recent facility reporting data (e.g., Biennial Report)
 - Use the data as a starting point to learn about potential issues
 - Recognize the inherent limitations of the data
 - Do not accept them on face value

Inspector Tips to Prepare for Inspection (Continued)

- Prepare an inspection checklist that reflects facility-specific information (e.g., its permit)
- For permitted facilities, speak with the permit writer
 - May be in closer communication with facility than inspectors
 - Can discuss facility operations and permit requirements, issues to look for onsite, etc.
 - May want to join you during facility visit

Insert Lesson 1, Exercise 3

Lesson 1 Summary

- Key issues covered in Lesson 1
 - Part 268 sets forth treatment standards for hazardous wastes and specifies requirements for generators and TSDFs (e.g., requirements for waste determinations, transmittal of notices/certifications)
 - The table in 268.40 sets forth 3 types of treatment standards for hazardous wastes: a “total waste standard,” a “waste extract standard,” and a “technology standard”
 - Part 268 also sets forth alternative treatment standards for lab packs, contaminated debris, and contaminated soil
 - Inspectors should review available information (e.g., facility permit, past reports, databases) to prepare for the inspection

Lesson 2: Conducting the Inspection

Lesson 2: Overview

- Welcome to Lesson 2. By the end of this lesson, you will be able to
 - Identify potential LDR violations during the facility walk-through
 - Review LDR notices for potential compliance problems
 - Explain EPA regulations and policy on various aspects of the LDR program (e.g., hazardous debris)
 - Review a facility's LDR treatment results to determine if a waste meets applicable treatment standards

Inspector Tips for Compliance Reviews of LDR Notices

- Are all required elements of the form included fully and accurately?
- Are all required waste codes for each waste included?
- Is the form signed, if required?
- Was supplementary data provided by the generator (if available)?
- Is the notice updated when required?
- Does the facility retain each form for at least 3 years from the date that the waste that is the subject of such documentation was last sent to on-site or off-site treatment, storage, or disposal?

Inspector Tips for Evaluating Generator's Acceptable Knowledge Determinations

- Is published data as current as practicable (e.g., SDSs greater than five years old may be obsolete due to changes in RCRA program, improvements in testing protocols, etc.)?
- Do material balances, if used, include the following (among other things):
 - Raw ingredient descriptions and physical and chemical properties
 - Physical and chemical processes involved prior to and during generation
 - Intermediate products
 - Materials added and removed during the process?

Inspector Tips for Evaluating Generator's Acceptable Knowledge Determinations (Continued)

- Does the generator review its original acceptable knowledge determination annually, randomly, and whenever the generating process/waste changes or the TSDF finds a nonconformance?
- Does the generator understand the potential for changes in the waste and its classification due to environmental factors or spontaneous changes?
- Are records kept demonstrating that periodic reviews are being conducted (e.g., a log or certification by facility personnel that is signed annually)?

Inspector Tips for Evaluating Generator's Acceptable Knowledge Determinations (Continued)

- Are analytical results of published studies based on currently acceptable sample/test methods?
- Are there significant differences between the published studies and the site's generation processes/wastes (e.g., raw materials used in the generation process) to warrant concerns about relevancy?
- Have you obtained samples of generator's waste to verify the accuracy of the determinations?

Inspector Tips for Evaluating Generator's Waste Analysis Plan (WAP)

- For generators treating waste to meet LDR standards in qualified units –
 - Do they have and follow a written WAP?
 - Is the generator's treatment appropriate?
 - Does the treated waste meet the standards?
 - Is the analytical data acceptable?
 - Do the data support the generator's determination?
 - Have they done sufficiently frequent sampling given the waste's variability?
 - For non-wastewaters, have they drawn grab samples instead of composites?

Insert Lesson 2, Exercise 1

Lesson 2 Summary

- Key issues covered in Lesson 2
 - Grab samples, not composites, are appropriate for analyzing non-wastewaters under the LDRs
 - LDR notices should be reviewed for completeness and accuracy
 - Compare the waste codes on the notice to its associated manifest
 - Inspectors should review the facility's treatment results to find potential problems
 - Preferably, trending data that show the facility's effectiveness at meeting the LDR treatment standards over time

Lesson 3: Conducting Follow-Up After Inspection

Lesson 3: Overview

- Welcome to Lesson 3. By the end of this lesson, you will be able to
 - Communicate potential concerns identified during the inspection
 - Answer questions raised by stakeholders
 - Identify follow-up actions with the facility
 - Identify follow-up issues that should be coordinated with other offices

Insert Lesson 3, Exercise 1

Lesson 3 Summary

- Effective communication is an important aspect of inspection/enforcement process
- Sometimes, compliance issues need to be resolved and followed up on after the inspection is done
- You should look for issues that may need to be conveyed to others outside of your immediate office
 - Other environmental programs
 - Permit writer
 - Regulated community
 - State

Training Summary

- Key issues covered in training
 - Part 268 sets forth treatment standards for hazardous wastes and specifies requirements for generators and TSDFs (e.g., requirements for waste determinations, transmittal of notices/certifications)
 - The table in 268.40 sets forth 3 types of treatment standards for hazardous wastes: a “total waste standard,” a “waste extract standard,” and a “technology standard”
 - Part 268 also sets forth alternative treatment standards for lab packs, contaminated debris, and contaminated soil
 - LDR notices should be reviewed for completeness and accuracy

Training Summary (Continued)

- Inspectors should review the facility's treatment results to find potential problems
 - Preferably, trending data that show the facility's effectiveness at meeting the LDR treatment standards over time
- Inspectors should evaluate 1) a facility's compliance with its permit **as well as** 2) the permit requirements themselves
 - Inspection may uncover deficiencies in the permit that require further action to resolve

Summary of Key Inspector Tips

- Prepare in advance for the inspection (e.g., review the permit files, re-familiarize yourself with the regulations)
- During onsite inspections:
 - Review LDR notices for compliance (e.g., are all required elements of the form included fully and accurately?)
 - Review generator's acceptable knowledge determinations and facility implementation of waste analysis plans
 - Use performance-based inspection of facility to thoroughly identify and evaluate waste generation and management
 - Evaluate the inter-relationships among the various facility operations and how they could affect each other from a compliance standpoint (e.g., upstream operational problems causing downstream compliance problems)

Summary of Key Inspector Tips (Continued)

- After the onsite inspection, communicate with stakeholders (e.g., permit writer, other agencies, state)

Resources

- “Introduction to Land Disposal Restrictions”
<http://www.epa.gov/osw/inforesources/pubs/training/ldr05.pdf>
- “Land Disposal Restrictions: Summary of Requirements”
<http://www.epa.gov/osw/hazard/tsd/ldr/ldr-sum.pdf>
- “Guidance on Demonstrating Compliance With the Land Disposal Restrictions (LDR) Alternative Soil Treatment Standards”
http://www.epa.gov/osw/hazard/tsd/ldr/soil_f4.pdf

Resources (Continued)

- “Waste Analysis At Facilities That Generate, Treat, Store, And Dispose Of Hazardous Wastes”
<http://www.epa.gov/osw/hazard/tsd/ldr/wap330.pdf>
- EPA memo regarding the placement of prohibited wastes (i.e., wastes that do not meet LDR treatment standards) in a landfill (RCRA Online Number 14843; 4/11/14)
<http://www.epa.gov/solidwaste/inforesources/online/index.htm>
- Fundamentals for RCRA Inspectors Training
www.epa.gov/compliance/training/neti/index.html

Resources (Continued)

- Process-Based Inspections Training
www.epa.gov/compliance/training/neti/index.html
- RCRA Inspection Manual