

Update on Waste Analysis Plan (WAP) Guidance

(Presentation primarily from the EPA Region 5 State RCRA Permit Program Meeting held May 7, 2015)

July 17, 2015

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- ► PGIII
- > 1986-2003 DEP RCRA permitting
- > 2003-2009 WRS, WRSCompass
- 2009-present DEP RCRA permitting



Why EPA Initiated the Effort

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Former WAP Guidance was from 1994 without update.

Purpose of the Guidance

Assist states, EPA, and O/Os with the application of waste analysis and waste analysis plan requirements under RCRA to TSDFs, including guidance on how to develop, implement, and evaluate waste analysis plans.

Who really needs a WAP?

- 40 CFR Part 264.13 (265.13 for interim status facilities) requires TSDFs to obtain a detailed physical and chemical analysis of a representative sample of a HW before it can be stored, treated or disposed.
- Generators who treat hazardous waste on site in tanks, containers or a containment building under 40 CFR Part 262.34 to meet LDR requirements must develop and follow a written waste analysis plan.
- **Generators** who treat waste to meet LDR must develop and follow a waste analysis plan (40 CFR Part 268.7).

Guidance can also be used to develop used oil processor or re-refiner analysis plans under Part 279.

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Who Asked for it and Why Was it Necessary?

- Since 1994, EPA identified through implementation and enforcement experience several areas where improved guidance could enable more effective compliance with the regulatory requirements.
 - Concerns about a commercial landfill that was not adequately stabilizing their incoming waste to comply with LDR before placing the waste in the landfill.
 - Landfill's problems could stem from inadequate waste profiling or analysis to show that they were not complying.
 - Also raised questions about how often the waste should be tested.

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How Did EPA Do Outreach and Who Responded?

Final guidance is a result of 40 comment submissions received during two rounds of public comment, including over 500 suggestions from operating TSDFs, regional and state permit writers, trade associations, and environmental groups.

What Has Changed?

- New recommendations
 - Greater use of testing
 - Procedure for determining re-evaluation frequencies (Section 2.8)
 - Content and organization of a WAP (Section 2.1)
 - Discrepancy policy (Section 2.10)
 - Rejection policy (Section 2.11)
 - Record keeping (Section 2.12)
 - Corrective and preventative action (Section 2.13)

What Has Changed (cont.)?

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- Expanded discussion on systematic planning on how to integrate Data Quality Objectives (DQOs) into sampling and analysis activities (Section 2.3).
 - Seven step DQO process with examples for each step
- Expanded sections on combustion (Sections 2.4.4 and 2.9.2).

What Has Changed (cont.)?

- Expanded discussion of LDR grab versus composite sampling (Footnote Page 1-7; Text Box Page 2-34).
- Addition of new real-world waste analysis plan examples (Part 4).
- Updates to the federal RCRA program, including regulations and guidance that have been issued since 1994 (Appendix B).
- Addition of table of regulatory citations (Appendix C).
- Addition of key considerations and tips for WAPs, generators and RCRA inspectors (Appendix F).
- Addition of new references (Appendix G).

When Did it Go Final?

Posted the final guidance and supporting documents on 04/03/15 at <u>http://www.epa.gov/epawaste/hazard/refdocs.htm#notice.</u>

Next Steps

- Plan to develop additional training for the August 11-13, 2015 ASTSWMO Hazardous Waste and Material Management Training Conference, Long Beach, CA.
 - Will focus on tips and lessons learned
- Work Group Chair: Gail Hansen, 703-308-0463, <u>hansen.gail@epa.gov</u>.

Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Waste-Final

- **EPA 530-R-12-001**
- http://www.epa.gov/ epawaste/hazard/tsd /permit/tsd-regs/tsdfwap-guide-final.pdf

United States Environmental Protection Agency	Solid Waste And Emergency Response (5303P)	EPA 530-R-12-001 April 2015 http://www.eps.gov
Waste Analysis at Faci Generate, Treat, Store of Hazardous Wastes	ilities that e, and Dispose - Final	2
A Guidance Manual		
Generation/ Treatment	Storag	e
	Land Disposal	

PART ONE: RCRA Waste Analysis – An Overview

PART TWO: Documenting and Conducting Waste Analysis

PART THREE: Checklist

PART FOUR: Sample WAPs

APPENDICES

PART ONE: RCRA Waste Analysis – An Overview

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Key Considerations for Permit Writers & Inspectors

Become familiar with the facility; schedule a visit.

- Use clear, enforceable language when preparing permit conditions and require the same from the facility in their permit application (e.g., use "must" and "shall" as opposed to "may" or "should"). Have Inspectors review draft permits to ensure clarity and enforceability of conditions.
- Include a permit condition that requires notification of any changes to the WAP or anything outside of the flexibility of the test method.
- Maintain a generic permit template that includes all federal/state conditions. Keep it up-to-date. Template is maintained in Tallahassee.
- During inspections, or compliance evaluations consider using someone on-staff with a chemistry or laboratory background to evaluate WAP compliance.

Key Initial Considerations for the Facility

- WAPs are not one-size-fits-all.
- Do not clutter up the WAP by repeating information that exists elsewhere in the Part B (e.g., basic process descriptions); however, brief summaries may sometimes be appropriate.
 - Prepare procedures for subjecting wastes to an appropriate level of testing. For example, an incoming hazardous waste shipment may be incorrectly evaluated or reported by the shipper as non-hazardous. The receiving TSDF should have measures in the WAP to detect and properly evaluate such shipments.



Waste Analysis Quality – Conceptual Model



Level of Accuracy and Precision Needed to Document Compliance

PART TWO: Documenting and Conducting Waste Analysis

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Content & Organization of the WAP

- 1. Purpose Identify requirements and permit conditions.
- 2. Facility and Waste Descriptions.
- 3. Waste Pre-Acceptance and Acceptance Processes.
- 4. Rejection Policy.
- 5. Discrepancy Policy.
- 6. Sampling Strategies and Frequency
- 7. Analytical Parameters and Test Methods.
- 8. Quality Assurance/ Quality Control and Data Reporting.
- 9. Recordkeeping.
- 10. Corrective and Preventative Action.

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PART THREE: Checklist

		Yes	No	Comments
1.	Facility Description			
а.	Are all processes that generate hazardous waste identified?			
b.	Is sufficient information provided for each process to confirm that all hazardous wastes are identified?			
C.	Have all hazardous waste management units been identified?			
d.	Are descriptions of all hazardous waste management units provided?			
e.	Have all hazardous and solid wastes been identified for each unit?			
f.	Have the methods of waste management (e.g., stabilization) been described for each unit?			

PART FOUR: Sample WAPs

- Example 1 belongs to ACE Chemical Services, which is a commercial treatment and disposal facility. It receives hazardous waste shipments from offsite, performs stabilization and other forms of treatment, and landfills the treated waste onsite.
- Example 2 belongs to Container Management Incorporated (CMI), which is a commercial storage facility. It receives shipments from offsite customers, performs minimal waste handling (e.g., consolidation), and ships the waste offsite for further management and disposal.

APPENDICES

- APPENDIX A: Hazardous Waste Identification
- APPENDIX B: Regulatory Summary (summaries of changes to RCRA program since 1994)
- APPENDIX C: Regulatory Citations for Conducting Waste Analysis
- APPENDIX D: Overview of Major Hazardous Waste Management Units
- APPENDIX E: Glossary of Terms
- APPENDIX F: Key Considerations and Tips (for WAPs, permit writers, inspectors, generators, etc.)
- APPENDIX G: References

Issues with Current WAPs

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LDR Compliance Demonstration in WAPs

- Missing Required Elements in WAPs
- Excessive Sampling and Analysis Exemptions

LDR Sampling Issues

- Discarding a failed LDR result by repeat sampling (with no additional treatment), or "re-treating" without additional reagents
- Sampling only small subset of treated batches with no accounting for variability
- Grab sample for enforcement.
 - One failing sample can be used to prove violation since LDR treatment standard is set conservatively.
 - Removes issue of sample representativeness for inspector.
 - Think any one sample must pass not only one sample must pass.
- LDR regulations leave open the possibility of alternative approaches for LDR demonstration in permit conditions (WAPs).

Missing Required Elements

- Parameter and Rationale Not Provided
- Overly Generic References to Compilations of Analytical Methods (e.g. "All of SW-846")
- Elements defined in Facility SOPs which are not part of the permit and can be modified without permission
- Elements defined in other Agency required documents not subject to RCRA permitting (e.g. wastestream re-evaluation frequency posted in the CAA MACT FAP which is usually self-implementing)
- Procedure for Determining Various Properties for Compliance with AA, BB, or CC

Excessive Exemptions from Mandatory Analysis

- Single Source Spill material: media contaminated by single chemical spill may also contain other constituents from historical activities
- Visually Identifiable Wastes: Many visibly identifiable wastes can be sampled and analyzed.
- Off-Specification Materials: If the designation "Off-Specification" is due to contamination with a permit-regulated hazardous constituent
- Wild Card: Facility Management may Waive Analysis without Agency approval if Waste Poses Hazard in the Laboratory or Other reasoning
- Mandatory analysis subject to internal subjective list of suspect wastes
 - Standard Profiles
 - MSDS
 - Generator Knowledge Check-Box

What next?

- EPA training: EPA developing an on-line interactive module so that students can self-test during the course and take it at their own pace. The interactive module should be ready sometime in 2016.
- DEP training (TBD) using Florida-specific examples. Send examples, good or bad, to Tallahassee.
- Include a model permit condition that requires notification of any changes to the WAP or anything outside of the flexibility of the test method.
- Project Manager to send guidance to permittees.
- Districts may want to send guidance to generators.
- Start evaluating WAPs against new guidance as permit renewals come in.



For additional Information

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